

Staff Handbook

Business and Industrial Data Analytics Laboratory

Name	<i>Dr. Muhammad Ahsan, S.Si.</i>		
Post	<i>Head of the Business and Industrial Data Analytics Laboratory</i>		
Academic career	<i>Initial academic appointment</i>	<i>UNM</i>	
	<i>Doctorate (subject)</i>	<i>ITS</i>	
Employment	<i>Lecturer</i>	<i>ITS</i>	<i>2020</i>
Research and development projects over the last 5 years	<i>2022 :</i> <i>1. Kernel Density Estimation-Based Max-MCUSUM Control Chart for Monitoring Cement Production Process Quality</i> <i>2. Kernel Density Estimation-Based Max-MCUSUM Control Chart for Monitoring Cement Production Process Quality</i> <i>3. Intervention ARIMA and Multioutput Least Square Support Vector Regression (MLS-SVR) Models for Analyzing the Impact of the COVID-19 Pandemic on International Tourist Visits to Indonesia</i> <i>4. Development of a Neutrosophic-Based Multivariate EWMA Control Chart</i> <i>5. Development of a Robust PCA Mix-Based Multivariate Control Chart for Intrusion Detection Systems</i> <i>6. 2022 Higher Education Excellent Basic Research Grant: Development of a Robust PCA Mix-Based Multivariate Control Chart for Intrusion Detection Systems</i> <i>7. 2022 ITS Department Research Grant: Intervention ARIMA and Multioutput Least Square Support Vector Regression (MLS-SVR) Models for Analyzing the Impact of the COVID-19 Pandemic on International Tourist Visits to Indonesia</i> <i>8. 2022 ITS Scientific Research Grant: Intrusion Detection System (IDS) Based on a Multivariate Support Vector Data Description (SVDD) Control Chart with a Kernel Density Estimation (KDE) Control Limit</i> <i>9. 2022 ITS Scientific Research Grant: Development of a Neutrosophic-Based Multivariate EWMA Control Chart</i> <i>10. 2022 Higher Education Applied Research Grant: Kernel Density Estimation-Based Max-MCUSUM Control Chart for Monitoring Cement Production Process Quality</i>		

	2023 : 1. <i>Implementation of a Modified Max-MCUSUM Control Chart for Monitoring the Quality of Production Water at PDAM Surya Sembada Surabaya</i> 2. <i>Intrusion Detection System (IDS) Based on a Robust Multivariate Mixed Quality Characteristic Control Chart Using the Fast Minimum Covariance Determinant (FMCD)</i> 3. <i>Modeling the Risk of COVID-19 Spread in East Java Using an Inhomogeneous Spatial Point Process with Piecewise Constant Covariates</i> 4. <i>Development of a Machine Learning-Based Support Vector Data Description Control Chart with Adaptive Exponentially Weighted Moving Average (D-AMEWMA)</i> 5. <i>Development of a Robust Simultaneous Mixed Quality Characteristics Control Chart Based on PCA Mix and Kernel Density Estimation (KDE) for Intrusion Detection</i> 6. <i>Performance of a Neutrosophic Hotelling's T^2 Control Chart Based on a Successive Difference Covariance Estimator with Various Run-Length Methods</i> 7. <i>2023 Fundamental Research – Regular Grant: Development of a Robust Simultaneous Mixed Quality Characteristics Control Chart Based on PCA Mix and Kernel Density Estimation (KDE) for Intrusion Detection</i> 8. <i>2023 ITS Scientific Research Grant: Intrusion Detection System (IDS) Based on a Robust Multivariate Mixed Quality Characteristic Control Chart Using the Fast Minimum Covariance Determinant (FMCD)</i> 9. <i>2023 ITS Scientific Research Grant: Performance of a Neutrosophic Hotelling's T^2 Control Chart Based on a Successive Difference Covariance Estimator with Various Run-Length Methods</i> 10. <i>2023 ITS Partnership Research Grant: Development of a Machine Learning-Based Support Vector Data Description Control Chart with Adaptive Exponentially Weighted Moving Average (D-AMEWMA)</i> 11. <i>2023 Applied Research Downstreaming Grant: Implementation of a Modified Max-MCUSUM Control Chart for Monitoring the Quality of Production Water at PDAM Surya Sembada Surabaya</i> 12. <i>2023 Master's Thesis Research Grant: Modeling the Risk of COVID-19 Spread in East Java Using an Inhomogeneous Spatial Point Process with Piecewise Constant Covariates</i> 2024 : 1. <i>2024 Research Progress Report: Exponentially Weighted Moving Average Max-Mchart (EWMA Max-Mchart) Control Chart</i> 2. <i>2024 Research Progress Report: Performance Evaluation of the Fuzzy $\bar{X}$-S Control Chart Based on Confidence Interval Estimation</i> 3. <i>2024 Research Progress Report: Intrusion Detection System (IDS) Based on a Robust Hotelling's T^2 Control Chart with the Minimum Regularized Covariance Determinant (MRCD)</i> 4. <i>2024 Research Progress Report: Monitoring the Welding Process in Shipbuilding Using a Demerit Control Chart and Fuzzy Analytic Hierarchy Process-Integrated Statistical Process Control</i> 5. <i>2024 Research Progress Report: Development of a Robust Simultaneous Mixed Quality Characteristics Control Chart Based on PCA Mix and Kernel Density Estimation (KDE) for Intrusion Detection</i>
--	--

	6. 2024 ITS Department Research Grant: Performance Evaluation of the Fuzzy $\bar{X}$-S Control Chart Based on Confidence Interval Estimation 7. 2024 ITS Department Research Grant: Monitoring the Welding Process in Shipbuilding Using a Demerit Control Chart and Fuzzy Analytic Hierarchy Process-Integrated Statistical Process Control 8. 2024 Fundamental Research – Regular Grant: Development of a Robust Simultaneous Mixed Quality Characteristics Control Chart Based on PCA Mix and Kernel Density Estimation (KDE) for Intrusion Detection 9. 2024 ITS Scientific Research Grant: Intrusion Detection System (IDS) Based on a Robust Hotelling's T^2 Control Chart with the Minimum Regularized Covariance Determinant (MRCD) 10. 2024 ITS Scientific Research Grant: Development of a Nonparametric Kernel Density-Based Multivariate Variability Control Chart for Non-Normally Distributed Quality Characteristics (development of an algorithm for selecting an appropriate control chart for monitoring quality characteristics) 11. 2024 ITS Partnership Research Grant: Exponentially Weighted Moving Average Max-Mchart (EWMA Max-Mchart) Control Chart 12. 2024 Master's to Doctorate Undergraduate Excellence Program: Development of SETAR-TREE for Multivariate Time Series Data Modeling 2025 : 1. 2025 Research Progress Report: Robust Hotelling's T^2 Control Chart with Cellwise Minimum Covariance Determinant Estimator (CMCD) for Intrusion Detection 2. 2025 Research Progress Report: Multivariate Functional Cumulative Sum Control Chart 3. 2025 Research Progress Report: Modification of the Variance-Covariance Matrix Estimator for Simultaneous Multivariate Control Charts with Individual Observations 4. 2025 Research Progress Report: Monitoring the Statistical Quality of Tube Production Using a Robust Maximum Multivariate Control Chart (Max-Mchart) 5. 2025 Research Progress Report: Development of a Robust Simultaneous Mixed Quality Characteristics Control Chart Based on the Minimum Regularized Covariance Determinant (MRCD) for Intrusion Detection 6. 2025 ITS Department Research Grant: Delon and McLean Information System Success Based on Structural Equation Modeling 7. 2025 ITS Department Research Grant: Monitoring the Quality of Fly Ash Bottom Ash (FABA) and Paper Sludge as Alternative Raw Materials in the Cement Production Process 8. 2025 ITS Department Research Grant: Monitoring the Statistical Quality of Tube Production Using a Robust Maximum Multivariate Control Chart (Max-Mchart) 9. 2025 ITS Scientific Research Grant: Robust Hotelling's T^2 Control Chart with Cellwise Minimum Covariance Determinant Estimator (CMCD) for Intrusion Detection 10. 2025 ITS Inter-University Collaboration Research Grant: Modification of the Variance-Covariance Matrix Estimator for Simultaneous Multivariate Control Charts with Individual Observations 11. 2025 PFR Grant: Development of a Robust Simultaneous Mixed Quality Characteristics Control Chart Based on the Minimum Regularized Covariance Determinant (MRCD) for Intrusion Detection
--	---

	12. 2025 PMDSU Grant: Multivariate Functional Cumulative Sum Control Chart 13. 2025 PMDSU Grant: Development of SETAR-TREE for Multivariate Time Series Data Modeling 14. 2025 PTM Grant: Combination of PLS-SEM and Principal Component Analysis (PCA) with Importance-Performance Analysis (IPA) for the Nutritional Status of Malnourished Toddlers 2026 : 1. 2026 Research Progress Report: Robust Exponentially Weighted Moving Average Max-Mchart (REWMA Max-Mchart) Control Chart for Intrusion Detection 2. 2026 Research Progress Report: Robust Multivariate Hotelling's T^2 Control Chart Based on the Minimum Covariance Determinant Matrix 3. 2026 Research Progress Report: Robust Multivariate Variability Control Chart Based on Vector Variance 4. 2026 Research Progress Report: Development of a Robust Estimation-Based Fuzzy Adaptive Control Chart for Non-Normal Data 5. 2026 Research Progress Report: Development of a Robust EWMA Control Chart Based on a Scale Estimator for Non-Normal Data 6. 2026 Research Progress Report: Development of a Simultaneous Multivariate Maximum Half-Normal Multivariate Control Chart Based on the Cellwise Minimum Covariance Determinant (CellMCD) 7. 2026 Research Progress Report: Development of a Simultaneous Adaptive EWMA-Adaptive EWMV Control Chart 8. 2026 Research Progress Report: Forecasting Monthly Train Passengers on the Surabaya–Jakarta Route Using the XGBoost Algorithm 9. 2026 Research Progress Report: Development of a Sentiment-Based Recommendation System for E-Commerce Using Aspect-Based Sentiment Analysis (ABSA)
Industry collaborations over the last 5 years	2022 : 1. "2022 ITS Thematic Community Service Grant: Statistical Learning Training to Improve the Competence of Mathematics Teachers in Sumenep Regency. Location: Sumenep Regency." 2023 : 1. "2023 ITS Department-Funded Thematic Community Service Grant: Basic Statistical Quality Control Workshop for Staff of PT Petrokimia Gresik" 2. "2023 ITS Community Service Grant: 2023 Customer Census for PDAM Surya Sembada, Surabaya City" 2024 : 1. "2024 ITS Department-Funded Thematic Community Service Grant: Increasing Digital Marketing and Branding Capacity for Batik MSME Entrepreneurs in Lamongan Regency"

	2025 : 1. "2025 Community Service Progress Report: Road to International Publication: Training on High-Quality Global Scientific Publication" 2. "2025 Community Service Progress Report: SIGMA SHIFT: Seminar on the Implementation of Quality Improvement at PT Semen Indonesia Group (SIG), Tuban" 3. "2025 ITS Thematic Community Service Grant: Road to International Publication: Training on High-Quality Global Scientific Publication" 2026 : 1. "2026 Community Service Progress Report: Digital Marketing Training to Improve the Competitiveness of MSMEs Supported by the Social Services Agency of Lamongan Regency" 2. "2026 Community Service Progress Report: Statistics-Based Research Methodology and Publication Strategies for Lecturers at UNISLA Lamongan for Reputable International Journals" Partners
Patents and proprietary rights	<i>CLUSTERAPPS: Web-Based Cluster Analysis</i> 2022 <i>Progressive Mean (PM) Control Chart and Its Application to Monitoring Aluminum Product Quality</i> 2023 <i>Book: Progressive Mean (PM) Control Chart and Its Application to Monitoring Aluminum Product Quality</i> 2023 <i>Kernel Density-Based Maximum Multivariate Cumulative Sum Chart Application</i> 2023 <i>Video Tutorial for the Max-MCUSUM Application</i> 2023 <i>Dashboard for Mapping MSME Potential to Support the One Village One Product Program in Lamongan Regency</i> 2024 <i>Methodology for Monitoring Drinking Water Production Processes Based on the Modified Max-MCUSUM Method</i> 2024 <i>Book: Introduction to Python for Statistics and Data Science</i> 2024

	<i>Book: Python Applications for Basic Statistics</i>	2024
	<i>Predictive Maintenance Dashboard for Electrical Submersible Pumps</i>	2024
	<i>Poster: Increasing Digital Marketing and Branding Capacity for Batik MSME Entrepreneurs in Lamongan Regency</i>	2024
	<i>Video: Increasing Digital Marketing and Branding Capacity for Batik MSME Entrepreneurs in Lamongan Regency</i>	2024
	<i>Poster Sharing Session Strategy On International Publication on Inbound Research Mobility 2024</i>	2025
	<i>Poster Guest Lecture Role Of SPC In Industry 4.0 Era on Inbound Research Mobility 2024</i>	2025
	<i>Research Poster: Intrusion Detection System (IDS) Based on Robust Hotelling's T^2 Control Charts with Minimum Regularized Covariance Determinant (MRCD)</i>	2025
	<i>Research Poster: Development of a Robust Simultaneous Control Chart for Mixed Quality Characteristics Based on PCA-Mix and Kernel Density Estimation (KDE) for Intrusion Detection</i>	2025
	<i>XgFORE: XGBoost Time Series Forecasting App</i>	2025
	<i>Clinker Monitoring Dashboard by Difyze</i>	2025
	<i>Poster FGD: BIDA Lab Curriculum and Research Roadmap</i>	2025
	<i>Poster Guest Lecture: Statistical Process Control in</i>	2025

	<i>the Era of IoT and Big Data: A New Paradigm for Quality</i> 2026 <i>Poster Sharing Session: AI for Academics: A Practical Guide to Writing Research Papers Efficiently and Ethically</i> 2026 <i>Poster Sharing Session: The Role and Responsibility of AI in Modern Research and Education: An Ethical Perspective</i> 2026 <i>Dashboard PDRB Kota Bekasi 2024 Kinerja Ekonomi & Sektor Unggulan</i> 2026 <i>Eye Image Augmentation and Classification Application</i> 2026 <i>Video of the 2026 Field Trip for the Statistical Quality Control Course</i> 2026
Important publications over the last 5 years	<i>Tahun 2022 :</i> <i>Springer Nature: "Comparing the Performance of Kernel PCA Mix Chart with PCA Mix Chart for Monitoring Mixed Quality Characteristics"</i> <i>Pattimura University: "Credit Card Fraud Detection Using Linear Discriminant Analysis (LDA), Random Forest, and Binary Logistic Regression"</i> <i>Department of Mathematics, Faculty of Mathematics and Natural Sciences, University of Pattimura: "Interpretable Predictive Model of Network Intrusion Using Several Machine Learning Algorithms"</i> <i>Pattimura University: "Multi-Response Optimization of Dielectric Fluid Mixture in EDM Using Grey Relational Analysis (GRA) in Taguchi Method"</i> <i>Universitas Muhammadiyah Mataram: "Multivariate Control Chart Based on Neutrosophic Hotelling T^2 Statistics and Its Application"</i> <i>Department of Mathematics, Universitas Negeri Gorontalo: "Application of the Neutrosophic Exponentially Weighted Moving Average (NEWMA) X Control Chart for Monitoring the Process Mean of Glass Thickness"</i> <i>ITS: "Development of the One Village One Product Program for MSME Mapping in Lamongan Regency"</i> <i>ITS: "Basic Statistical Quality Control for Quality Assurance Staff at PT Semen Indonesia (Persero) Tbk"</i> <i>DRPM ITS: "Improving Research Data Processing Skills for Lecturers in Sumenep Regency"</i> <i>Pattimura University: "Selecting Optimal Process Parameters of Al_2O_3/C Composite Using GRA with PCA and Taguchi's QLF Approach"</i>

Tahun 2023 :

1. *"Classification of Provinces Based on the Indonesian Democracy Index Using the K-Medoids Clustering Algorithm"*
2. CV. Jakad Media Publishing: *"Progressive Mean (PM) Control Chart and Its Application to Monitoring Aluminum Product Quality"*
3. *"Generally Weighted Moving Coefficient of Variation (GWMCV) Control Chart Using Three Parametric Log-Normal Transformations"*
4. *"Max- $\bar{X}$ Stn Control Chart for Monitoring Mean and Variability Process"*
5. LPPM ITS: *"Monitoring the Quality of the PeduliLindungi Application Based on Customer Ratings on Google Play Using the Laney p' Attribute Control Chart"*
6. LPPM ITS: *"Monitoring the Quality of the MyPertamina Application Based on User Ratings on Google Play Using the p Control Chart"*
7. Atlantis Press: *"Monitoring Quality of KAI Access Application Based on Customer Reviews on Google Play Store Using Laney p' Control Chart Based on Convolutional Neural Network"*
8. INSIGHT — Indonesian Society for Knowledge and Human Development: *"Monitoring the Quality of the PeduliLindungi Application Based on Customer Reviews on Google Play Using Hybrid Naïve Bayes–Laney p' Attribute Control Chart"*
9. International Association of Engineers: *"Multivariate Exponentially Weighted Moving Average (MEWMA) and Multivariate Exponentially Weighted Moving Variance (MEWMV) Chart Based on Residual XGBoost Regression for Monitoring Water Quality"*
10. *"Multivariate Robust MRCD-Based Hotelling's T^2 Control Chart with Bootstrap Control Limit for Intrusion Detection"*
11. Growing Science: *"Neutrosophic Multivariate EWMA Control Chart"*
12. Research Square: *"On the Performance of T^2 -Based PCA Mix Control Chart with KDE Control Limit for Monitoring Variable and Attribute Characteristics"*
13. Statistics Department, Universitas PGRI Adi Buana Surabaya: *"Plastic Product Optimization Using a Taguchi Mixed-Level Approach with Injection Molding Interaction Factors"*
14. DRPM ITS: *"Statistical Learning Training to Improve the Competence of Mathematics Teachers in Sumenep Regency"*
15. LPPM ITS: *"Quality Control of the White Crystal Sugar Production Process at PG Djatiroto PTPN XI Using a Maximum Multivariate Cumulative Sum (Max-MCUSUM) Control Chart Based on Residual Multioutput Least Square Support Vector Regression (MLS-SVR) Model"*
16. AIP Publishing: *"Quality Control Analysis of Tube Drain Production at Samba Moda Utama Inc. Using Robust Control Chart Based on Winsorized Modified One-Step M-Estimator (MOM)"*
17. Springer Nature: *"Statistical Quality Control of NPK Fertilizer Production Process Using Mixed Dual Multivariate Cumulative Sum (MDMCUSUM) Chart Based on Multioutput Least Square Support Vector Regression (MLS-SVR)"*
18. Springer Nature: *"Statistical Quality Control of Plastic Spoon Production Process Using Laney Demerit Control Chart and Analytical Hierarchy Process-Integrated Statistical Process Control"*

	19. Springer Nature: "Support Vector Data Description with Kernel Density Estimation (SVDD-KDE) Control Chart for Network Intrusion Monitoring" 20. "Basic Statistical Quality Control Workshop for Staff of PT Petrokimia Gresik" Tahun 2024 : 1. Thai Statistical Association: "Comparison of ARIMAX and Feedforward Neural Network in Forecasting Cash Outflow Inflow at Bank Indonesia East Java Region" 2. Indonesian Society for Knowledge and Human Development: "Deep Learning and Statistical Process Control Approach to Improve Quality in Immigration Services" 3. Pattimura University: "Forecasting Number of International Tourist Arrivals Using Multi-Input Intervention ARIMA Model" 4. "Improved Bootstrap $[\bar{X}]$ Control Chart for Non-Normally Distributed Data" 5. International Association of Engineers: "Kernel PCA Based on Hotelling Multivariate Control Chart for Monitoring Breast Cancer Diagnostic" 6. Pattimura University: "Maximum Exponentially Weighted Moving Average with Measurement Error (Using Covariate Method) Using Auxiliary Information for Cement Quality Control" 7. Elsevier: "Modelling of Poor Households in East Kalimantan Using Zero-Inflated Ordered Probit (ZIOP) Approach" 8. Pattimura University: "Monitoring the Sausage Product Using Laney Demerit Chart Based on Analytical Hierarchy Process" 9. International Association of Engineers: "Monitoring Welding Process on Ship Construction Using Demerit Control Chart and Fuzzy Analytics Hierarchy Process-Integrated Statistical Process Control" 10. Industrial Engineering Study Program, Faculty of Science and Technology, Universitas Widya Mataram: "Determination of Reorder Point and Safety Stock for Consumable Materials Based on Forecasting Using Artificial Neural Network" 11. Center for Language and Scientific Publication: "Increasing Digital Marketing and Branding Capacity for Batik MSME Entrepreneurs in Lamongan Regency" 12. Springer Nature: "Performance of T^2-Based PCA Mix Control Chart with KDE Control Limit for Monitoring Variable and Attribute Characteristics" 13. Springer International Publishing: "Technical Feasibility of Implementing Heaving Device Wave Energy Converter: A Case Study in Mentawai Waters, Indonesia" Tahun 2025 : 1. Growing Science: "A Hybrid Approach to Hospital Quality Monitoring Based on Google Maps Reviews: Integrating p-Control Charts and Bidirectional Encoder Representations from Transformers (BERT)" 2. IEEE: "Adaptive Exponentially Weighted Moving Average Max Multivariate Control Chart for Simultaneous Monitoring of Process Mean and Variability" 3. Pattimura University: "Adaptive Exponentially Weighted Moving Average with Measurement Error (Covariate) with Auxiliary Information Maximum for Cement Quality Control"
--	---

	4. AIP Publishing LLC: "Advanced Process Monitoring in Ordinary Portland Cement (OPC) Data Using Robust Max-Half-Mchart Control Charts with Fast-MCD and Dxct-MCD Estimators" 5. "Clustering Water Quality Testing Locations at PT Air Minum Giri Menang (Perseroda) as a Form of Company Evaluation Using Self-Organizing Maps (SOM)" 6. Pattimura University: "Clustering of Water Quality Locations Using Self-Organizing Maps (SOM)" 7. AIP Publishing LLC: "Comparing the Performance of Max-Mchart, Max-Half-Mchart, and Kernel-Based Max-Mchart for Individual Observation in Monitoring Cement Quality" 8. Elsevier: "Control Chart for Geometrically Distributed Data Based on Bayesian Fast Double Bootstrap" 9. AIP Publishing: "Design of Variable Sample Size Max Chart for Monitoring the Mean and Variability Process" 10. AIP Publishing: "Development of Multivariate Control Chart Support Vector Data Description Based on Adaptive Exponentially Weighted Moving Average (AEWMA)" 11. Springer Nature: "Enhanced Monitoring of Process Anomalies: Exponentially Weighted Moving Average Max Multivariate (EWMA Max-M) Control Chart" 12. "Exponentially Weighted Moving Average Max Multivariate Chart" 13. AIP Publishing LLC: "Exponentially Weighted Moving Average Max Multivariate Control Chart (EWMA-Max-Mchart)" 14. Elsevier: "Improved Bootstrap $\bar{X}$ Control Chart for Non-Normally Distributed Data" 15. MDPI: "Improving the Forecast Accuracy of PM2.5 Using SETAR-Tree Method: Case Study in Jakarta, Indonesia" 16. Elsevier: "Monitoring Air Quality Index with EWMA and Individual Charts Using XGBoost and SVR Residuals" 17. Parameter: "Monitoring and Evaluation of Clinker Quality Using T^2 Hotelling-Generalized Variance Control Chart" 18. "Monitoring Public Sentiment on Google Maps Reviews of Surabaya Immigration Office Services as an Early Warning System for Quality Improvement Based on Convolutional Long..." 19. Springer Nature: "Monitoring the Quality of Water Production Process in Surabaya Using Max-MCUSUM Control Chart Based on Residual Deep Learning LSTM Model" 20. "Forecasting Indonesian Nickel Prices Using Fuzzy Time Series and Support Vector Regression" 21. Trans Tech Publications Ltd: "Performance Comparison of Max-Chart and AEWMA-Max Chart in Monitoring Temperature" 22. Public Library of Science: "Residual XGBoost Regression-Based Individual Moving Range Control Chart for Gross Domestic Product Growth Monitoring" 23. IEEE: "Residual-Based Air Quality Monitoring: A Hybrid XGBoost-AEWMA Control Chart for Detecting PM2.5 Anomalies" 24. Elsevier: "Residual-Based Multivariate Exponentially Weighted Moving Average Control Chart for Statistical Process Control of Water Quality in Surabaya City Utilizing Generative Adversarial Network" 25. "Road to International Publication: Training on High-Quality Global Scientific Publication" 26. Madaniya: "Road to International Publication: Training on High-Quality Global Scientific Publication"
--	--

27. Elsevier: "Shewhart-Type Simultaneous Univariate Control Chart Based on Ranked Set Sampling Scheme"
28. AIP Publishing LLC: "Simulation Studies for Evaluating the Performance of Bootstrap-Based Robust T^2 Control Chart in Detecting Highly Outlier-Contaminated Data"
29. "Simulation Studies Performance of EWMA-Max Mchart Based on Synthetic Data"
30. AIP Publishing LLC: "Simultaneous Robust Max-Half-Mchart Control Charts Based on Minimum Regularized Covariance Determinant (MRCD)"

Tahun 2026 :

1. "A Majorization-Minimization gLASSO Framework for SETAR Models: Theory, Simulation, and Application to PM2.5 Data"
2. Springer Nature: "Bootstrap-Based $Tr(R^2)$ Control Charts for Monitoring Multivariate Variability Process"
3. Springer Nature: "Bootstrap-Based Truncation Parameter Estimation for Monitoring Nonconforming Processes"
4. "Business Process Monitoring Using a Robust Max-Half-Mchart Developed with Fast S Estimator"
5. AIP Publishing LLC: "Comparison Control Charts – $\bar{X}$, S, and Max $\bar{X}$ $\bar{R}$ $\bar{X}$ Charts to Monitor Water pH"
6. Pattimura University: "Control Limits of the G Chart Based on Fast Double Bootstrap with Generalized Kullback-Leibler Divergence Parameter Estimation"
7. Growing Science: "Data-Driven Railway Management: Forecasting Monthly Train Passengers on the Surabaya-Jakarta Route Using XGBoost Algorithm"
8. "Enhanced Multivariate Process Monitoring Based on Adaptive EWMA-Based Support Vector Data Description Control Chart"
9. "EWMA Robust Max-M Control Chart for Synthetic and Real Data"
10. "Exploration of Ethnomathematics in the Mandar Traditional House as a Source of Deep Learning-Based Instruction in Schools"
11. Sveučilište Josipa Jurja Strossmayera u Osijeku, Građevinski i arhitektonski fakultet Osijek: "Influence of Waste PET Fibres on Mechanical and Durability Properties of Polyester Concrete for Tension Members"
12. Department of Statistics, Faculty of Science and Mathematics, Universitas Diponegoro: "Modeling Child Malnutrition in East Java Using the Integration of Partial Least Square with Importance-Performance Analysis"
13. "Optimizing Digital Marketing for MSMEs Supported by the Social Services Agency of Lamongan Regency Through Visual Design Training, Video Content, and the Utilization of Artificial Intelligence"
14. "Improving Students' Critical Thinking Skills Using Deep Learning Methods in Mathematics Learning at Junior High Schools"
15. Multidisciplinary Digital Publishing Institute: "Robust Max-Half-MChart Based on the Cellwise Minimum Covariance Determinant"
16. Preprints: "Robust Maximum Half-Normal Multivariate Control Chart"
17. Multidisciplinary Digital Publishing Institute: "Robust Maximum Half-Normal Multivariate Control Chart Based on Det-MCD and Fast-MCD Estimators"

	18. Multidisciplinary Digital Publishing Institute: <i>"Robust Multivariate Simultaneous Control Chart Based on Minimum Regularized Covariance Determinant (MRCD)"</i> 19. Elsevier: <i>"Transformation from Green to Brown: A Geospatial Analysis of Urban Expansion, Urban Heat Environment, and Agricultural Land Use Conversion"</i>
--	--

Activities in specialist bodies over the last 5 years	<i>Workshop on Enhancing the Quality and Governance of Scientific Journals (FORSTAT)</i>	<i>Training</i>	<i>2023</i>
	<i>Power BI Data Modelling Basics Tutorial Course (X)</i>	<i>Training</i>	<i>2023</i>
	<i>Introduction to SQL (X)</i>	<i>Training</i>	<i>2023</i>
	<i>Introduction to Crud Operations in MongoDB (X)</i>	<i>Training</i>	<i>2023</i>
	<i>Big Data Training with Hadoop and Spark(X)</i>	<i>Training</i>	<i>2023</i>
	<i>Introduction to Deep Learning with Keras (X)</i>	<i>Training</i>	<i>2023</i>
	<i>Global Project for Young Lecturers (I)</i>	<i>Training</i>	<i>2023</i>
	<i>Professional Certificate in Data Science 2024</i>		<i>2024</i>
	<i>Data Science: Capstone (Harvard University edX Platform)</i>		<i>2024</i>
	<i>Data Science: Probability (Harvard University edX Platform)</i>	<i>Course</i>	<i>2024</i>
	<i>Data Science: Wrangling (Harvard University edX Platform)</i>	<i>Course</i>	<i>2024</i>
	<i>Data Science: Inference and Modeling (Harvard University edX Platform)</i>	<i>Course</i>	<i>2024</i>
	<i>Data Science: Machine Learning (Harvard University edX Platform)</i>	<i>Course</i>	<i>2024</i>
	<i>Data Science: Linear Regression (Harvard University edX Platform)</i>	<i>Course</i>	<i>2024</i>
	<i>Training for Authors, Editors, Reviewers, and Scientific Publishing Managers (UNISMA PRESS, Islamic University of Malang)</i>	<i>Course</i>	<i>2024</i>

	<i>Data Science: Productivity Tools (Harvard University edX Platform)</i>	<i>Training</i>	<i>2024</i>
	<i>Data Science: R Basics (Harvard University edX Platform)</i>	<i>Course</i>	<i>2024</i>
	<i>Data Science: Visualization</i>	<i>Training</i>	<i>2024</i>
	<i>AWARENESS & INTERNAL AUDITOR OF EDUCATIONAL ORGANIZATIONS MANAGEMENT SYSTEMS ISO 21001:2018 TRAINING (Intertek Academy' Institut Teknologi Sepuluh Nopember)</i>	<i>Course</i>	<i>2025</i>
	<i>Unleashing Unlabelled Data: Self-Supervised Learning (Udemy Online)</i>	<i>Training</i>	<i>2026</i>

Name	<i>Prof. Dr. Muhammad Mashuri, M.T.</i>		
Post	<i>Professor</i>		
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] (subject) ITB</i> <i>Doctorate (subject) ITB</i>		
Employment	<i>Lecturer</i>	<i>ITS</i>	<i>1987</i>
Research and development projects over the last 5 years	<i>2022 :</i> <i>1. Max-MCUSUM Control Chart Based on Kernel Density Estimation for Monitoring the Quality of the Cement Production Process.</i> <i>2. Development of a Multivariate Control Chart Based on Robust PCA Mix for an Intrusion Detection System.</i> <i>3. 2022 Higher Education Excellence Fundamental Research Decree: Development of a Multivariate Control Chart Based on Robust PCA Mix for an Intrusion Detection System.</i> <i>4. 2022 Higher Education Excellence Applied Research Decree: Max-MCUSUM Control Chart Based on Kernel Density Estimation for Monitoring the Quality of the Cement Production Process.</i> <i>2023 :</i> <i>1. Implementation of the Modified Max-MCUSUM Control Chart for Monitoring the Quality of Water Produced by PDAM Surya Sembada Surabaya.</i> <i>2. Intrusion Detection System (IDS) Based on a Robust Multivariate Control Chart for Mixed Quality Characteristics Using Fast Minimum Covariance Determinant (FMCD).</i> <i>3. Development of a Univariate Neo-Normal Air Quality Control Chart.</i> <i>4. Development of a Machine Learning-Based Support Vector Data Description Control Chart with Adaptive Exponentially Weighted Moving Average (D-AMEWMA).</i> <i>5. Comparison of LSTM and Intervention ARIMA Models for Forecasting International Tourist Arrivals to Indonesia After the COVID-19 Pandemic.</i> <i>6. ITS Department Research Decree (Batch 2), 2023: Comparison of LSTM and Intervention ARIMA Models for Forecasting International Tourist Arrivals to Indonesia After the COVID-19 Pandemic.</i> <i>7. ITS Scientific Research Decree (Batch 2), 2023: Intrusion Detection System (IDS) Based on a Robust Multivariate Control Chart for Mixed Quality Characteristics Using Fast Minimum Covariance Determinant (FMCD).</i> <i>8. ITS Scientific Research Decree, 2023: Development of a Univariate Neo-Normal Air Quality Control Chart.</i> <i>9. ITS Partnership Research Decree (Batch 2), 2023: Development of a Machine Learning-Based Support Vector Data Description Control Chart with Adaptive Exponentially Weighted Moving Average (D-AMEWMA).</i> <i>10. Applied Research Downstreaming Pathway Decree, 2023: Implementation of the Modified Max-MCUSUM Control Chart for</i>		

	<i>Monitoring the Quality of Water Produced by PDAM Surya Sembada Surabaya.</i> 2024 : 1. <i>2024 Research Progress Report: Intrusion Detection System (IDS) Based on a Robust Hotelling's T^2 Control Chart with Minimum Regularized Covariance Determinant (MRCD).</i> 2. <i>2024 Research Progress Report: Development of a Bivariate Neo-Normal MSN Burr Control Chart: A Case Study of Brain Signals in Children with Mild Epilepsy.</i> 3. <i>ITS Scientific Research Decree, 2024: Intrusion Detection System (IDS) Based on a Robust Hotelling's T^2 Control Chart with Minimum Regularized Covariance Determinant (MRCD).</i> 4. <i>ITS Scientific Research Decree, 2024: Development of a Bivariate Neo-Normal MSN Burr Control Chart: A Case Study of Brain Signals in Children with Mild Epilepsy.</i> 5. <i>ITS Scientific Research Decree, 2024: Development of a Nonparametric Multivariate Variability Control Chart Based on Kernel Density for Non-Normally Distributed Quality Characteristics.</i> 2025 : 1. <i>2025 Research Progress Report: Robust Hotelling's T^2 Control Chart with Cellwise Minimum Covariance Determinant (CMCD) for Intrusion Detection.</i> 2. <i>2025 Research Progress Report: Multivariate Functional Cumulative Sum Control Chart.</i> 3. <i>2025 Research Progress Report: Modification of the Variance-Covariance Matrix Estimator for a Simultaneous Multivariate Control Chart for Individual Observations.</i> 4. <i>2025 Research Progress Report: Statistical Quality Monitoring of Tube Production Using a Robust Maximum Multivariate Control Chart (Max-Mchart).</i> 5. <i>2025 Research Progress Report: Development of a Robust Simultaneous Control Chart for Mixed Quality Characteristics Based on Minimum Regularized Covariance Determinant (MRCD) for Intrusion Detection.</i> 6. <i>ITS Department Research Decree, 2025: Statistical Quality Monitoring of Tube Production Using a Robust Maximum Multivariate Control Chart (Max-Mchart).</i> 7. <i>ITS Department Research Decree, 2025: Delon and McLean Information System Success Based on a Structural Equation Model.</i> 8. <i>ITS Scientific Research Decree, 2025: Robust Hotelling's T^2 Control Chart with Cellwise Minimum Covariance Determinant Estimator (CMCD) for Intrusion Detection.</i> 9. <i>ITS Inter-University Collaboration Research Decree, 2025: Modification of the Variance-Covariance Matrix Estimator for a Simultaneous Multivariate Control Chart for Individual Observations.</i> 10. <i>PFR Research Decree, 2025: Development of a Robust Simultaneous Control Chart for Mixed Quality Characteristics Based on Minimum Regularized Covariance Determinant (MRCD) for Intrusion Detection.</i> 11. <i>PMDSU Research Decree, 2025: Multivariate Functional Cumulative Sum Control Chart.</i>
--	---

	2026 : 1. 2026 Research Progress Report: Robust Exponentially Weighted Moving Average Max-Mchart (REWMA Max-Mchart) Control Chart for Intrusion Detection. 2. 2026 Research Progress Report: Robust Multivariate Hotelling's T^2 Control Chart Based on the Matrix Minimum Covariance Determinant. 3. 2026 Research Progress Report: Robust Multivariate Variability Control Chart Based on Vector Variance. 4. 2026 Research Progress Report: Optimization of Preventive Maintenance Policy for Feeder Distribution Systems Using the Hierarchical Power Law Process Approach. 5. 2026 Research Progress Report: Development of a Simultaneous Adaptive EWMA-Adaptive EWMV Control Chart. 6. Beneficiary that has completed progress on research and innovation activities titled "AMWAL: Secure and Legal Waqf Management Application."
Industry collaborations over the last 5 years	2022 : 1. ITS Thematic Community Service Decree (Department Funds), 2022: Statistics Learning Training to Improve the Competence of Mathematics Teachers in Sumenep Regency. Location: Sumenep Regency. 2023 : 1. ITS Thematic Community Service Decree (Department Funds), 2023: Basic Statistical Quality Control Workshop for Staff of PT Petrokimia Gresik. 2. ITS Community Service Decree, 2023: Customer Census of PDAM Surya Sembada, Surabaya, 2023. 2024 : 1. ITS Thematic Community Service (Department Funds), 2024: Enhancing Digital Marketing and Branding Capacity for Batik MSME Practitioners in Lamongan Regency. 2025 : 1. 2025 Community Service Progress Report: Road to International Publication: Global-Quality Scientific Publication Training. 2. 2025 Community Service Progress Report: SIGMA SHIFT: Quality Improvement Implementation Seminar at PT Semen Indonesia Group (SIG), Tuban. 3. ITS Thematic Community Service Decree (Department Funds), 2025: Road to International Publication: Global-Quality Scientific Publication Training. 2026 : 1. 2026 Community Service Progress Report: Digital Marketing Training to Improve the Competitiveness of MSMEs Supported by the Lamongan Regency Social Services Office. 2. 2026 Community Service Progress Report: Statistics-Based Research Methodology and Publication Strategy Training for Lecturers of UNISLA Lamongan for Publication in Reputable International Journals.

	<i>Partners</i>	
Patents and proprietary rights	<i>Trace (R^2) Control Chart Application for Quality Monitoring.</i>	<i>2019</i>
	<i>Max-MCUSUM Control Chart Application for Quality Monitoring.</i>	<i>2021</i>
	<i>Video on Mapping MSME Potential to Support the One Village One Product Program in Lamongan Regency.</i>	<i>2021</i>
	<i>Dashboard for Mapping MSME Potential to Support the One Village One Product Program in Lamongan Regency.</i>	<i>2023</i>
	<i>Methodology for Monitoring the Drinking Water Production Process Based on the Modified Max-MCUSUM Method.</i>	<i>2023</i>
	<i>Video on Enhancing Digital Marketing and Branding Capacity for Batik MSME Practitioners in Lamongan Regency.</i>	<i>2024</i>
	<i>Poster for the Activity on Enhancing Digital Marketing and Branding Capacity for Batik MSME Practitioners in Lamongan Regency.</i>	<i>2024</i>
	<i>Travel-Twist</i>	<i>2024</i>
	<i>Guest Lecture Poster: Role of SPC in the Industry 4.0 Era, Inbound Research Mobility 2024.</i>	<i>2024</i>
	<i>Sharing Session Poster: Strategy for International Publication, Inbound Research Mobility 2024.</i>	<i>2024</i>
	<i>SmartEats</i>	<i>2024</i>
	<i>TanyaMata</i>	<i>2024</i>
	<i>Cement Quality Monitoring Dashboard SIG × ITS.</i>	<i>2025</i>
	<i>Dashboard for Implementing a Personally Identifiable</i>	<i>2025</i>

	<i>Information (PII) Detection System.</i>
Important publications over the last 5 years	2022 : 1. Springer Nature: "Comparing the Performance of Kernel PCA Mix Chart with PCA Mix Chart for Monitoring Mixed Quality Characteristics." 2. Elsevier: "Kernel Principal Component Analysis (PCA) Control Chart for Monitoring Mixed Non-Linear Variable and Attribute Quality Characteristics." 3. ITS: "Development of the One Village One Product Program for MSME Mapping in Lamongan Regency." 4. ITS: "Basic Statistical Quality Control for Quality Assurance Staff of PT Semen Indonesia (Persero) Tbk." 5. DRPM ITS: "Improving Research Data Processing Skills for Lecturers in Sumenep Regency." 2023 : 1. "Generally Weighted Moving Coefficient of Variation (GWMCV) Control Chart Using Three Parametric Log-Normal Transformations." 2. "Max-$\bar{X}$Stn Control Chart for Monitoring Mean and Variability Process." 3. DRPM ITS: "Statistics Learning Training to Improve the Competence of Mathematics Teachers in Sumenep Regency." 4. "Basic Statistical Quality Control Workshop for Staff of PT Petrokimia Gresik." 2024 : 1. Multidisciplinary Digital Publishing Institute: "Bootstrap and MRCD Estimators in Hotelling's T^2 Control Charts for Precise Intrusion Detection." 2. Elsevier: "Brainwave Monitoring in Epileptic Pediatric Patient Using MSAR EM-Gaussian and MSAR Bayesian-Exponential Power." 3. ITS Press: "Multivariate Variability Control Chart Based on Vector Variance and Vector Correlation." 4. Pattimura University: "Forecasting Number of International Tourist Arrivals Using Multi-Input Intervention ARIMA Model." 5. "Improved Bootstrap Control Chart for Non-Normally Distributed Data." 6. Springer Nature: "Performance of T^2-Based PCA Mix Control Chart with KDE Control Limit for Monitoring Variable and Attribute Characteristics." 7. Pusat Studi Bahasa dan Publikasi Ilmiah: "Enhancing Digital Marketing and Branding Capacity for Batik MSME Practitioners in Lamongan Regency." 2025 : 1. IEEE: "Adaptive Exponentially Weighted Moving Average Max Multivariate Control Chart for Simultaneous Monitoring of Process Mean and Variability." 2. "Reliability Analysis of an Overhead Travelling Crane in Building N1 at a Railway Manufacturing Company." 3. Elsevier: "Control Chart for Geometrically Distributed Data Based on Bayesian Fast Double Bootstrap." 4. "Design of Extended Exponentially Weighted Moving Variance (EEWMV) Control Chart."

	5. AIP Publishing: "Design of Variable Sample Size Max Chart for Monitoring the Mean and Variability Process." 6. AIP Publishing: "Development of Multivariate Control Chart Support Vector Data Description Based on Adaptive Exponentially Weighted Moving Average (AEWMA)." 7. Springer Nature: "Enhanced Monitoring of Process Anomalies: Exponentially Weighted Moving Average Max Multivariate (EWMA Max-M) Control Chart." 8. AIP Publishing LLC: "Exponentially Weighted Moving Average Max Multivariate Control Chart (EWMA-Max-Mchart)." 9. Elsevier: "Improved Bootstrap Control Chart for Non-Normally $\bar{X}$ Distributed Data." 10. Trans Tech Publications Ltd: "Performance Comparison of Max-Chart and AEWMA-Max Chart in Monitoring Temperature." 11. Madaniya: "Road to International Publication: Global-Quality Scientific Publication Training (25 November 2025)." 12. Elsevier: "Shewhart-Type Simultaneous Univariate Control Chart Based on Ranked Set Sampling Scheme." 13. AIP Publishing LLC: "Simulation Studies for Evaluating the Performance of Bootstrap-Based Robust T^2 Control Chart in Detecting Highly Outlier-Contaminated Data." 14. "Simulation Studies on the Performance of EWMA-Max Mchart Based on Synthetic Data." 2026 : 1. Springer Nature: "Bootstrap-Based $Tr(R^2)$ Control Charts for Monitoring Multivariate Variability Process." 2. Springer Nature: "Bootstrap-Based Truncation Parameter Estimation for Monitoring Nonconforming Processes." 3. AIP Publishing LLC: "Comparison of Control Charts – $\bar{X}$, S and Max $\bar{X}\bar{R}\bar{X}$ Charts – to Monitor Water pH." 4. Pattimura University: "Control Limits of the G Chart Based on Fast Double Bootstrap with Generalized Kullback-Leibler Divergence Parameter Estimation." 5. IEEE: "Enhanced Cyber Attack Clustering Through Multiview Attribute Fuzzy C-Means with Differential Evolution Optimization." 6. "Improving Fast Double Bootstrap for H Chart-Based Control Limits Using Robust Memoryless Property Estimator." 7. "Structural Equation Modeling (Case Study: Emotional Comfort of Pediatric Cancer Patients Based on Healing Environment)." 8. American Institute of Physics: "Moderating Structural Equation Modeling (MSEM) on Product Attributes of Drekle's Skincare Using Principal Component Analysis (PCA)." 9. Preprints: "Robust Maximum Half-Normal Multivariate Control Chart." 10. Multidisciplinary Digital Publishing Institute: "Robust Maximum Half-Normal Multivariate Control Chart Based on Det-MCD and Fast-MCD Estimators." 11. Multidisciplinary Digital Publishing Institute: "Robust Multivariate Simultaneous Control Chart Based on Minimum Regularized Covariance Determinant (MRCD)." 12. IEEE: "Sentiment Analysis of Super App Polri Reviews Using a Hybrid CNN-BiLSTM Model."
--	---

	<i>13. "Successive Difference Covariance Matrix for Monitoring High-Dimensional Spectral Data: A Functional Hotelling's T^2 Approach."</i>	
Activities in specialist bodies over the last 5 years	<i>Lecturer Workload</i> <i>Assessor</i>	<i>2022</i>

Name	<i>Dr. Wibawati, S.Si, M.Si.</i>		
Post	<i>Secretary of the Department of Statistics</i>		
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] (subject) UGM</i> <i>Doctorate (subject) ITS</i>		
Employment	<i>Lecturer</i>	<i>ITS</i>	<i>1998</i>
Research and development projects over the last 5 years	<i>2022 :</i> <i>1. Intrusion Detection System (IDS) Based on a Multivariate Control Chart Using Support Vector Data Description (SVDD) with Kernel Density Estimation (KDE) Control Limits.</i> <i>2. Intervention ARIMA and Multioutput Least Square SVR (MLS-SVR) Models for Analyzing the Impact of the COVID-19 Pandemic on International Tourist Arrivals to Indonesia.</i> <i>3. Development of a Neutrosophic-Based Multivariate EWMA Control Chart.</i> <i>4. ITS Department Research Grant (Batch 2), 2022: Intervention ARIMA and Multioutput Least Square SVR (MLS-SVR) Models for Analyzing the Impact of the COVID-19 Pandemic on International Tourist Arrivals to Indonesia.</i> <i>5. ITS Scientific Research Grant, 2022: Intrusion Detection System (IDS) Based on a Multivariate Support Vector Data Description (SVDD) Control Chart with Kernel Density Estimation (KDE) Control Limits.</i> <i>6. ITS Scientific Research Grant, 2022: Development of a Neutrosophic-Based Multivariate EWMA Control Chart.</i> <i>2023 :</i> <i>1. Implementation of a Modified Max-MCUSUM Control Chart to Monitor the Quality of Water Produced by PDAM Surya Sembada Surabaya.</i> <i>2. Development of a Simultaneous Robust Mixed Quality Characteristics Control Chart Based on PCA Mix and Kernel Density Estimation (KDE) for Intrusion Detection.</i> <i>3. Performance of a Neutrosophic Hotelling's T^2 Control Chart Based on a Successive Difference Covariance Estimator Using Various Run-Length Methods.</i> <i>4. Fundamental Research – Regular Grant, 2023: Development of a Simultaneous Robust Mixed Quality Characteristics Control Chart Based on PCA Mix and Kernel Density Estimation (KDE) for Intrusion Detection.</i> <i>5. Applied Research – Downstreaming Grant, 2023: Implementation of a Modified Max-MCUSUM Control Chart to Monitor the Quality of Water Produced by PDAM Surya Sembada Surabaya.</i> <i>6. ITS Scientific Research Grant, 2023: Performance of a Neutrosophic Hotelling's T^2 Control Chart Based on a Successive Difference Covariance Estimator Using Various Run-Length Methods.</i>		

	2024 : 1. 2024 Research Progress Report: Performance Evaluation of the Fuzzy X-S Control Chart Based on Confidence Interval Estimation. 2. 2024 Research Progress Report: Monitoring the Welding Process in Shipbuilding Using a Demerit Control Chart and Fuzzy Analytic Hierarchy Process-Integrated Statistical Process Control. 3. 2024 Research Progress Report: Development of a Simultaneous Robust Mixed Quality Characteristics Control Chart Based on PCA Mix and Kernel Density Estimation (KDE) for Intrusion Detection. 4. ITS Department Research Grant, 2024: Performance Evaluation of the Fuzzy X-S Control Chart Based on Confidence Interval Estimation. 5. ITS Department Research Grant, 2024: Monitoring the Welding Process in Shipbuilding Using a Demerit Control Chart and Fuzzy Analytic Hierarchy Process-Integrated Statistical Process Control. 6. Fundamental Research – Regular Grant, 2024: Development of a Simultaneous Robust Mixed Quality Characteristics Control Chart Based on PCA Mix and Kernel Density Estimation (KDE) for Intrusion Detection. 2025 : 1. 2025 Research Progress Report: Modification of the Variance-Covariance Matrix Estimator for Simultaneous Multivariate Control Charts for Individual Observations. 2. 2025 Research Progress Report: Development of Machine Learning-Based Multivariate Control Charts. 3. 2025 Research Progress Report: Development of a Simultaneous Robust Mixed Quality Characteristics Control Chart Based on the Minimum Regularized Covariance Determinant (MRCD) for Intrusion Detection. 4. 2025 Research Progress Report: Sea Wave Height Prediction Based on Climate Data for Maritime Disaster Risk Mitigation Using Machine Learning and Deep Learning Methods. 5. ITS Department Research Grant, 2025: Development of Machine Learning-Based Multivariate Control Charts. 6. ITS Department Research Grant (Batch 2), 2025: Sea Wave Height Prediction Based on Climate Data for Maritime Disaster Risk Mitigation Using Machine Learning and Deep Learning Methods. 7. ITS Inter-University Collaboration Research Grant, 2025: Modification of the Variance-Covariance Matrix Estimator for Simultaneous Multivariate Control Charts for Individual Observations. 8. PFR Research Grant, 2025: Development of a Simultaneous Robust Mixed Quality Characteristics Control Chart Based on the Minimum Regularized Covariance Determinant (MRCD) for Intrusion Detection. 2026 : 1. 2026 Research Progress Report: Robust Multivariate Variability Control Chart Based on Vector Variance. 2. 2026 Research Progress Report: Optimization of Preventive Maintenance Policies for Feeder Distribution Systems Using a Hierarchical Power Law Process Approach. 3. 2026 Research Progress Report: Development of a Robust Estimation-Based Fuzzy Adaptive Control Chart for Non-Normal Data. 4. 2026 Research Progress Report: Development of a Robust EWMA Control Chart Based on a Scale Estimator for Non-Normal Data.
--	---

	5. 2026 Research Progress Report: Development of a Simultaneous Multivariate Maximum Half-Normal Multivariate Control Chart Based on the Cellwise Minimum Covariance Determinant (cellMCD). 6. 2026 Research Progress Report: Monthly Train Passenger Forecasting for the Surabaya–Jakarta Route Using the XGBoost Algorithm.				
Industry collaborations over the last 5 years	2022 : 1. ITS Department Thematic Community Service Grant, 2022: Statistics Learning Training to Improve the Competence of Mathematics Teachers in Sumenep Regency. Location: Sumenep Regency 2023 : 1. ITS Department Thematic Community Service Grant, 2023: Basic Statistical Quality Control Workshop for Staff of PT Petrokimia Gresik. 2. ITS Community Service Grant, 2023: Preparation of the 2023 Sectoral Statistics Metadata for Blitar Regency. 3. ITS Community Service Grant, 2023: 2023 Customer Census of PDAM Surya Sembada, Surabaya. 2024 : 1. ITS Department Thematic Community Service Grant, 2024: Improving Digital Marketing and Branding Capacity for Batik MSME Practitioners in Lamongan Regency. 2. ITS Community Service Grant, 2024: Self-Managed Collection, Processing, and Analysis of Sectoral Statistical Data (Raw Data) for the Pasuruan Regency One Data Portal. 2025 : 1. 2025 Community Service Progress Report: Road to International Publication: Global-Quality Scientific Publication Training. 2. 2025 Community Service Progress Report: SIGMA SHIFT: Quality Improvement Implementation Seminar at PT Semen Indonesia Group (SIG), Tuban. 3. ITS Department Thematic Community Service Grant, 2025: Road to International Publication: Global-Quality Scientific Publication Training. 2026 : 1. 2026 Community Service Progress Report: Digital Marketing Training to Improve the Competitiveness of MSMEs Supported by the Lamongan Regency Social Affairs Office. 2. 2026 Community Service Progress Report: Statistics-Based Research Methodology and Publication Strategy Training for UNISLA Lamongan Faculty Members for Publication in Reputable International Journals. Partners				
Patents and proprietary rights	<table> <tr> <td>Trace (R2) Control Chart Application for Quality Monitoring</td> <td>2019</td> </tr> <tr> <td>Max-MCUSUM Control Chart Application for Quality Monitoring</td> <td>2021</td> </tr> </table>	Trace (R2) Control Chart Application for Quality Monitoring	2019	Max-MCUSUM Control Chart Application for Quality Monitoring	2021
Trace (R2) Control Chart Application for Quality Monitoring	2019				
Max-MCUSUM Control Chart Application for Quality Monitoring	2021				

	<i>Video on Mapping MSME Potential to Support the One Village One Product Program in Lamongan Regency</i>	2021
	<i>MSME Potential Mapping Dashboard to Support the One Village One Product Program in Lamongan Regency</i>	2023
	<i>Methodology for Monitoring the Drinking Water Production Process Using the Modified Max-MCUSUM Method</i>	2023
	<i>Data Analytics Training Video Bank Syariah Indonesia (BSI) Region VIII Surabaya</i>	2024
	<i>Video on Improving Digital Marketing and Branding Capacity for Batik MSME Practitioners in Lamongan Regency</i>	2024
	<i>Poster Survey 911</i>	2024
	<i>Poster Guest Lecture Role Of SPC In Industry 4.0 Era Pada Kegiatan Inbound Research Mobility 2024</i>	2024
	<i>Poster MarketMinder</i>	2024
	<i>Poster for the "Strategy on International Publication" Sharing Session at the 2024 Inbound Research Mobility Program</i>	2024
	<i>Video MarketMinder</i>	2024
	<i>Video Survey 911</i>	2024
	<i>Video on Improving Digital Marketing and Branding Capacity for Batik MSME Practitioners in Lamongan Regency</i>	2024
	<i>Clinker Monitoring Dashboard by Difyze</i>	2024
	<i>Infografis Program Makan Bergizi Gratis (MBG) di Jawa Timur</i>	2025

Important publications over the last 5 years	2022 : 1. Department of Mathematics, Universitas Negeri Gorontalo: "Application of the Neutrosophic Exponentially Weighted Moving Average (NEWMA) X Control Chart for Monitoring the Mean Glass Thickness Process." 2. Universitas Muhammadiyah Mataram: "Multivariate Control Chart Based on Neutrosophic Hotelling T^2 Statistics and Its Application." 3. ITS: "Development of the One Village One Product Program for MSME Mapping in Lamongan Regency." 4. ITS: "Basic Statistical Quality Control for Quality Assurance Staff at PT Semen Indonesia (Persero) Tbk." 5. Elsevier: "Kernel Principal Component Analysis (PCA) Control Chart for Monitoring Mixed Nonlinear Variable and Attribute Quality Characteristics." 6. DRPM ITS: "Improving Research Data Processing Skills for Faculty Members in Sumenep Regency." 2023 : 1. Universitas Cokroaminoto: "Monitoring Hot Glass Quality Using the MEWMA Control Chart." 2. Growing Science: "Neutrosophic Multivariate EWMA Control Chart." 3. DRPM ITS: "Statistics Learning Training to Improve the Competence of Mathematics Teachers in Sumenep Regency." 4. Springer Nature: "Support Vector Data Description with Kernel Density Estimation (SVDD-KDE) Control Chart for Network Intrusion Monitoring." 2024 : 1. Pattimura University: "Maximum Exponentially Weighted Moving Average with Measurement Error (Using Covariate Method) Using Auxiliary Information for Cement Quality Control." 2. Universitas Cokroaminoto: "Service and Marketing Strategies through Data Analytics Training at Bank X." 3. Pattimura University: "Forecasting the Number of International Tourist Arrivals Using a Multi-Input Intervention ARIMA Model." 4. "Statistical Quality Control and Capability Process on Nonnormally Distributed Data." 5. Pusat Studi Bahasa dan Publikasi Ilmiah: "Improving Digital Marketing and Branding Capacity for Batik MSME Practitioners in Lamongan Regency." 2025 : 1. Pattimura University: "Adaptive Exponentially Weighted Moving Average with Measurement Error (Covariate) with Auxiliary Information Maximum for Cement Quality Control." 2. AIP Publishing LLC: "Simultaneous Robust Max-Half-MChart Control Charts Based on Minimum Regularized Covariance Determinant (MRCD)." 3. AIP Publishing LLC: "Comparing the Performance of Max-MChart, Max-Half-MChart, and Kernel-Based Max-MChart for Individual Observations in Monitoring Cement Quality."
--	---

	4. AIP Publishing LLC: "Advanced Process Monitoring in Ordinary Portland Cement (OPC) Data Using Robust Max-Half-MChart Control Charts with Fast-MCD and Dxcet-MCD Estimators." 5. Springer Nature: "Enhanced Monitoring of Process Anomalies: Exponentially Weighted Moving Average Max Multivariate (EWMA Max-M) Control Chart." 6. IEEE: "Residual-Based Air Quality Monitoring: A Hybrid XGBoost-AEWMA Control Chart for Detecting PM2.5 Anomalies." 7. Madaniya: "Road to International Publication: Global-Quality Scientific Publication Training." 8. Parameter: "Monitoring and Evaluation of Clunker Quality Using T^2 Hotelling-Generalized Variance Control Chart." 2026 : 1. Multidisciplinary Digital Publishing Institute: "Robust Max-Half-MChart Based on the Cellwise Minimum Covariance Determinant." 2. "Optimizing Digital Marketing for MSMEs Supported by the Lamongan Regency Social Affairs Office through Visual Design Training, Video Content, and the Use of Artificial Intelligence."		
Activities in specialist bodies over the last 5 years	Microsoft Power BI Data Analys (X)	Training	2023
	Certified Data Analyst Expert (CDA) (PT. Human Indonesia Manajemen Surabaya)	Competency Development Program	2024
	Microsoft Azure Data Fundamental (Trust)	Competency Development Program	2024
	Leadership School (SdMO ITS Surabaya)	Training	2025

Name	<i>Diaz Fitra Aksioma, S.Si, M.Si.</i>
Post	<i>Assistant Expert Lecturer</i>
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] (subject) ITS</i>
Employment	<i>Lecturer ITS 2012</i>
Research and development projects over the last 5 years	<i>2023 :</i> <i>1. Development of an Accurate Probability-Based Model for Sequence Alignment of Paired Data</i> <i>2. Comparison of LSTM and Intervention ARIMA Models for Forecasting International Tourist Arrivals to Indonesia in the Post-COVID-19 Pandemic Period</i> <i>3. ITS Department Research Grant (Batch 2), 2023: Development of an Accurate Probability-Based Model for Sequence Alignment of Paired Data</i> <i>4. ITS Department Research Grant (Batch 2), 2023: Comparison of LSTM and Intervention ARIMA Models for Forecasting International Tourist Arrivals to Indonesia in the Post-COVID-19 Pandemic Period</i> <i>2025 :</i> <i>1. 2025 Research Progress Report: Statistical Quality Monitoring of Tube Production Using the Robust Maximum Multivariate Control Chart (Max-MChart)</i> <i>2. 2025 Research Progress Report: Development of Machine Learning-Based Multivariate Control Charts</i> <i>3. ITS Department Research Grant, 2025: Quality Monitoring of Fly Ash Bottom Ash (FABA) and Paper Sludge as Alternative Raw Materials in the Cement Production Process</i> <i>4. ITS Department Research Grant, 2025: Statistical Quality Monitoring of Tube Production Using the Robust Maximum Multivariate Control Chart (Max-MChart)</i> <i>5. ITS Department Research Grant, 2025: Development of Machine Learning-Based Multivariate Control Charts</i> <i>6. PTM Research Grant, 2025: Combination of PLS-SEM, Principal Component Analysis (PCA), and Importance-Performance Analysis (IPA) for the Nutritional Status of Malnourished Toddlers</i> <i>2026 :</i> <i>1. 2026 Research Progress Report: Data-Driven Accelerated Degradation Model for Predicting the Remaining Useful Life of Ball Bearing Components in Rotating Machines</i> <i>2. 2026 Research Progress Report: Optimization of Preventive Maintenance Policies for Feeder Distribution Systems Using the Hierarchical Power Law Process Approach</i> <i>3. 2026 Research Progress Report: Development of a Robust EWMA Control Chart Based on Scale Estimators for Non-Normal Data</i>

	4. 2026 Research Progress Report: Development of a Grey-Box Functional Regression Model for Predicting NO_x Emission Concentrations in Coal-Fired Power Plant Electricity Production
Industry collaborations over the last 5 years	2023 : 1. ITS Department-Funded Thematic Community Service Program, 2023: Basic Statistical Quality Control Workshop for Staff of PT Petrokimia Gresik 2024 : 1. ITS Department-Funded Thematic Community Service Program, 2024: Improving Digital Marketing and Branding Capabilities for Batik MSME Entrepreneurs in Lamongan Regency 2025 : 1. 2025 Community Service Progress Report: Road to International Publication: Global-Quality Scientific Publication Training 2. 2025 Community Service Progress Report: SIGMA SHIFT: Quality Improvement Implementation Seminar at PT Semen Indonesia Group (SIG) Tuban 3. ITS Department-Funded Thematic Community Service Program, 2025: Road to International Publication: Global-Quality Scientific Publication Training 2026 : 1. 2026 Community Service Progress Report: Digital Marketing Training to Improve the Competitiveness of MSMEs Assisted by the Lamongan Regency Social Services Office 2. 2026 Community Service Progress Report: Statistics-Based Research Methodology and Publication Strategies for Reputable International Journals for UNISLA Lecturers Partners
Patents and proprietary rights	Trace Diagram Application (R^2) for Quality Monitoring 2019 Video on Improving Digital Marketing and Branding Capabilities for Batik MSME Entrepreneurs in Lamongan Regency 2024 Poster: Improving Digital Marketing and Branding Capabilities for Batik MSME Entrepreneurs in Lamongan Regency 2024 Poster: Guest Lecture — Role of SPC in the Industry 4.0 Era 2024

	<i>at the 2024 Inbound Research Mobility Program</i> <i>Poster: Sharing Session — Strategy for International Publication at the 2024 Inbound Research Mobility Program</i> 2024 <i>Cement Quality Monitoring Dashboard SIG × ITS</i> 2025
Important publications over the last 5 years	2022 : 1. ITS: “Basic Statistical Quality Control for Quality Assurance Staff of PT Semen Indonesia (Persero) Tbk” 2023 : 1. “Basic Statistical Quality Control Workshop for Staff of PT Petrokimia Gresik” 2024 : 1. “PCC Cement Quality Control at PT Semen Bosowa Banyuwangi Using the Maximum Half-Normal Multivariate Control Chart (Max-Half-MChart)” 2. “Examining the Influence of Intrinsic Motivation and Job Satisfaction on Organizational Citizenship Behaviour at Company XYZ via Structural Equation Modelling” 3. Pattimura University: “Forecasting Number of International Tourist Arrivals Using Multi-Input Intervention ARIMA Model” 4. Center for Language Studies and Scientific Publication: “Improving Digital Marketing and Branding Capabilities for Batik MSME Entrepreneurs in Lamongan Regency” 2025 : 1. “Reliability Analysis of the Overhead Travelling Crane in Building N1 at a Railway Manufacturing Company” 2. “Production Quality Control Analysis of PDAM Surya Sembada Surabaya Using MEWMA and MEWMV Control Charts” 3. Pattimura University: “Clustering of Water Quality Locations Using Self-Organizing Maps (SOM)” 4. Madaniya: “Road to International Publication: Global-Quality Scientific Publication Training” 5. “Road to International Publication: Global-Quality Scientific Publication Training 2026 : 1. Wiley: “Using Multiple Regression Models and Methods to Estimate Fatigue-Life Distributions and Construct Constant-Life Diagrams” 2. Elsevier: “Combination of Partial Least Square Structural Equation Modeling Scheme of Principal Component Analysis with Importance-Performance Analysis” 3. Taylor & Francis: “Accelerated Destructive Degradation Modeling and Analysis with Multiple Experimental Variables”

Activities in specialist bodies over the last 5 years	<i>English As The Medium of Instruction Training 2025 (Global Language Center, ITS)</i>	<i>Training</i>	<i>2025</i>
---	---	-----------------	-------------

Name	<i>Novri Suhermi, S.Si., M.Sc.</i>		
Post	<i>Assistant Expert Lecturer</i>		
Academic career	<i>Initial academic appointment</i>	<i>ITS</i>	<i>Year</i>
	<i>Habilitation [German post-doctoral qualification] (subject)</i>	<i>ITS & Universite De Paris VII</i>	<i>Year</i>
	<i>Doctorate (subject)</i>	<i>Lancaster University</i>	<i>Year</i>
Employment	<i>Lecturer</i>	<i>ITS</i>	<i>2017</i>
Research and development projects over the last 5 years	<i>2023 :</i> <i>1. Comparison of LSTM and Intervention ARIMA Models for Forecasting International Tourist Arrivals to Indonesia in the Post-COVID-19 Pandemic Period</i> <i>2. ITS Department Research Grant (Batch 2), 2023: Comparison of LSTM and Intervention ARIMA Models for Forecasting International Tourist Arrivals to Indonesia in the Post-COVID-19 Pandemic Period</i> <i>2025 :</i> <i>1. 2025 Research Progress Report: Functional Data Analysis for Air Quality Forecasting with Missing Data</i> <i>2. 2025 Research Progress Report: Energy Consumption Modeling Using Functional Data Analysis</i> <i>3. ITS Department Research Grant, 2025: Functional Data Analysis for Air Quality Forecasting with Missing Data</i> <i>2026 :</i> <i>1. 2026 Research Progress Report: Development of a Sentiment-Based Recommendation System for E-Commerce Using Aspect-Based Sentiment Analysis (ABSA)</i> <i>2. 2026 Research Progress Report: Evaluation of Boosting Algorithms and Interpretable Machine Learning for Cyberattack Detection</i> <i>3. 2026 Research Progress Report: Development of a Grey-Box Functional Regression Model for Predicting NOx Emission Concentrations in Coal-Fired Power Plant Electricity Production</i> <i>4. 2026 Research Progress Report: Deep Learning-Based Air Quality Index Forecasting Using Time Series Data with Missing Values</i>		
Industry collaborations over the last 5 years	<i>2023 :</i> <i>1. ITS Department-Funded Thematic Community Service Program, 2023: Basic Statistical Quality Control Workshop for Staff of PT Petrokimia Gresik</i>		

	2024 : 1. <i>ITS Department-Funded Thematic Community Service Program, 2024: Improving Digital Marketing and Branding Capabilities for Batik MSME Entrepreneurs in Lamongan Regency</i> 2025 : 1. <i>ITS Department-Funded Thematic Community Service Program, 2025: Road to International Publication: Global-Quality Scientific Publication Training</i> 2. <i>2025 Community Service Progress Report: Road to International Publication: Global-Quality Scientific Publication Training</i> 3. <i>2025 Community Service Progress Report: SIGMA SHIFT: Quality Improvement Implementation Seminar at PT Semen Indonesia Group (SIG) Tuban</i> 2026 : 1. <i>2026 Community Service Progress Report: Digital Marketing Training to Improve the Competitiveness of MSMEs Assisted by the Lamongan Regency Social Services Office</i> 2. <i>2026 Community Service Progress Report: Statistics-Based Research Methodology and Publication Strategies for Reputable International Journals for UNISLA Lecturers</i> Partners
Patents and proprietary rights	Video: Mapping the Potential of MSMEs to Support the One Village One Product Program in Lamongan Regency 2021 Dashboard: Mapping the Potential of MSMEs to Support the One Village One Product Program in Lamongan Regency 2023
Important publications over the last 5 years	2022 : 1. <i>ITS: "Development of the One Village One Product Program for MSME Mapping in Lamongan Regency"</i> 2. <i>ITS: "Basic Statistical Quality Control for Quality Assurance Staff of PT Semen Indonesia (Persero) Tbk"</i> 2023 : 1. <i>AIP Publishing LLC: "Forecasting Double Seasonal Electricity Consumption with TBATS Model"</i> 2. <i>Madaniya: "Basic Statistical Quality Control Workshop for Staff of PT Petrokimia Gresik"</i> 2024 : 1. <i>Springer International Publishing: "Survival Support Vector Machines: A Simulation Study and Its Health-Related Application"</i>

	2. <i>"Intrusion Detection Systems (IDSs) Using Multivariate Hotelling's T^2 Control Chart with Dimensional Reduction of Factorial Analysis of Mixed Data (FAMD) and Autoencoder"</i> 3. <i>Pattimura University: "Forecasting Number of International Tourist Arrivals Using Multi-Input Intervention ARIMA Model"</i> 4. <i>IEEE: "Functional Data Analysis for Household Appliance Energy Consumption Prediction"</i> 2025 : 1. <i>"Multivariate Time Series Forecasting Using Hybrid Vector Autoregressive and Neural Network for Coupled Roll-Sway-Yaw Motions Prediction"</i> 2. <i>Springer Nature Singapore: "Energy Consumption Prediction Using Functional Regression"</i> 3. <i>Madaniya: "Road to International Publication: Global-Quality Scientific Publication Training"</i> 4. <i>"Road to International Publication: Global-Quality Scientific Publication Training"</i> 2026 : 1. <i>"Leveraging XGBoost, LightGBM, and CatBoost for Enhanced Customer Segmentation in the Automotive Industry"</i> 2. <i>"Clinical Factor Analysis and Comparison of Heart Failure Patient Prediction Models Using Logistic Regression and XGBoost"</i> 3. <i>IEEE: "Sentiment Analysis of Super App Polri Reviews Using a Hybrid CNN-BiLSTM Model"</i> 4. <i>"Optimizing Digital Marketing for MSMEs Assisted by the Lamongan Regency Social Services Office Through Training in Visual Design, Video Content, and the Use of Artificial Intelligence"</i> 5. <i>"Forecasting Palm Oil Production Using a Hierarchical Time Series Approach, Extreme Gradient Boosting, and Neural Network Autoregressive with Exogenous Input"</i>
Activities in specialist bodies over the last 5 years	<i>Deep Learning for Training</i> 2025 <i>Natural Language Processing (INIXINDO)</i>

Name	<i>Rahmatin Nur Amalia, S.Stat., M.Si.</i>
Post	<i>Assistant Expert Lecturer</i>
Academic career	<i>Initial academic appointment IPB</i> <i>Habilitation [German post-doctoral qualification] (subject) IPB</i>
Employment	<i>Lecturer ITS 2025</i>
Research and development projects over the last 5 years	<i>2025 :</i> <i>2025 Research Progress Report: Robust Hotelling's T^2 Control Chart with Cellwise Minimum Covariance Determinant Estimator (CMCD) for Intrusion Detection</i> <i>2025 Research Progress Report: Functional Data Analysis for Air Quality Forecasting with Missing Data</i> <i>2025 Research Progress Report: Statistical Quality Monitoring of Tube Production Using the Robust Maximum Multivariate Control Chart (Max-MChart)</i> <i>ITS Department Research Grant, 2025: Functional Data Analysis for Air Quality Forecasting with Missing Data</i> <i>ITS Department Research Grant, 2025: Quality Monitoring of Fly Ash Bottom Ash (FABA) and Paper Sludge as Alternative Raw Materials in the Cement Production Process</i> <i>ITS Department Research Grant, 2025: Statistical Quality Monitoring of Tube Production Using the Robust Maximum Multivariate Control Chart (Max-MChart)</i> <i>ITS Scientific Research Grant, 2025: Robust Hotelling's T^2 Control Chart with Cellwise Minimum Covariance Determinant Estimator (CMCD) for Intrusion Detection</i> <i>2026 :</i> <i>2026 Research Progress Report: Robust Exponentially Weighted Moving Average Max-MChart (REWMA Max-MChart) Control Chart for Intrusion Detection</i> <i>2026 Research Progress Report: Data-Driven Accelerated Degradation Model for Predicting the Remaining Useful Life of Ball Bearing Components in Rotating Machines</i> <i>2026 Research Progress Report: Development of a Simultaneous Multivariate Maximum Half-Normal Multivariate Control Chart Based on the Cellwise Minimum Covariance Determinant (cellMCD)</i> <i>2026 Research Progress Report: Monthly Train Passenger Forecasting for the Surabaya–Jakarta Route Using the XGBoost Algorithm</i>

	5. <i>2026 Research Progress Report: Development of a Sentiment-Based Recommendation System for E-Commerce Using Aspect-Based Sentiment Analysis (ABSA)</i>
Industry collaborations over the last 5 years	2025 : 1. <i>2025 Community Service Progress Report: Road to International Publication: Global-Quality Scientific Publication Training</i> 2. <i>2025 Community Service Progress Report: SIGMA SHIFT: Quality Improvement Implementation Seminar at PT Semen Indonesia Group (SIG) Tuban</i> 3. <i>ITS Department-Funded Thematic Community Service Program, 2025: Road to International Publication: Global-Quality Scientific Publication Training</i> 4. <i>ITS Community Service Grant, 2025: Consulting Services Assistance for the Preparation of the 2025 Social Piety Index of Mojokerto City</i> 5. <i>ITS Community Service Grant, 2025: Consulting Services Assistance for the Preparation of the 2024 Youth Development Index of Mojokerto City</i> 2026 : 1. <i>2026 Community Service Progress Report: Digital Marketing Training to Improve the Competitiveness of MSMEs Assisted by the Lamongan Regency Social Services Office</i> 2. <i>2026 Community Service Progress Report: Statistics-Based Research Methodology and Publication Strategies for Reputable International Journals for UNISLA Lecturers</i>
Patents and proprietary rights	<i>Title</i> <i>Year</i>
Important publications over the last 5 years	2025 : 1. <i>Pattimura University: "Clustering of Water Quality Locations Using Self-Organizing Maps (SOM)"</i> 2. <i>Madaniya: "Road to International Publication: Global-Quality Scientific Publication Training"</i> 3. <i>"Road to International Publication: Global-Quality Scientific Publication Training"</i> 2026 : 1. <i>Multidisciplinary Digital Publishing Institute: "Robust Multivariate Simultaneous Control Chart Based on Minimum Regularized Covariance Determinant (MRCD)"</i> 2. <i>"Strengthening Statistical Literacy and Data Science Skills Among Students of SMP Negeri 30 Surabaya Through Educational Activities"</i> 3. <i>"Optimizing Digital Marketing for MSMEs Assisted by the Lamongan Regency Social Services Office Through Training in Visual Design, Video Content, and the Use of Artificial Intelligence"</i>

Activities in specialist bodies over the last 5 years	<i>Induction Training for Prospective Non-Civil-Service Lecturers at ITS (Human Resources and Organization, ITS)</i>	<i>Training</i>	<i>2025</i>
	<i>Basic Instructional Skills Improvement Program (Directorate of Academic Development and Learning Innovation, Institut Teknologi Sepuluh Nopember)</i>	<i>Pekerti</i>	<i>2025</i>
	<i>English as the Medium of Instruction Training, 2025 (Global Language Center, ITS)</i>	<i>Training</i>	<i>2025</i>

Computational Statistics and Data Science Laboratory

Name	<i>Prof. Nur Iriawan, M.Ikom, Ph.D.</i>		
Post	<i>Head of Computational Statistics and Data Science Laboratory</i>		
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] (subject) UI & Maryland Univ.</i> <i>Doctorate (subject) Curtin Univ. of Tech.</i>		
Employment	<i>Lecturer</i>	<i>ITS</i>	<i>1988</i>
	<i>Professor</i>	<i>ITS</i>	<i>2023</i>
Research and development projects over the last 5 years	<i>2022 :</i> <i>1. Multi-Class Text Classification of Community Complaint Websites Using Machine Learning</i> <i>2. ITS Departmental Research Decree (Batch 2) 2022: Multi-Class Text Classification of Community Complaint Websites Using Machine Learning</i> <i>2023 :</i> <i>1. Development of Neo-Normal Univariate Air Quality Control Charts</i> <i>2. Prediction of Poverty Percentage Based on Satellite Imagery and Point of Interest (POI) Using Machine Learning</i> <i>3. ITS Departmental Research Decree (Batch 2) 2023: Prediction of Poverty Percentage Based on Satellite Imagery and Point of Interest (POI) Using Machine Learning</i> <i>4. ITS Scientific Research Decree 2023: Development of Neo-Normal Univariate Air Quality Control Charts</i> <i>2024 :</i> <i>1. Research Progress Report 2024: Development of MSN Burr Neo-Normal Bivariate Control Charts: A Case Study of Brain Signals in Children with Mild Epilepsy</i> <i>2. ITS Departmental Research Decree 2024: Brainwave Monitoring in Pediatric Patients with Epilepsy Using Markov Switching Autoregressive (MSAR) Method with EM-Gaussian and Bayesian-Exponential Power Approaches</i> <i>3. ITS Scientific Research Decree 2024: Development of MSN Burr Neo-Normal Bivariate Control Charts: A Case Study of Brain Signals in Children with Mild Epilepsy</i> <i>2025 :</i> <i>1. Research Progress Report 2025: Integration of Hidden Markov Random Field and Bernoulli Mixture Models in Medical Image Segmentation</i> <i>2. Research Progress Report 2025: Integration of Spatial Ising and Neo-Normal Patterns as a Ventricular Septal Defect (VSD) Detector in Pediatric Cardiac Ultrasound</i>		

	3. <i>ITS Faculty Research Decree 2025: Development of Islamic Banking Financing Strategies Based on Economic Sectors Using Optimized Predictive Analytics for Sustainable Finance</i> 4. <i>PFR Decree 2025: Integration of Spatial Ising and Neo-Normal Patterns as a Ventricular Septal Defect (VSD) Detector in Pediatric Cardiac Ultrasound</i> 5. <i>PMDSU Decree 2025: Integration of Hidden Markov Random Field and Bernoulli Mixture Models in Medical Image Segmentation</i> 2026 : 1. <i>Research Progress Report 2026: Integration of Hidden Markov Random Field and Bernoulli Mixture Models in Medical Image Segmentation</i> 2. <i>Research Progress Report 2026: A Two-Stage Probabilistic Framework Based on Bayesian Neo-Normal Mixture Model for Land Object Detection and Rice Growth Phase Zoning</i> 3. <i>Research Progress Report 2026: On the Technology Acceptance Model Using Bayesian Structural Equation Modeling Fernandez-Steel Skew Normal (TAM-SEM-FSSN) in E-Learning Adoption</i> 4. <i>Research Progress Report 2026: Transfer Learning-Based Modeling for Lung Disease Classification Using Image Data</i> 5. <i>Research Progress Report 2026: Modeling Hidden Markov Neo-Normal Mixture Model for Epileptic Seizure Detection in EEG Signals</i> 6. <i>Research Progress Report 2026: Modeling Rice Planting Phase Patterns Using Neo-Normal Mixture Model Approach</i> 7. <i>Research Progress Report 2026: Development of MSVAR Model with Skewed Exponential Power Distribution for Financial Contagion Effect Analysis Between Indonesian and United States Stock Markets</i> 8. <i>Research Progress Report 2026: Development of Multivariate Spatio-Temporal Markov Switching Model with Neo-Normal Conditional Autoregressive (NeNo-CAR) Prior for Infectious Disease Mapping</i> 9. <i>Research Progress Report 2026: Solar Power Plant Output Forecasting in Nusa Penida Using Hybrid Autoregressive Integrated Moving Average (ARIMA) – Long Short-Term Memory (LSTM)</i>
Industry collaborations over the last 5 years	2022 : <i>ITS Departmental Thematic Community Service Decree 2022: Capacity Building for Village Officials in Data Collection and Analysis (Location: Klagen Village, Rejos District, Nganjuk Regency, Java)</i> 2023 : <i>ITS Departmental Thematic Community Service Decree 2023: Scientific Writing Workshop for Teachers of SMAN 1 Surabaya Using Statistical Methodology</i> 2025 : <i>ITS Departmental Thematic Community Service Decree 2025: Applied Statistical Modeling Training for UNIPRA Lecturers to Strengthen Scientific Work Quality</i> <i>ITS Departmental Thematic Community Service Decree 2025: Strengthening Competencies of UNIPRA Lecturers in Data Exploration and Scientific Publication</i> <i>Community Service Progress Report 2025: Applied Statistical Modeling Training for UNIPRA Lecturers to Strengthen Scientific Work Quality</i>

	<i>Community Service Progress Report 2025: Strengthening Competencies of UNIPRA Lecturers in Data Exploration and Scientific Publication</i> 2026 : <i>Community Service Progress Report 2026: Applied Statistical Modeling Training for UNITOMO Lecturers and Students to Strengthen Research Quality</i> <i>Community Service Progress Report 2026: Strengthening Competencies of UNITOMO Lecturers and Students in Identifying Data Patterns and Anomalies</i> <i>Partners</i>
Patents and proprietary rights	<i>Community Service Video: "Applied Statistical Modeling Training for UNIPRA Lecturers to Strengthen Scientific Work Quality"</i> 2025 <i>Community Service Video: "Strengthening Competencies of UNIPRA Lecturers in Data Exploration and Scientific Publication"</i> 2025 <i>Security and Fire Brigade Dashboard</i> 2025
Important publications over the last 5 years	2022 : 1. <i>Multidisciplinary Digital Publishing Institute: "A Bayesian Pipe Failure Prediction for Optimizing Pipe Renewal Time in Water Distribution Networks"</i> 2. <i>Department of Mathematics, Faculty of Science and Technology, Universitas Islam Negeri Sunan Ampel: "A Functional Form of The Zenga Curve Based on Rohde's Version of the Lorenz Curve"</i> 3. <i>"A Hybrid Evaluation Index Approach in Optimizing Single Tuition Fee Cluster Validity"</i> 4. <i>Department of Mathematics, Faculty of Science and Technology, UIN Sunan Ampel: "A Functional Form of The Zenga Curve Based on Rohde's Version of the Lorenz Curve"</i> 5. <i>"A Hybrid Evaluation Index Approach in Optimizing Single Tuition Fee Cluster Validity"</i> 6. <i>Multidisciplinary Digital Publishing Institute: "A Bayesian Pipe Failure Prediction for Optimizing Pipe Renewal Time in Water Distribution Networks"</i> 7. <i>Elsevier: "Brain Tumor MRI Image Segmentation Using Deep Learning Techniques"</i> 8. <i>2nd International Seminar on Machine Learning, Optimization, and Data Science (ISMODE): "Markov Switching Process Monitoring Brain Wave Movement in Autism Children"</i> 9. <i>MDPI: "On the Bayesian Mixture of Generalized Linear Models with Gamma-Distributed Responses"</i> 10. <i>MDPI: "On the Bayesian Mixture of Generalized Linear Models with Gamma-Distributed Responses"</i> 11. <i>UTM Press: "On the YOLOv4 Architecture for Fast and Real Time Congenital Heart Disease Detection Via Ultrasound Videos"</i>

	12. MDPI: "Two-Phase Stratified Random Forest for Paddy Growth Phase Classification: A Case of Imbalanced Data" 13. DPRM ITS: "Workshop on the Implementation of Statistics in Classroom Action Research at SMKN 5 Surabaya" 2023 : 1. The Symposium on Advance of Sustainable Engineering 2021 (SIMASE 2021): "A Spatial Data-Driven Decision Analysis of Pipe Failure Management in Water Supply System" 2. FMIPA Sriwijaya: "Bayesian Mixture Statistical Modeling Perspective in the Series of Diabetes Mellitus Disaster Mitigation in Malang Regions" 3. Institute of Advanced Engineering and Science: "Categorical Encoder Based Performance Comparison in Preprocessing Imbalanced Multiclass Classification" 4. AIP Publishing: "On the Computational Bayesian Survival Spatial Dengue Hemorrhagic Fever (DHF) Modelling with Fernandez-Steel Skew Normal Conditional Autoregressive (FSSN CAR) Frailty" 5. Elsevier ScienceDirect: "The Adjusted SNR and Its Application for Selection Lorenz Function of Income Inequality Analysis" 2024 : 1. Multidisciplinary Digital Publishing Institute (MDPI) : "A Markov Switching Autoregressive Model with Time-Varying Parameters" 2. IEEE : "A Prescriptive Analytics Framework for Banks' Loan Strategy Development: Indonesian Banks' Case Study" 3. IEEE : "A Regime Switching Analysis of Resilience and Sustainability in Indonesia's Islamic Banking" 4. IEEE : "Adaptive EfficientNet-DeeplabV3+ for Left Ventricular Wall Segmentation" 5. IEEE : "Development of Indonesian Islamic Banking Financial Inclusion Strategy: A Machine Learning Approach" 6. Universitas Pertamina : "Anomaly Detection for Carbon Capture and Storage Facility using Markov Switching Model" 7. AIP : "Analyzing Financial Crisis and Contagion Effect on the Indonesian and United States Stock Markets via a Markov Switching Bayesian Vector Autoregressive Approach" 8. Elsevier : "Adjusted SNR for Generalized Extreme Value Mixture Autoregressive Model in Actuarial Data" 9. Elsevier : "Brainwave Monitoring in Epileptic Pediatric Patient using MSAR EM-Gaussian and MSAR Bayesian-Exponential Power" 10. IEEE : "Dense-UNet with Network-Based Transfer Learning for Left Ventricular Wall Segmentation" 11. IEEE : "Electricity Availability Modeling through Night Time Light Data Visible Infrared Imaging Radiometer Suite (NTL VIIRS) using Poisson Point Process in South Sumatera" 12. AIP : "Forecasting Bitcoin Return using GARCH-LSTM" 13. IEEE : "Hierarchical Bayesian Modelling on Predicting East Java Province Population" 14. International Journal of Islamic Finance and Sustainable Development : "Indonesian Islamic Banks' Post-Pandemic Profitability Alignment with Sustainability Goals" 15. IEEE : "Ising Neo-Normal Model (INNMM) for Segmentation of Cardiac Ultrasound Imaging"
--	--

	16. IEEE : "On Identifying Anomaly Factor Scores Distribution in Estimating Structural Equation Model Using Bayesian Approach" 17. Sage Inc. Publications : "On the Flexible Neo-Normal MSAR MSN-Burr Control Chart in Air Quality Monitoring" 18. IEEE : "On the Spatial Point Pattern on Customer Affect Retail Fuel Stations Businesses" 19. "Pemodelan Perulangan Pengobatan Pasien Kanker Serviks di RSUD dr. Soetomo dengan Bayesian Geometric Regression dan Bayesian Mixture-Geometric Regression" 20. Hungarian Central Statistical Office : "The Extended Amato Index and Its Application to Income Data" 21. Elsevier : "The lorenz-extended rohde function for asymmetric lorenz curve (Application in income data)" 22. Scientific Oasis doo Belgrade : "The New Measures of Lorenz Curve Asymmetry: Formulation and Hypothesis Testing" 23. Matematika : "Time-Varying Autoregressive Models for Economic Forecasting" 24. Institute of Advanced Engineering and Science (IAES) : "Transfer learning scenarios on deep learning for ultrasound based image segmentation" 25. Hindawi : "YOLO-UNet Architecture for Detecting and Segmenting the Localized MRI Brain Tumor Image" 2025 : 1. Forecasting: "A Bayesian Markov Switching Autoregressive Model with Time-Varying Parameters for Dynamic Economic Forecasting" 2. "Bivariate Normal Distribution for Modelling Spatio-Temporal Data" 3. IEEE: "Brainwave Monitoring in Epileptic Pediatric Patient Using MSAR-Normal, MSAR-Azzalini, and MSAR-Exponential Power" 4. Scientific Oasis: "Bayesian Restructuring Technology Acceptance Model (TAM) with Moderating Lecture Self-Managing in E-Learning Adoption" 5. Department of Statistics, Universitas Diponegoro: "Performance Accuracy of Hybrid Geometric Brownian Motion-Kalman Filter Method in Indonesian Stock Price Forecasting" 6. AIP Publishing LLC: "Forecasting Tourist Visits Using Switching-Markov ARX Based on Google Trends Data" 7. IEEE: "HMM-Based Mixture of Gaussian Process Functional Regressions for Seasonal Time Series Forecasting Under Multimodal Distributions: A Case Study on the Hourly Prediction of Land Surface Temperature" 8. Department of Mathematics, Universitas Negeri Gorontalo: "Hybrid Geometric Brownian Motion-Markov Switching for Indonesian Stock Price Forecasting" 9. IEEE: "Left Ventricular Wall Segmentation Using U-Net and Link-Net" 10. Elsevier: "On the Bayesian Generalized Extreme Value Mixture Autoregressive Model with Adjusted SNR in Non-Standard Actuarial Data" 11. Elsevier: "On the Bayesian Generalized Extreme Value Mixture Autoregressive Model with Adjusted SNR in Non-Standard Actuarial Data" 12. AIP Publishings: "On the Generalized Extreme Value Mixture Autoregressive Model with Expectation Maximization Estimator on the Claims Reserve Data of General Insurance Companies in Indonesia" 13. MDPI: "Parameter Estimation of MSNBurr-Based Hidden Markov Model: A Simulation Study"
--	--

	14. <i>Numerical: Jurnal Matematika dan Pendidikan Matematika: "Energy Sector Stock Modeling Using Non-Homogeneous Markov Switching Autoregressive (NHMS-AR) with Non-Homogeneous Transition Probabilities"</i> 15. <i>AIP Publishing: "The New Adjusted SNR in Determining Order of the Autoregressive Model"</i> 16. <i>AIP Publishing LLC: "The New Adjusted SNR in Determining Order of the Autoregressive Model"</i> 2026 : 1. <i>IOP Science: "Assessing Rainfall Variability and Atmospheric Dynamics Using a Multisite Hidden Markov Model for Hydrometeorological Hazard Assessment in Yogyakarta, Indonesia"</i> 2. <i>IEEE: "Enhanced Cyber Attack Clustering Through Multiview Attribute Fuzzy C-Means with Differential Evolution Optimization"</i> 3. <i>IEEE: "Hybrid of Spatial Ising Model and MSTBurr Distribution for Cardiac Ultrasound Imaging Segmentation"</i> 4. <i>IOP Science: "Improving Local Rainfall Projections in Bali Through Bias Correction of CMIP6 Data: A Contribution to Hydro-Meteorological Disaster Mitigation"</i> 5. <i>IEEE: "Mixture Models for Biomedical Image Segmentation: A Systematic Review"</i> 6. <i>IEEE: "Performance Accuracy of Modified Hybrid Geometric Brownian Motion Kalman Filter and Markov Switching Methods in Indonesian Stock Prices Forecasting"</i> 7. <i>MDPI: "SEP-HMM: A Flexible Hidden Markov Model Framework for Asymmetric and Non-Mesokurtic Emission Patterns"</i>		
Activities in specialist bodies over the last 5 years	<i>Book Writing Workshop (I)</i> <i>Competency Development Planning</i>	<i>Training</i> <i>Competency Enhancement Program</i>	2023 2024

Name	<i>Dr. Dra. Kartika Fithriasari, M.Si.</i>		
Post	<i>Vice Dean of the Faculty of Science and Data Analytics</i>		
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] (subject) IPB</i> <i>Doctorate (subject) ITS</i>		
Employment	<i>Lecturer</i>	<i>ITS</i>	<i>1993</i>
Research and development projects over the last 5 years	<i>2022 :</i> <i>1. Multi-Class Text Classification of Public Complaint Website using Machine Learning</i> <i>2. ITS Department Research Decree (Batch 2) 2022: Multi-Class Text Classification of Public Complaint Website using Machine Learning</i> <i>2023 :</i> <i>1. Tourist Attraction Image Classification Model using Machine Learning Approach</i> <i>2. Poverty Percentage Prediction Based on Satellite Imagery and Point of Interest (POI) using Machine Learning</i> <i>3. ITS Department Research Decree (Batch 2) 2023: Tourist Attraction Image Classification Model using Machine Learning Approach</i> <i>4. ITS Department Research Decree (Batch 2) 2023: Poverty Percentage Prediction Based on Satellite Imagery and Point of Interest (POI) using Machine Learning</i> <i>2024 :</i> <i>1. Research Progress Report 2024: Deep Learning for Highly Multivariate Log-Gaussian Cox Processes</i> <i>2. Research Progress Report 2024: Development of Neural Network Methods for Classification and Image-to-Image Translation on Tourism Object Images</i> <i>3. ITS Department Research Decree 2024: Forest Fire Potential Prediction Based on Hotspots using Machine Learning Methods</i> <i>4. Fundamental Research Decree – Regular 2024: Development of Genetic Algorithm-Based Hybrid SETAR-Tree Model to Improve Forecasting Accuracy on Nonlinear Time Series Data</i> <i>5. ITS Scientific Research Decree 2024: Development of Neural Network Methods for Classification and Image-to-Image Translation on Tourism Object Images</i> <i>6. ITS Partnership Research Decree 2024: Deep Learning for Highly Multivariate Log-Gaussian Cox Processes</i> <i>7. Domestic Collaboration Research Decree 2024: Sentiment Analysis on the Movement of the Government Securities Market</i> <i>8. Master's Thesis Research Decree 2024: Random Forest with Adaptive Synthetic Sampling - Nominal Continuous and Cost Sensitive Learning in the Classification of Imbalanced Bank Financing Data</i>		

	2025 : 1. <i>Research Progress Report 2025: Exploration of Model-Based Clusterwise Multi-Output Neural Network via Stochastic Simulation on Multivariate Time Series Data</i> 2. <i>Research Progress Report 2025: Integration of Hidden Markov Random Field and Bernoulli Mixture Model in Medical Image Segmentation</i> 3. <i>Research Progress Report 2025: Integration of Spatial Ising and Neo-Normal Patterns as a Ventricular Septal Defect (VSD) Detector on Pediatric Heart Ultrasound</i> 4. <i>Research Progress Report 2025: Permutation Feature Importance-Based Neural Network Model Input Selection for Economic Growth Projections in Terms of Bank Credit Distribution</i> 5. <i>Research Progress Report 2025: Age, Gender, and Expression Prediction Based on Facial Images using Convolutional Neural Networks and Transfer Learning</i> 6. <i>PDD Decree 2025: Exploration of Model-Based Clusterwise Multi-Output Neural Network via Stochastic Simulation on Multivariate Time Series Data</i> 7. <i>PDD Decree 2025: Development of Expectile Regression Neural Network Model on Mixed-Frequency Time Series Data for Economic and Financial Risk Analysis</i> 8. <i>ITS Department Research Decree (Batch 2) 2025: Permutation Feature Importance-Based Neural Network Model Input Selection for Economic Growth Projections in Terms of Bank Credit Distribution</i> 9. <i>ITS Department Research Decree 2025: Analysis of Hotel Service Aspect Reviews using Machine Learning</i> 10. <i>ITS Department Research Decree 2025: Age, Gender, and Expression Prediction Based on Facial Images using Convolutional Neural Networks and Transfer Learning</i> 11. <i>ITS Institutional Development Research Decree 2025: Leaf Waste Load Analysis in Waterways in an Effort for Sustainable Environmental Management on the ITS Campus</i> 12. <i>ITS Educational Staff Research Decree (Faculty Funds Batch 2) 2025: Clustering Analysis of Lecturer Scientific Publication Characteristics and Profile Dashboard Development for FSAD</i> 13. <i>PFR Decree 2025: Integration of Spatial Ising and Neo-Normal Patterns as a Ventricular Septal Defect (VSD) Detector on Pediatric Heart Ultrasound</i> 14. <i>PMDSU Decree 2025: Integration of Hidden Markov Random Field and Bernoulli Mixture Model in Medical Image Segmentation</i> 2026 : 1. <i>Research Progress Report 2026: Integration of Few-Shot Learning and Data Augmentation in Neural Networks for Imbalanced Data Classification</i> 2. <i>Research Progress Report 2026: Integration of Hidden Markov Random Field and Bernoulli Mixture Model in Medical Image Segmentation</i> 3. <i>Research Progress Report 2026: Two-Stage Probabilistic Framework Based on Bayesian Neo-Normal Mixture Model for Land Object Detection and Rice Growth Phase Zoning</i> 4. <i>Research Progress Report 2026: Dynamic Routing Optimization in Dual Attention Capsule Network for Pedestrian Attribute Recognition</i>
--	---

	5. <i>Research Progress Report 2026: Transfer Learning-Based Modeling for Pulmonary Disease Classification with Image Data</i> 6. <i>Research Progress Report 2026: Modeling Rice Planting Phase Patterns using Neo-Normal Mixture Model Approach</i> 7. <i>Research Progress Report 2026: Development of MSVAR Model with Skewed Exponential Power Distribution for Financial Contagion Effect Analysis Between Indonesian and US Stock Markets</i> 8. <i>Research Progress Report 2026: Development of Multivariate Spatio-Temporal Markov Switching Model with Neo-Normal Conditional Autoregressive (NeNo-CAR) Prior for Infectious Disease Mapping</i> 9. <i>Research Progress Report 2026: Power Output Forecasting of Solar Power Plants in Nusa Penida using Hybrid Autoregressive Integrated Moving Average (ARIMA) - Long Short-Term Memory (LSTM)</i> 10. <i>Research Progress Report 2026: Synthetic Aperture Radar (SAR) Image Translation with Generative Adversarial Network (GAN) Approach</i>
Industry collaborations over the last 5 years	2022 : 1. <i>ITS Department Funds Thematic Community Service Decree 2022: Capacity Building for Village Officials in Data Collection and Analysis (Location: Klagen Village, Rejoso District, Nganjuk Regency, East Java)</i> 2023 : 1. <i>ITS Department Funds Thematic Community Service Decree 2023: Scientific Writing Workshop for Teachers of SMAN 1 Surabaya using Statistical Methodology</i> 2. <i>ITS Community Service Decree 2023: Preparation of Sectoral Statistical Metadata for Blitar Regency in 2023</i> 2024 : 1. <i>ITS Community Service Decree 2024: Self-Management of Collection, Processing, and Analysis of Sectoral Statistical Data (Raw Data) for the Needs of the One Data Portal of Pasuruan Regency</i> 2025 : 1. <i>Community Service Progress Report 2025: Applied Statistical Modeling Training for UNIPRA Lecturers in Framework of Strengthening Scientific Work Quality</i> 2. <i>Community Service Progress Report 2025: Strengthening Competency of UNIPRA Lecturers in Data Exploration and Scientific Publication</i> 3. <i>ITS Thematic Community Service Decree (Department Funds) 2025: Applied Statistical Modeling Training for UNIPRA Lecturers in Framework of Strengthening Scientific Work Quality</i> 4. <i>ITS Thematic Community Service Decree (Department Funds) 2025: Strengthening Competency of UNIPRA Lecturers in Data Exploration and Scientific Publication</i> 2026 : 1. <i>Community Service Progress Report 2026: Applied Statistical Modeling Training for UNITOMO Lecturers and Students in Framework of Strengthening Research Quality</i>

	2. <i>Community Service Progress Report 2026: Strengthening Competency of UNITOMO Lecturers and Students in Identifying Data Patterns and Anomalies</i> <i>Partners</i>
Patents and proprietary rights	<i>Video SGen: Statistics Genius</i> 2024 <i>Video ArtVice</i> 2024 <i>Video KostKitchen</i> 2024 <i>Video Foreneur</i> 2024 <i>Video Nexus Consultant</i> 2024 <i>Video ANALYTIX</i> 2024 <i>Video SiLancar</i> 2024 <i>Video StatLabs</i> 2024 <i>Video BinaBisnis</i> 2024 <i>Video Bantu Tani</i> 2024 <i>Video Glowify</i> 2024 <i>Video Data Analytics Training for Bank Syariah Indonesia (BSI) Region VIII Surabaya</i> 2024 <i>Video Introduction and Business Idea Planning for FOODIE</i> 2025 <i>Community Service Video "Applied Statistical Modeling Training for Unipra Lecturers in Framework of Strengthening Scientific Work Quality"</i> 2025 <i>Community Service Video "Strengthening Competency of Unipra Lecturers in Data Exploration and Scientific Publication"Poster Koperasi Poster Regency/City Village Unit Cooperatives in East Java Province</i> 2025
Important publications over the last 5 years	2022 : 1. UTM Press: "On the YOLOv4 Architecture to Fast and Realtime Congenital Heart Disease Detection via Ultrasound Videos" 2. DPRM ITS: "Workshop on the Implementation of Statistics in Classroom Action Research at SMKN 5 Surabaya"

	2023 : 1. <i>Pattimura University in Collaboration with Indonesian Mathematical Society (IndoMS): "Modelling of Poverty Percentage in East Java Province with Semiparametric Regression Approach"</i> 2. <i>ITS: "Classification of Mathematics Question Image Labels using Convolutional Neural Network"</i> 3. <i>Universitas Bumigora: "Impact of SST Anomalies on Coral Reefs Damage Based on Copula Analysis"</i> 4. <i>University of the Punjab, Lahore, Pakistan: "Implementation of Bayesian Simulation for Earthquake Disaster Risk Analysis in Indonesia Based on Gutenberg Richter Model and Copula Method"</i> 5. <i>"Forecasting Indonesia Inflation using Long Short-Term Memory Method"</i> 6. <i>Springer: "Plant Growth Phase Classification Using Deep Neural Network (Case Study of ASF in Poso District, Central Sulawesi Province)"</i> 7. <i>AIP Publishing: "Prediction of Rice Growth Phases with Multitemporal Landsat-8 Data Using Rotation Forest Multiclass Method"</i> 8. <i>MDPI: "The t-Distribution Approach to the Second-Order Multiresponse Surface Model of Paracetamol Tablets Quality Characteristics"</i> 2024 : 1. <i>IEEE: "Electricity Availability Modeling Through Night Time Light Data Visible Infrared Imaging Radiometer Suite (NTL VIIRS) using Poisson Point in South Sumatra"</i> 2. <i>AIP Publishing (AIP Conference Proceedings): "Identification of Land Use for Crops in Jawa Timur Province Based on Multispectral Imaging by Combining Multi-Layer Density-Based Spatial Clustering of Applications with Noise and Time-Weighted Dynamic Time Warping"</i> 3. <i>IEEE: "Ising-Neo-Normal Model (INNM) for Segmentation of Cardiac Ultrasound Imaging"</i> 4. <i>IEEE: "Random Forest With Adaptive Synthetic Sampling-Nominal Continuous and Cost Sensitive Learning on Imbalanced Binary Classification"</i> 5. <i>IEEE: "Scenarios to Handle Shifts Data Pattern Using Neural Network for Forecasting Indonesian GDP Based on Financial Growth at Risk"</i> 6. <i>ITS: "Tourist Destination Recommendation System in Surabaya City using Content-Based Filtering and Neural Collaborative Filtering Methods"</i> 7. <i>Springer Nature Singapore: "The Impact of Clustering-Based Sequential Multivariate Outliers Detection in Handling Missing Values"</i> 8. <i>Hindawi: "YOLO-UNet Architecture for Detecting and Segmenting the Localized MRI Brain Tumor Image"</i> 2025 : 1. <i>"Bivariate Normal Distribution for Modeling Spatio-Temporal Data"</i> 2. <i>IEEE: "Clustering Mixed-Type Data on the Scientific Publication Productivity of ITS Lecturers Using Cluster Ensemble Based Mixed Data Clustering (CEBMDC)"</i> 3. <i>"Forecasting Indonesia's Export Values using SETAR-GA and SETAR-Tree"</i> 4. <i>AIP Publishing LLC: "Forecasting Tourist Visits using Switching-Markov ARX Based on Google Trends Data"</i>
--	---

	5. <i>IEEE: "Market Risk Analysis of Indonesian Mining Stocks using GARCH Based Value at Risk Approach on ADRO and INCO"</i> 6. <i>Springer: "Model-Based Clusterwise Neural Network in Time Series Clustering of Stock Price"</i> 7. <i>"Energy Sector Stock Modeling using Non-Homogeneous Markov Switching Autoregressive (NHMS-AR) with Non-Homogeneous Transition Probabilities"</i> 8. <i>Institute of Advanced Engineering and Science: "Per Capita Expenditure Prediction Using Model Stacking Based on Satellite Imagery"</i> 9. <i>Springer: "Performance Comparison of Individual Risk Model Using VaR-POT with Its Risk Dependence Model Using Quantile Regression-Based CoVaR"</i> 10. <i>IEEE: "Probabilistic Deep Learning for Highly Multivariate Spatio-Temporal Log-Gaussian Cox Processes"</i> 11. <i>AIP Publishing LLC: "Spatial Temporal Density-Based Spatial Clustering of Applications with Noise (ST-DBSCAN) to Cluster Rainfall in East Java"</i> 12. <i>MDPI: "Systemic Risk Modeling with Expectile Regression Neural Network and Modified LASSO"</i> 2026 : 1. <i>Elsevier: "An Accuracy-Level Method for Robust Evaluation in Predictive Analytics"</i> 2. <i>IEEE: "An Adaptive Robust Support Vector Machine with Sequential Minimal Optimization for Imbalanced Data Classification"</i> 3. <i>Elsevier: "An Expectile-Based Neural Network Approach for Mixed-Frequency Economic Forecasting"</i> 4. <i>IEEE: "Aspect-Based Sentiment Analysis of Hotel Reviews using Multiscale Convolutional Neural Network"</i> 5. <i>IEEE: "Dual Attention Capsule Network Multi-Label for Pedestrian Attribute Recognition"</i> 6. <i>IIUM Press: "Enhanced Beach Photo Translation using Modified Unsupervised GAN with Regularization"</i> 7. <i>IEEE: "Hybrid of Spatial Ising Model and MSTBurr Distribution for Cardiac Ultrasound Imaging Segmentation"</i> 8. <i>Elsevier: "Knowledge-Driven Nodes Selection with Modified LASSO Regularization for Neural Network Modeling in Economic Data Forecasting"</i> 9. <i>"Markov-Switching GARCH-Machine Learning for Forecasting Return Volatility"</i>
--	--

Activities in specialist bodies over the last 5 years	<i>Workshops 7th International Conference on Big Data Data Science (X)</i>	<i>Training</i>	<i>2022</i>
	<i>Big Data Training with Hadoop and Spark (X)</i>	<i>Training</i>	<i>2023</i>
	<i>Fullstack Machine Learning Model Training with Django and ReactJS (Inixindo Surabaya)</i>	<i>Training</i>	<i>2024</i>
	<i>Competency Assessor</i>		<i>2024</i>
	<i>Data Science Certification with Big Data Scientist Competency</i>		<i>2024</i>
	<i>PBIP Level-1 Competency Training (Center for Procurement Human Resource Development - Institut Teknologi Sepuluh Nopember)</i>	<i>Training</i>	<i>2025</i>
	<i>Government Goods/Services Procurement Competency Certification Level-1</i>		<i>2025</i>

Name	<i>Dr. Irhamah, S.Si., M.Si.</i>		
Post	<i>Head of the Postgraduate Study Program, Department of Statistics</i>		
Academic career	<i>Initial academic appointment</i> <i>UB</i> <i>Habilitation [German post-doctoral qualification] (subject)</i> <i>ITS</i> <i>Doctorate (subject)</i> <i>UTM</i>		
Employment	<i>Lecturer</i>	<i>ITS</i>	<i>2001</i>
Research and development projects over the last 5 years	<i>2022 :</i> <i>1. Multi-Class Text Classification of Public Complaint Websites Using Machine Learning.</i> <i>2. ITS Department Research Decree (Batch 2), 2022: Multi-Class Text Classification of Public Complaint Websites Using Machine Learning.</i> <i>2023 :</i> <i>1. Prediction of Poverty Percentage Based on Satellite Imagery and Points of Interest (POI) Using Machine Learning.</i> <i>2. Image Classification Model for Tourist Attractions Using a Machine Learning Approach.</i> <i>3. ITS Department Research Decree (Batch 2), 2023: Image Classification Model for Tourist Attractions Using a Machine Learning Approach.</i> <i>4. ITS Department Research Decree (Batch 2), 2023: Prediction of Poverty Percentage Based on Satellite Imagery and Points of Interest (POI) Using Machine Learning.</i> <i>2024 :</i> <i>1. 2024 Research Progress Report: Development of Neural Network Methods for Classification and Image-to-Image Translation of Tourist Attraction Images.</i> <i>2. ITS Scientific Research Decree, 2024: Development of Neural Network Methods for Classification and Image-to-Image Translation of Tourist Attraction Images.</i> <i>3. Fundamental Research – Regular Scheme, 2024: Development of a Hybrid SETAR-Tree Model Based on a Genetic Algorithm to Improve Forecasting Accuracy for Nonlinear Time-Series Data.</i> <i>4. ITS Department Research Decree, 2024: Forest Fire Potential Prediction Based on Hotspots Using Machine Learning Methods.</i> <i>2025 :</i> <i>1. 2025 Research Progress Report: Integration of Spatial Ising and Neo-Normal Patterns as a Detector of Ventricular Septal Defect (VSD) in Pediatric Cardiac Ultrasound.</i> <i>2. 2025 Research Progress Report: Dynamic Survival Modeling of PM2.5 Exposure Using Time-Varying Cox and Random Survival Forest.</i> <i>3. 2025 Research Progress Report: Air Quality Index Forecasting in Surabaya Using LSTM and CNN-LSTM.</i>		

	4. <i>2025 Research Progress Report: Prediction of Age, Gender, and Facial Expression Based on Facial Images Using Convolutional Neural Networks and Transfer Learning.</i> 5. <i>PFR Research Decree, 2025: Integration of Spatial Ising and Neo-Normal Patterns as a Detector of Ventricular Septal Defect (VSD) in Pediatric Cardiac Ultrasound.</i> 6. <i>ITS Department Research Decree, 2025: Air Quality Index Forecasting in Surabaya Using LSTM and CNN-LSTM.</i> 7. <i>ITS Department Research Decree, 2025: Prediction of Age, Gender, and Facial Expression Based on Facial Images Using Convolutional Neural Networks and Transfer Learning.</i> 8. <i>ITS Department Research Decree (Batch 2), 2025: Dynamic Survival Modeling of PM2.5 Exposure Using Time-Varying Cox and Random Survival Forest.</i> 2026 : 1. <i>2026 Research Progress Report: Cluster-Based Route Optimization Modeling Using Mixed-Integer Linear Programming at PT Gagas Energi Indonesia.</i> 2. <i>2026 Research Progress Report: Development of an MSVAR Model with a Skewed Exponential Power Distribution for Analyzing the Financial Contagion Effect Between the Indonesian and United States Stock Markets.</i> 3. <i>2026 Research Progress Report: Forecasting the Power Output of Solar Power Plants in Nusa Penida Using a Hybrid Autoregressive Integrated Moving Average (ARIMA)–Long Short-Term Memory (LSTM) Model.</i> 4. <i>2026 Research Progress Report: Synthetic Aperture Radar (SAR) Image Translation Using a Generative Adversarial Network (GAN) Approach.</i> 5. <i>2026 Research Progress Report: Identification of Breast Cancer Biomarkers by Integrating Multi-Omics Data Using a Multimodal Neural Network.</i> 6. <i>2026 Research Progress Report: Integration of Few-Shot Learning and Data Augmentation in Neural Networks for Imbalanced Data Classification.</i> 7. <i>2026 Research Progress Report: A Two-Stage Probabilistic Framework Based on the Bayesian Neo-Normal Mixture Model for Land Object and Rice Growth Phase Zone Detection.</i> 8. <i>2026 Research Progress Report: Dynamic Routing Optimization in a Dual Attention Capsule Network for Pedestrian Attribute Recognition.</i>
Industry collaborations over the last 5 years	2022 : 1. <i>ITS Product-Based Community Service Decree, 2022: Study of the Potential of Silvopasture for Productive Crops in Kebontunggul Village, Mojokerto.</i> 2. <i>ITS Department Fund Thematic Community Service Decree, 2022: Capacity Building for Village Officials in Data Collection and Analysis, Klagen Village, Rejoso District, Nganjuk Regency, East Java.</i> 3. <i>ITS Community Service Decree, 2022: Consultancy Services for the Preparation of the Religious Harmony Index Analysis Document.</i> 4. <i>ITS Community Service Decree, 2022: Consultancy Services for the Preparation of the Social Piety Index Analysis Document.</i>

	2023 : 1. <i>ITS Department Fund Thematic Community Service Decree, 2023: Scientific Writing Workshop for Teachers of SMAN 1 Surabaya Using Statistical Methodology.</i> 2. <i>ITS Community Service Decree, 2023: Consultancy Services for Research Studies and Technical Assistance for the Preparation of the Social Piety Index (IKS) Document.</i> 3. <i>ITS Community Service Decree, 2023: Consultancy Services for Research Studies and Technical Assistance for the Preparation of the Religious Harmony Index (IKUB) Document.</i> 4. <i>ITS Community Service Decree, 2023: Evaluation of the Results of Regional Government Work Plans (Renja).</i> 5. <i>ITS Community Service Decree, 2023: Preparation of an Evaluation Document for the Results of Regional Government Work Plans in the Human Development Sector.</i> 2024 : 1. <i>ITS Community Service Decree, 2024: Analysis of Increase in Absorber pH in Flue Gas Desulphurization (FGD).</i> 2025 : 1. <i>2025 Community Service Progress Report: Applied Statistical Modeling Training for UNIPRA Lecturers to Strengthen the Quality of Scientific Publications.</i> 2. <i>2025 Community Service Progress Report: Strengthening the Competence of UNIPRA Lecturers in Data Exploration and Scientific Publication.</i> 3. <i>ITS Priority Community Service Decree, 2025: Pilot Testing of the Environmentally Friendly School Index.</i> 4. <i>ITS Thematic Community Service Decree (Department Fund), 2025: Applied Statistical Modeling Training for UNIPRA Lecturers to Strengthen the Quality of Scientific Publications.</i> 5. <i>ITS Thematic Community Service Decree (Department Fund), 2025: Strengthening the Competence of UNIPRA Lecturers in Data Exploration and Scientific Publication.</i> 6. <i>ITS Community Service Decree, 2025: Preparation of the Social Piety Index (IKS).</i> 7. <i>ITS Community Service Decree, 2025: Preparation of the Religious Harmony Index (IKUB).</i> 8. <i>ITS Community Service Decree, 2025: Preparation of the Social Welfare Index.</i> 2026 : 1. <i>2026 Community Service Progress Report: Applied Statistical Modeling Training for UNITOMO Lecturers and Students to Strengthen Research Quality.</i> 2. <i>2026 Community Service Progress Report: Strengthening the Competence of UNITOMO Lecturers and Students in Identifying Data Patterns and Anomalies.</i>
--	---

Patents and proprietary rights	<i>ITS WorkTime: Employee Work Time and Location Recording Application</i> 2021 <i>East Java Province Inflation Forecasting Dashboard, 2025–2026</i> 2025 <i>Community Service Video: “Applied Statistical Modeling Training for UNIPRA Lecturers to Strengthen the Quality of Scientific Publications”</i> 2025 <i>Community Service Video: “Strengthening the Competence of UNIPRA Lecturers in Data Exploration and Scientific Publication”</i> 2025
Important publications over the last 5 years	2022 : 1. <i>“A Hybrid Evaluation Index Approach in Optimizing Single Tuition Fee Cluster Validity.”</i> 2. <i>Research and Community Service Institute (LPPM), ITS: “Sentiment Analysis of Indonesian Public Opinion Regarding COVID-19 Vaccines on Twitter Using Naïve Bayes Classifier and Support Vector Machine Methods.”</i> 3. <i>“Bivariate Zero-Inflated Generalized Poisson Regression on Modeling Stillbirth and Maternal Death.”</i> 4. <i>“Clustering on ‘Z’ E-Learning Application Reviews Using Self-Organizing Maps and K-Means Methods.”</i> 5. <i>“The Impact of the COVID-19 Pandemic and Joe Biden’s Winning Speech on the IDX Composite Using Multi-Input Intervention Analysis.”</i> 6. <i>DPRM ITS: “Workshop on the Implementation of Statistics in Classroom Action Research at SMKN 5 Surabaya.”</i> 2023 : 1. <i>Institute of Advanced Engineering and Science: “Categorical Encoder-Based Performance Comparison in Preprocessing Imbalanced Multiclass Classification.”</i> 2. <i>ITS: “Policy Study on the Potential of Silvopasture for Productive Crops on Perhutani Land in Kebontunggul Village, Gondang, Mojokerto Regency.”</i> 2024 : 1. <i>Multidisciplinary Digital Publishing Institute (MDPI): “A Markov Switching Autoregressive Model with Time-Varying Parameters.”</i> 2. <i>IEEE: “Adaptive EfficientNet-DeepLabV3+ for Left Ventricular Wall Segmentation.”</i> 3. <i>AIP: “Analyzing Financial Crisis and Contagion Effects on the Indonesian and United States Stock Markets via a Markov Switching Bayesian Vector Autoregressive Approach.”</i>

	4. <i>IEEE: "Electricity Availability Modeling Through Night-Time Light Data from the Visible Infrared Imaging Radiometer Suite (NTL VIIRS) Using a Poisson Point Process in South Sumatra."</i> 5. <i>AIP: "Forecasting Bitcoin Returns Using GARCH-LSTM."</i> 6. <i>Hindawi: "YOLO-UNet Architecture for Detecting and Segmenting Localized MRI Brain Tumor Images."</i> 2025 : 1. <i>Department of Statistics, Faculty of Science and Mathematics, Diponegoro University: "Accuracy of the Hybrid Geometric Brownian Motion–Kalman Filter Method in Forecasting Indonesian Stock Prices."</i> 2. <i>"A Bayesian Markov Switching Autoregressive Model with Time-Varying Parameters for Dynamic Economic Forecasting."</i> 3. <i>"Forecasting Indonesia's Export Values Using SETAR-GA and SETAR-Tree."</i> 4. <i>Department of Mathematics, Universitas Negeri Gorontalo: "Hybrid Geometric Brownian Motion–Markov Switching for Forecasting Indonesian Stock Prices."</i> 5. <i>IEEE: "Interval Forecasting of Stock Price Movement Using QRNN and Hybrid LASSO-QRNN Models with Technical Indicator Inputs."</i> 2026 : 1. <i>IEEE: "A Hybrid GARCH-MIDAS-XGBoost Model for Forecasting Indonesian Exchange Rate Volatility under the Uncovered Interest Rate Parity."</i> 2. <i>IEEE: "Dual Attention Capsule Network Multi-Label for Pedestrian Attribute Recognition."</i> 3. <i>IEEE: "Enhancing Solar Power Output Forecasting Using a Hybrid Transfer Function-LSTM."</i> 4. <i>IEEE: "Hybrid Spatial Ising Model and MSTBurr Distribution for Cardiac Ultrasound Image Segmentation."</i> 5. <i>IEEE: "Mixture Models for Biomedical Image Segmentation: A Systematic Review."</i> 6. <i>IEEE: "Performance Accuracy of Modified Hybrid Geometric Brownian Motion–Kalman Filter and Markov Switching Methods in Indonesian Stock Price Forecasting."</i> 7. <i>IEEE: "Spatio-Temporal Forecasting of Air Quality in Surabaya, Sidoarjo, and Gresik Using Generalized Space-Time Autoregressive Integrated Moving Average (GSTARIMA)."</i>
--	---

Activities in specialist bodies over the last 5 years	<i>Lecturer Workload Assessor</i>		2022
	<i>Human Resources Manager</i>		2023
	<i>Big Data Scientist</i>		2024
	<i>Professional Internal Auditor (PIA)</i>	<i>Training</i>	2024
	<i>Certification Training, Association of Internal Auditors</i>		
	<i>Big Data Analysis with Python (Ixindo)</i>	<i>Training</i>	2024
	<i>Assessor, Independent Accreditation Agency for Natural and Formal Sciences</i>		2025
	<i>Professional Internal Auditor</i>		2025
	<i>Training on the Simulation of IAPS 3.0 Study Program Accreditation Assessment, (LAMSAMA)</i>	<i>Training</i>	2025
	<i>Awareness & Internal Auditor of Educational Organizations Management Systems (EOMS) ISO 21001:2018 (Intertek)</i>	<i>Training</i>	2025
	<i>Seminar Collaborative Corruption: Eradication Strategies and Challenges - Roles of Internal Auditors (Asosiasi Auditor Internal)</i>	<i>Training</i>	2025
	<i>Risk-Based Audit Webinar (WABR)</i>	<i>Training</i>	2026

Name	<i>Adatul Mukarromah, S.Si., M.Si.</i>
Post	<i>Assistant Expert</i>
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] (subject) ITS</i>
Employment	<i>Lecturer ITS 2003</i>
Research and development projects over the last 5 years	2022 1. <i>Multi-Class Text Classification of Public Complaint Websites Using Machine Learning.</i> 2. <i>ITS Department Research Decree (Batch 2), 2022: Multi-Class Text Classification of Public Complaint Websites Using Machine Learning.</i> 2023 1. <i>ITS National Institutional Development Research Decree, 2023: Determining the Weights of Regional Determinant Components of Stunting Prevalence: A Proposed Development of a Region-Based Stunting Management Index (IPS) as an Early Warning System for Stunting Problems.</i> 2. <i>Determining the Weights of Regional Determinant Components of Stunting Prevalence: A Proposed Development of a Region-Based Stunting Management Index (IPS) as an Early Warning System for Stunting Problems.</i> 3. <i>Classification of Halal Certification Types Based on Raw Material Descriptions.</i> 4. <i>ITS Department Research Decree (Batch 2), 2023: Classification of Halal Certification Types Based on Raw Material Descriptions.</i> 2024 1. <i>ITS Scientific Research Decree, 2024: Development of Neural Network Methods for Classification and Image-to-Image Translation of Tourist Attraction Images.</i> 2. <i>ITS Institutional Development Research Decree, 2024: Further Analysis of the Formation of Weights for Regional Determinant Components of Stunting Prevalence at the Regency/Municipality Level in Indonesia and the Development of a Region-Based Stunting Management Index (IPS) as an Early Warning System for Stunting Problems.</i> 3. <i>2024 Research Progress Report: Further Analysis of the Formation of Weights for Regional Determinant Components of Stunting Prevalence at the Regency/Municipality Level in Indonesia and the Development of a Region-Based Stunting Management Index (IPS) as an Early Warning System for Stunting Problems.</i> 4. <i>2024 Research Progress Report: Development of Neural Network Methods for Classification and Image-to-Image Translation of Tourist Attraction Images.</i>

	2025 1. ITS Department Research Decree, 2025: A Few-Shot Learning Approach for Addressing Class Imbalance in Classification Analysis for Disease Detection. 2. ITS Department Research Decree, 2025: Air Quality Index Forecasting in Surabaya Using LSTM and CNN-LSTM. 3. ITS Department Research Decree, 2025: Prediction of Age, Gender, and Facial Expression Based on Facial Images Using Convolutional Neural Networks and Transfer Learning. 4. 2025 Research Progress Report: Air Quality Index Forecasting in Surabaya Using LSTM and CNN-LSTM. 5. 2025 Research Progress Report: Prediction of Age, Gender, and Facial Expression Based on Facial Images Using Convolutional Neural Networks and Transfer Learning. 2026 1. 2026 Research Progress Report: Identification of Breast Cancer Biomarkers by Integrating Multi-Omics Data Using a Multimodal Neural Network. 2. 2026 Research Progress Report: Integration of Few-Shot Learning and Data Augmentation in Neural Networks for Imbalanced Data Classification. 3. 2026 Research Progress Report: Development of an MSVAR Model with a Skewed Exponential Power Distribution for Analyzing the Financial Contagion Effect Between the Indonesian and United States Stock Markets. 4. 2026 Research Progress Report: Forecasting the Power Output of Solar Power Plants in Nusa Penida Using a Hybrid Autoregressive Integrated Moving Average (ARIMA)–Long Short-Term Memory (LSTM) Model. 5. 2026 Research Progress Report: Sentiment Analysis-Based Topic Modeling Using Machine Learning on Public Opinions on Social Media Platform X. 6. 2026 Research Progress Report: Synthetic Aperture Radar (SAR) Image Translation Using a Generative Adversarial Network (GAN) Approach.
Industry collaborations over the last 5 years	2022 : 1. ITS Department Fund Thematic Community Service Decree, 2022: Capacity Building for Village Officials in Data Collection and Analysis, Klagen Village, Rejoso District, Nganjuk Regency, East Java. 2023 : 1. ITS Department Fund Thematic Community Service Decree, 2023: Scientific Writing Workshop for Teachers of SMAN 1 Surabaya Using Statistical Methodology. 2025 : 1. 2025 Community Service Progress Report: Applied Statistical Modeling Training for UNIPRA Lecturers to Strengthen the Quality of Scientific Publications. 2. 2025 Community Service Progress Report: Strengthening the Competence of UNIPRA Lecturers in Data Exploration and Scientific Publication.

	3. ITS Thematic Community Service Decree (Department Fund), 2025: Applied Statistical Modeling Training for UNIPRA Lecturers to Strengthen the Quality of Scientific Publications. 4. ITS Thematic Community Service Decree (Department Fund), 2025: Strengthening the Competence of UNIPRA Lecturers in Data Exploration and Scientific Publication. 5. ITS Community Service Decree, 2025: Preparation of the Social Piety Index (IKS). 6. ITS Community Service Decree, 2025: Preparation of the Religious Harmony Index (IKUB). 2026 : 1. 2026 Community Service Progress Report: Applied Statistical Modeling Training for UNITOMO Lecturers and Students to Strengthen Research Quality. 2. 2026 Community Service Progress Report: Strengthening the Competence of UNITOMO Lecturers and Students in Identifying Data Patterns and Anomalies. Partners
Patents and proprietary rights	1. Training Video: Data Analytics Training for Bank Syariah Indonesia (BSI) Region VIII Surabaya. 2024 2. Community Service Video: "Strengthening the Competence of UNIPRA Lecturers in Data Exploration and Scientific Publication." 2025 3. Community Service Video: "Applied Statistical Modeling Training for UNIPRA Lecturers to Strengthen the Quality of Scientific Publications." 2025 4. Dashboard Implementasi Sistem Deteksi Personally Identifiable Information (PII) 2025 5. East Java Province Inflation Forecasting Dashboard, 2025–2026. 2025 6. "Become an Analyst, Eliminate Provocative Buzzers." 2025
Important publications over the last 5 years	2022 1. DPRM ITS: "Workshop on the Implementation of Statistics in Classroom Action Research at SMKN 5 Surabaya." 2023 1. "Analysis of Unintended Pregnancy Factors on Women of Productive Age in East Java Using Logistic Regression with SMOTE-N"

	2024		
	1. IEEE : "Mitigating Class Imbalance for Neural Networks via Balanced Mini-Batch Training"		
Activities in specialist bodies over the last 5 years	Competency-Based Training in Data Management Systems for the Data Analyst Certification Scheme (X)	Training	2023
	Big Data with Hadoop and Spark	Training	2023
	Certified Data Science (International Board of Standard Surabaya)	Training	2024
	English As The Medium of Instruction (Global Language Center ITS)	Training	2025
	Awareness & Internal Auditor of Educational Organizations Management Systems (EOMS) ISO 21001:2018 (Intertek)	Training	2025
	Successful Strategies for Further Study and Excellent Research, Faculty of Science and Data Analytics, ITS	Training	2025

Name	<i>Tintrim Dwi Ary Widhianingsih , S.Si, M.Stat, Ph.D.</i>		
Post	<i>Senior Lecturer</i>		
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] (subject) ITS</i> <i>Doctorate (subject) DSU Korea Selatan</i>		
Employment	<i>Lecturer</i>	<i>ITS</i>	<i>2022</i>
Research and development projects over the last 5 years	<i>2023 :</i> <i>1. Classification of Halal Certification Types Based on Raw Material Descriptions.</i> <i>2. Development of a Transfer Learning Method for Poverty Prediction Using Satellite Imagery: A Case Study of Poverty in East Java.</i> <i>3. ITS Department Research Decree (Batch 2), 2023: Classification of Halal Certification Types Based on Raw Material Descriptions.</i> <i>4. ITS Scientific Research Decree, 2023: Development of a Transfer Learning Method for Poverty Prediction Using Satellite Imagery: A Case Study of Poverty in East Java.</i> <i>2024 :</i> <i>1. 2024 Research Progress Report: Deep Learning for Highly Multivariate Log-Gaussian Cox Processes.</i> <i>2. ITS Department Research Decree, 2024: Deep Learning for Similarity Analysis of Spatial Point Patterns of Earthquake Events in Indonesia.</i> <i>3. ITS Department Research Decree, 2024: Brainwave Monitoring in Pediatric Epilepsy Patients Using the Markov Switching Autoregressive (MSAR) Method with EM-Gaussian and Bayesian-Exponential Power Approaches.</i> <i>4. Fundamental Research – Regular Scheme, 2024: Development of a Hybrid SETAR-Tree Model Based on a Genetic Algorithm to Improve Forecasting Accuracy for Nonlinear Time-Series Data.</i> <i>5. ITS Partnership Research Decree, 2024: Deep Learning for Highly Multivariate Log-Gaussian Cox Processes.</i> <i>6. Domestic Cooperation Research Decree, 2024: Sentiment Analysis of Government Bond Market Movements.</i> <i>2025 :</i> <i>1. 2025 Research Progress Report: Disaster Risk Mitigation Innovation in Indonesia: Integration of Geophysics, Tourism, Social Communication, Statistics, and Economics.</i> <i>2. 2025 Research Progress Report: Air Quality Index Forecasting in Surabaya Using LSTM and CNN-LSTM.</i> <i>3. 2025 Research Progress Report: Spatial Point Process Intensity Modeling with Gradient Boosting Techniques.</i> <i>4. ITS Department Research Decree, 2025: Analysis of Hotel Service Reviews Using Machine Learning.</i>		

	5. <i>ITS Department Research Decree, 2025: A Few-Shot Learning Approach for Addressing Class Imbalance in Classification Analysis for Disease Detection.</i> 6. <i>ITS Department Research Decree, 2025: Air Quality Index Forecasting in Surabaya Using LSTM and CNN-LSTM.</i> 7. <i>ITS Type B Partnership Research Decree, 2025: Spatial Point Process Intensity Modeling with Gradient Boosting Techniques.</i> 8. <i>ITS Indonesian Collaborative Research (RKI) Decree, 2025: Disaster Risk Mitigation Innovation in Indonesia: Integration of Geophysics, Tourism, Social Communication, Statistics, and Economics.</i> 2026 : 1. <i>2026 Research Progress Report: Identification of Breast Cancer Biomarkers by Integrating Multi-Omics Data Using a Multimodal Neural Network.</i> 2. <i>2026 Research Progress Report: Image-Based Geolocation Prediction with a Visual Attention Model.</i> 3. <i>2026 Research Progress Report: Integration of Few-Shot Learning and Data Augmentation in Neural Networks for Imbalanced Data Classification.</i> 4. <i>2026 Research Progress Report: Optimization of Machine Learning Methods Using Cost-Sensitive Learning to Improve the Performance of Electricity Theft Detection at PLN UID West Java.</i> 5. <i>2026 Research Progress Report: Development of an MSVAR Model with a Skewed Exponential Power Distribution for Analyzing the Financial Contagion Effect Between the Indonesian and United States Stock Markets.</i> 6. <i>2026 Research Progress Report: Forecasting the Power Output of Solar Power Plants in Nusa Penida Using a Hybrid Autoregressive Integrated Moving Average (ARIMA)–Long Short-Term Memory (LSTM) Model.</i> 7. <i>2026 Research Progress Report: Health Index Prediction of Boiler Feedwater Pump Turbines Using an Attention Mechanism-LSTM Method.</i> 8. <i>2026 Research Progress Report: Sentiment Analysis-Based Topic Modeling Using Machine Learning on Public Opinions on Social Media Platform X.</i> 9. <i>2026 Research Progress Report: Synthetic Aperture Radar (SAR) Image Translation Using a Generative Adversarial Network (GAN) Approach.</i>
Industry collaborations over the last 5 years	2023 : 1. <i>ITS Department Fund Thematic Community Service Decree, 2023: Empowerment of Students at Miftahul Ulum Islamic Boarding School Through Ecoprint Training.</i> 2. <i>ITS Department Fund Thematic Community Service Decree, 2023: Scientific Writing Workshop for Teachers of SMAN 1 Surabaya Using Statistical Methodology.</i> 3. <i>ITS Community Service Decree, 2023: Preparation of the 2023 Sectoral Statistics Metadata for Blitar Regency.</i> 2024 : 1. <i>ITS Community Service Decree, 2024: Applied Program in Information and Communication Technology (PRODISTIK).</i>

	2. <i>ITS Community Service Decree, 2024: Applied Program in Information and Communication Technology (PRODISTIK).</i> 3. <i>ITS Community Service Decree, 2024: Applied Program in Information and Communication Technology (PRODISTIK).</i> 4. <i>ITS Community Service Decree, 2024: Applied Program in Information and Communication Technology (PRODISTIK).</i> 5. <i>ITS Community Service Decree, 2024: Applied Program in Information and Communication Technology (PRODISTIK).</i> 6. <i>ITS Community Service Decree, 2024: Applied Program in Information and Communication Technology (PRODISTIK).</i> 7. <i>ITS Community Service Decree, 2024: Applied Program in Information and Communication Technology (PRODISTIK).</i> 8. <i>ITS Community Service Decree, 2024: Applied Program in Information and Communication Technology (PRODISTIK).</i> 2025 : 1. <i>2025 Community Service Progress Report: Applied Statistical Modeling Training for UNIPRA Lecturers to Strengthen the Quality of Scientific Publications.</i> 2. <i>2025 Community Service Progress Report: Strengthening the Competence of UNIPRA Lecturers in Data Exploration and Scientific Publication.</i> 3. <i>ITS Thematic Community Service Decree (Department Fund), 2025: Applied Statistical Modeling Training for UNIPRA Lecturers to Strengthen the Quality of Scientific Publications.</i> 4. <i>ITS Thematic Community Service Decree (Department Fund), 2025: Strengthening the Competence of UNIPRA Lecturers in Data Exploration and Scientific Publication.</i> 2026 : 1. <i>2026 Community Service Progress Report: Applied Statistical Modeling Training for UNITOMO Lecturers and Students to Strengthen Research Quality.</i> 2. <i>2026 Community Service Progress Report: Strengthening the Competence of UNITOMO Lecturers and Students in Identifying Data Patterns and Anomalies.</i>
Patents and proprietary rights	Community Service Video: 2025 <i>"Applied Statistical Modeling Training for UNIPRA Lecturers to Strengthen the Quality of Scientific Publications"</i> Community Service Video: 2025 <i>"Strengthening the Competence of UNIPRA Lecturers in Data Exploration and Scientific Publication"</i> Infographic: Social Assistance Profile of East Java Province 2024 2025

Important publications over the last 5 years	2022 : 1. Springer: "Augmented Domain Agreement for Adaptable Meta-Learner on Few-Shot Classification." 2024 : 1. Department of Statistics, Faculty of Science and Mathematics, Universitas Diponegoro: "Ensemble-Based Logistic Regression on High-Dimensional Data: A Simulation Study." 2. IEEE: "Hierarchical Bayesian Modelling on Predicting East Java Province Population." 3. IEEE: "Mitigating Class Imbalance for Neural Networks via Balanced Mini-Batch Training." 4. "Optimizing Neural Network for Parameter Estimation of Highly Multivariate Log-Gaussian Cox Process Using Dropout Training." 5. IEEE: "Optimizing XGBoost for Nonparametric Intensity Estimation of Spatial Point Processes: Algorithm Performance on the Sumatra Earthquake Dataset." 6. Growing Science: "Predicting Per Capita Expenditure Using Satellite Imagery and Transfer Learning: A Case Study of East Java Province, Indonesia." 7. IEEE: "Prediction of Earthquake Intensity and Location in Sumatra Using Deep Learning." 2025 : 1. IEEE: "Brainwave Monitoring in Epileptic Pediatric Patients Using MSAR-Normal, MSAR-Azzalini, and MSAR-Exponential Power." 2. IEEE: "Convolutional Neural Networks for Inhomogeneous Neyman-Scott Cox Process with Application in Earthquake Risk Prediction." 3. IEEE: "Interval Forecasting of Stock Price Movements with Technical Indicator Inputs Using Hybrid LASSO-Quantile Regression and Support Vector Regression." 4. IEEE: "Left Ventricular Wall Segmentation Using U-Net and Link-Net." 5. Springer Nature: "Patterns: A Case Study of Maluku." 6. Institute of Advanced Engineering and Science: "Per Capita Expenditure Prediction Using Model Stacking Based on Satellite Imagery." 7. IEEE: "Probabilistic Deep Learning for Highly Multivariate Spatio-Temporal Log-Gaussian Cox Processes." 8. Springer Nature Singapore: "Siamese Neural Network for Detecting Spatial Similarities in Earthquake Patterns: A Case Study of Maluku and Sulawesi." 2026 : 1. IEEE: "Aspect-Based Sentiment Analysis of Hotel Reviews Using Multiscale Convolutional Neural Network." 2. Department of Data Science, Universitas Muhammadiyah Semarang: "CoVaR Modelling Using QRNN Based on Quantile Regression and Quantile Autoregressive Models with Stochastic Search Variable Selection for LQ45." 3. The Scientific Association for Studies and Applied Research: "XGBoost Algorithm for Spatial Point Process Intensity Estimation Based on Logistic Loss."
--	---

Activities in specialist bodies over the last 5 years	<i>Basic Skills Program for Instructional Techniques (PEKERTI)</i>	<i>Training</i>	<i>2022</i>
	<i>Emi Training</i>		<i>2023</i>
	<i>Global Project for ITS Young Lecturers</i>	<i>Training</i>	<i>2023</i>
	<i>Basic Training for Permanent Non-Civil Servant (Non-PNS) Candidates at ITS</i>	<i>Training</i>	<i>2023</i>
	<i>Big Data with Hadoop and Spark</i>	<i>Training</i>	<i>2023</i>
	<i>Pelatihan Big Data Analysis with Python (Inxindo)</i>	<i>Training</i>	<i>2024</i>
	<i>Asesor Kompetensi</i>	<i>Training</i>	<i>2024</i>
	<i>Deep Learning for Natural Language Processing (Inxindo)</i>	<i>Training</i>	<i>2025</i>
	<i>Digital & Data-Driven Bussiness from Insight to Strategy (SIMT ITS)</i>	<i>Training</i>	<i>2026</i>

Name	<i>Muhamad Syukron, S.Stat, MAI.</i>		
Post	<i>Assistant Expert Lecturer</i>		
Academic career	<i>Initial academic appointment Universitas Diponegoro</i> <i>Habilitation [German post-doctoral qualification] (subject) Monash University</i>		
Employment	<i>Lecturer</i>	<i>ITS</i>	<i>2025</i>
Research and development projects over the last 5 years	<i>2025 :</i> <i>1. Research Progress Report 2025: Air Quality Index Forecasting in Surabaya Using LSTM and CNN-LSTM</i> <i>2. Research Progress Report 2025: Spatial Point Process Intensity Modeling with Gradient Boosting Techniques</i> <i>3. ITS Independent Funding Research Decree 2025: Deep Learning Algorithm for Autism Spectrum Disorder Detection Using Eye-Tracking Patterns</i> <i>4. ITS Independent Funding Research Decree 2025: Vehicle Detection from Satellite Imagery Using YOLOv12</i> <i>5. ITS Independent Funding Research Decree 2025: Survey on the Implementation of Causal Consistency in Geo-Replicated Cases</i> <i>6. ITS Department Research Decree 2025: Few-Shot Learning Approach for Addressing Class Imbalance in Classification Analysis for Disease Detection</i> <i>7. ITS Department Research Decree 2025: Air Quality Index Forecasting in Surabaya Using LSTM and CNN-LSTM</i> <i>8. ITS Type B Partnership Research Decree 2025: Spatial Point Process Intensity Modeling with Gradient Boosting Techniques</i> <i>2026 :</i> <i>1. Research Progress Report 2026: Image-Based Geolocation Prediction with Visual Attention Model</i> <i>2. Research Progress Report 2026: Development of an MSVAR Model with a Skewed Exponential Power Distribution for Analyzing the Financial Contagion Effect Between the Indonesian and United States Stock Markets</i> <i>3. Research Progress Report 2026: Solar Power Generation Output Forecasting in Nusa Penida Using a Hybrid Autoregressive Integrated Moving Average (ARIMA)–Long Short-Term Memory (LSTM) Model</i> <i>4. Research Progress Report 2026: Topic Modeling Based on Sentiment Analysis Using Machine Learning on Public Opinions on Social Media X</i> <i>5. Research Progress Report 2026: Synthetic Aperture Radar (SAR) Image Translation Using a Generative Adversarial Network (GAN) Approach</i>		
Industry collaborations over the last 5 years	<i>2025 :</i> <i>1. Community Service Progress Report 2025: Applied Statistical Modeling Training for UNIPRA Lecturers to Strengthen the Quality of Scientific Publications</i>		

	2. <i>Community Service Progress Report 2025: Strengthening the Competence of UNIPRA Lecturers in Data Exploration and Scientific Publication</i> 3. <i>ITS Thematic Community Service Decree (Department Funding) 2025: Applied Statistical Modeling Training for UNIPRA Lecturers to Strengthen the Quality of Scientific Publications</i> 4. <i>ITS Thematic Community Service Decree (Department Funding) 2025: Strengthening the Competence of UNIPRA Lecturers in Data Exploration and Scientific Publication</i> 2026 : 1. <i>Community Service Progress Report 2026: Applied Statistical Modeling Training for UNITOMO Lecturers and Students to Strengthen Research Quality</i> 2. <i>Community Service Progress Report 2026: Strengthening the Competence of UNITOMO Lecturers and Students in Identifying Data Patterns and Anomalies</i>
Patents and proprietary rights	Community Service Video: 2025 <i>"Strengthening the Competence of UNIPRA Lecturers in Data Exploration and Scientific Publication"</i> Community Service Video: 2025 <i>"Applied Statistical Modeling Training for UNIPRA Lecturers to Strengthen the Quality of Scientific Publications"</i>
Important publications over the last 5 years	2024 : 1. <i>IEEE: "Mitigating Class Imbalance for Neural Networks via Balanced Mini-Batch Training"</i> 2025 : 1. <i>"A Patch-Based Transformer Approach to Nonlinear Dynamics Natural Gas Price Forecasting"</i> 2026 : 1. <i>Study Program of Aquaculture, Faculty of Agriculture, Universitas Samudra: "Clustering of Blue Swimming Crab Catch Productivity Based on Fisher Age Using the K-Means Algorithm in Pantai Lunci District"</i> 2. <i>Universitas Nahdlatul Ulama Sunan Giri: "Multimodal Deep Learning for Online Gambling Promotion Detection on Indonesian Social Media"</i> 3. <i>"Strengthening Statistical and Data Science Literacy among Students of SMP Negeri 30 Surabaya through Educational Activities"</i> 4. <i>The Scientific Association for Studies and Applied Research: "XGBoost Algorithm for Spatial Point Process Intensity Estimation Based on Logistic Loss"</i>

Activities in specialist bodies over the last 5 years	<i>Induction Training for Prospective Non-Civil Servant Lecturers at ITS — Directorate of Human Resources and Organization</i>	<i>Training</i>	<i>2025</i>
	<i>Program for Improving Basic Instructional Technical Skills (PEKERTI) — Directorate of Academic Development and Learning Innovation, (ITS)</i>	<i>Training</i>	<i>2025</i>
	<i>English as the Medium of Instruction Training 2025 (Global Language Center, Institute Teknologi Sepuluh Nopember)</i>	<i>Training</i>	<i>2025</i>
	<i>Workshop – Biosensor untuk Deteksi Makanan Halal (ITS)</i>	<i>Training</i>	<i>2026</i>

Economic and Financial Data Analytics Laboratory

Name	<i>Dr. Muhammad Sjahid Akbar, S.Si., M.Si.</i>		
Post	<i>Head of the Economics and Finance Data Analytics Lab</i>		
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] (subject) IPB</i> <i>Doctorate (subject) ITS</i>		
Employment	<i>Lecturer</i>	<i>ITS</i>	<i>1998</i>
Research and development projects over the last 5 years	<i>Tahun 2022 :</i> <i>1. Analysis of the Impact Evaluation of the COVID-19 Pandemic on the Liquidity Classification of Sharia LQ45 Stocks Using SMOTE-Binary Logistic Regression and SMOTE-Fisher Discriminant Methods</i> <i>2. DEPARTMENT RESEARCH DECREE (BATCH 2) ITS 2022: Analysis of the Impact Evaluation of the COVID-19 Pandemic on the Liquidity Classification of LQ45 Sharia Stocks Using SMOTE-Binary Logistic Regression and SMOTE-Fisher Discriminant</i> <i>Tahun 2023 :</i> <i>1. RESEARCH DECREE ON PARTNERSHIP (BATCH 2) ITS 2023: Development of a Hybrid Model Based on Machine Learning and MGSTAR for Multivariate Forecasting</i> <i>2. Doctoral Dissertation Research Decree 2023: Detecting and Handling Outliers in Spatial Panel Simultaneous Equations and Its Application to Economic Growth in ASEAN-China Countries</i> <i>3. Development of the GSTAR Model with Exogenous Variables (Metric and Non-Metric) and Activity-Based Weighting</i> <i>4. Development of a Hybrid Model Based on Machine Learning and MGSTAR for Multivariate Forecasting</i> <i>5. Detecting and Handling Outliers in Spatial Panel Simultaneous Equations and Its Application to Economic Growth in ASEAN-China Countries</i> <i>Tahun 2024 :</i> <i>1. ITS Partnership Research Decree 2024: Development of Threshold Spatial Vector Autoregressive Model with Exogenous Variables (TSpVARX) using Quasi Maximum Likelihood Estimation Method</i> <i>2. Master's Thesis Research Decree 2024: Forecasting Inflow and Outflow Data in NTT Province and Nationally using the Hybrid Time Series Regression-Self Exciting Threshold Autoregressive Method</i> <i>3. Doctoral Dissertation Research Decree 2024: Detection and Management of Outliers in Spatial Panel Simultaneous Equations and Its Application to the Economic Growth of ASEAN-China Region Countries</i>		

	4. <i>ITS Department Research Decree 2024: Time Series Intervention Analysis on International Tourist Arrival Data Using Log-Linear Poisson Autoregressive and Poisson Autoregressive (PAR(p)) Models</i> 5. <i>ITS Department Research Decree 2024: Forecasting SO2 in Surabaya City Using the SETAR Method as an Early Warning for Environmental Conditions</i> 6. <i>2024 Research Progress Report: Developing a Model to Quantify Risk Dependence and Select Risk Factors Based on a Quantile Regression Neural Network Model with LASSO Regularization</i> 7. <i>2024 Research Progress Report: Forecasting Inflow and Outflow Data in NTT Province and Across the Country Using a Hybrid Time Series Regression-Self Exciting Threshold Autoregressive Method</i> 8. <i>2024 Research Progress Report: Forecasting SO2 Levels in Surabaya City Using the SETAR Method as an Early Warning for Environmental Conditions</i> 9. <i>2024 Research Progress Report: Time Series Intervention Analysis on International Tourist Visit Count Data Using Log-Linear Poisson Autoregressive and Poisson Autoregressive (PAR(p)) Models</i> 10. <i>2024 Research Progress Report: Developing a Threshold Spatial Vector Autoregressive Model with Exogenous Variables (TSpVARX) Using the Quasi Maximum Likelihood Estimation Approach</i> <i>Tahun 2025 :</i> 1. <i>INDONESIA COLLABORATIVE RESEARCH DECREE (RKI) ITS 2025: DEVELOPMENT OF HETEROGENEITY DETECTION ON LATENT VARIABLES USING SEM SEGMENTATION MARS SPATIAL MODEL</i> 2. <i>ITS DEPARTMENT RESEARCH DECREE 2025: Risk Analysis of the Five Largest Market Capitalization Stocks Using VaR and CoVaR Methods with QRNN Approach</i> 3. <i>ITS DEPARTMENT RESEARCH DECREE 2025: Assessment of Financial Risk Dependency Using Conditional Value-At-Risk Based on Quantile Regression and Extreme Value Theory</i> 4. <i>ITS DEPARTMENT RESEARCH DECREE 2025: Modeling Williamson Index and Gini Ratio Using Dynamic Spatial Econometric Model Approach</i> 5. <i>2025 Research Progress Report: Risk Analysis of the Five Largest Market Capitalization Stocks Using VaR and CoVaR Methods with QRNN Approach</i> <i>Tahun 2026 :</i> 1. <i>2026 Research Progress Report: Imbalanced Classification Prediction on Village Backwardness Status in East Java Using a Combination Approach Between Sampling Methods and Conventional Logistic Regression, Ridge Logistic Regression, and Kernel Discriminant Methods</i> 2. <i>2026 Research Progress Report: VARIANCE SHIFT OUTLIER MODEL (VSOM) WITH SIMPLIFIED CRITICAL VALUES TO ADDRESS INFLUENTIAL OBSERVATIONS (CASE STUDY OF A SPATIO-TEMPORAL ECONOMETRIC MODEL)</i> 3. <i>2026 Research Progress Report: DETECTION AND HANDLING OF OUTLIERS IN SPATIAL SEEMINGLY UNRELATED REGRESSION MODELS USING THE SPATIAL VARIANCE SHIFT OUTLIER MODEL FRAMEWORK (CASE STUDY: GRDP MODELING)</i>
--	--

	4. 2026 Research Progress Report: GRDP MODELING OF THE MANUFACTURING INDUSTRY SECTOR IN THE GERBANGKERTOSUSILA REGION PLUS EAST JAVA PROVINCE USING A SPATIAL ECONOMETRIC APPROACH 5. 2026 Research Progress Report: Development of the Penalized Support Vector Quantile Regression (Penalized-SVQR) Model for Financial Risk Modeling 6. 2026 Research Progress Report: Forecasting Stock Returns of Coal Subsectors with High and Low Volatility Characteristics Using the ARIMA-GARCH Hybrid LSTM Method 7. 2026 Research Progress Report: FORECASTING EXCHANGE RATE VOLATILITY OF ASEAN COUNTRIES: A REGIME SWITCHING APPROACH BASED ON MACROECONOMIC FUNDAMENTAL INDICATORS ... 8. 2026 Research Progress Report: Analysis of Dynamic Decoupling between Renewable Energy, Economic Growth, and CO2 Emissions in Indonesia: An Integrated VECM and Machine Learning Approach 9. 2026 Research Progress Report: Comparative Analysis between Fintech Loans and Conventional Loans in Indonesia Using a LASSO-Based Instrumental Variables Approach
Industry collaborations over the last 5 years	Tahun 2022: 1. ITS Department Fund Thematic ABMAS Decree 2022: Empowering Women Through Shibori Batik Entrepreneurship in Keputih Village, Sukolilo District, Surabaya City, East Java Province 2. ITS Priority ABMAS Decree 2022: The Thousand Prosthetic Hands Movement 3. ITS Product-Based ABMAS Decree 2022: Strengthening Women's Capacities Through Ecoprint Entrepreneurship in Keputih Village, Sukolilo District, Surabaya City, East Java Province Tahun 2023: 1. "ITS 2023 Thematic ABMAS Decree: Empowerment of Miftahul Ulum Islamic Boarding School Students through Ecoprint Training" 2. "ITS 2023 Product-Based ABMAS Decree: Digital Fabrication Education Center as a Training and Prototype Production Center for MSMEs Based on Integrated Digital Design" 3. "ITS 2023 Product-Based ABMAS Decree: Empowerment of Al Hidayah Islamic Boarding School Students in Support of the One Pesantren One Product Program" Tahun 2025: 1. "SK PENGABDIAN MASYARAKAT ITS TAHUN 2025: Penyusunan Dokumen Rencana Pembangunan Jangka Menengah Daerah (RPJMD) Kabupaten Tuban Tahun 2025-2029" 2. "SK ABMAS PRIORITAS ITS tahun 2025: GERAKAN 1000 Digital Marketing UMi: Usaha Ultra Mikro Di Surabaya, Gresik, Sidoarjo, dan Sekitarnya" 3. "Thematic ABMAS Decree (Department Funds) ITS year 2025: Empowerment of Study Groups through Ecoprint Training" 4. "Thematic ABMAS Decree (Department Funds) ITS year 2025: Empowerment of Ponpes Roudlotul Hidayah Students through Ecoprint"

	and Digital Marketing Training Location: Pakis Village, Trowulan District, Mojokerto Regency, East Java Province" "Thematic ABMAS Decree (Department Funds) ITS year 2025: Enhancement of Lecturers' Capacity in Statistical Data Analysis Quality within the Nursing Academy Environment, Ngawi Regency" "ABMAS Progress Report Year 2025: Empowerment of Study Groups through Ecoprint Training" "ABMAS Progress Report Year 2025: Empowerment of Ponpes Roudlotul Hidayah Students through Ecoprint and Digital Marketing Training Location: Pakis Village, Trowulan District, Mojokerto Regency, East Java Province" "ABMAS Progress Report Year 2025: Enhancement of Lecturers' Capacity in Statistical Data Analysis Quality within the Nursing Academy Environment, Ngawi Regency" Tahun 2026: - Progress Report on Community Service 2026: EMPOWERMENT OF BADAS VILLAGE COMMUNITY THROUGH ECOPRINT PRODUCTION TRAINING AND MARKETING ASPECTS USING THE CORE PLASMA CONCEPT - Progress Report on Community Service 2026: ECOPRINT TRAINING FOR TEACHERS AND STUDENTS OF SMA IPIEMS SURABAYA ALONG WITH MARKETING - Progress Report on Community Service 2026: STRUCTURAL EQUATION MODELING (SEM) TRAINING BASED ON PARTIAL LEAST SQUARES (PLS) FOR IMPROVING RESEARCH QUALITY IN THE ECONOMIC EDUCATION PROGRAM AT STKIP PGRI JOMBANG Partners
Patents and proprietary rights	"Video on Strengthening Women's Capacity Through Ecoprint Entrepreneurship in Keputih Subdistrict, Sukolilo District, Surabaya City, East Java Province" 2022 "Accompanying Video on Improving Data Analysis Quality at the Faculty of Health Sciences, Wiraraja University Sumenep by the Environmental Health Statistics Laboratory, Department of Statistics, FSAD ITS" 2024 "Poster of the Fishermen's Village in Kedung Cowek Subdistrict" 2025 "Community Service Video: Steam Technique Eco Print Workshop for Women's Study" 2025

	<i>Group in Dlanggu, Mojokerto Regency"</i> <i>"Community Service Poster - Eco-Print Training in Trowulan, Mojokerto"</i> 2026
Important publications over the last 5 years	<i>Tahun 2022 :</i> <i>"STRENGTHENING WOMEN'S CAPACITY THROUGH COMMUNITY SERVICE IN ECOPRINT ENTREPRENEURSHIP"</i> <i>Tahun 2023 :</i> <i>"Clustering Stock Prices of Industrial and Consumer Sector Companies in Indonesia Using Fuzzy C-Means and Fuzzy C-Medoids Involving ACF and PACF"</i> <i>Tahun 2024 :</i> <i>Multidisciplinary Digital Publishing Institute (MDPI): "Addition of Subset and Dummy Variables in the Threshold Spatial Vector Autoregressive with Exogenous Variables Model to Forecast Inflation and Money Outflow"</i> <i>MDPI: "Addition of Subset and Dummy Variables in the Threshold Spatial Vector Autoregressive with Exogenous Variables Model to Forecast Inflation and Money Outflow"</i> <i>Elsevier: "Modeling and Forecasting Return Volatilities of Inter-Capital Market Indices using GARCH-Fractional Cointegration Model Variation"</i> <i>Elsevier: "Modeling the Volatility of World Energy Commodity Prices Using the GARCH-Fractional Cointegration Model"</i> <i>Universitas Wiraraja Sumenep: "Improving the Quality of Data Analysis in Scientific Publications and Research within the Faculty of Health Sciences Faculty Staff"</i> <i>Pattimura University in collaboration with the Indonesian Mathematical Society (IndoMS): "EID AL-FITR INFLUENCES THE NUMBER OF TRAIN PASSENGERS ON SUMATRA ISLAND (CALENDAR VARIATIONS TIME SERIES MODEL)"</i> <i>Springer, Cham: "Conditional Value-At-Risk Modelling Using Hybrid LASSO-QRNN to Quantify the Market Risk Dependence on Oil and Gas Companies' Stock in Indonesia"</i> <i>Department of Statistics, Faculty of Science and Mathematics, Diponegoro University: "APPLICATION OF THE DYNAMIC FACTOR MODEL ON NOWCASTING SECTORAL ECONOMIC GROWTH WITH HIGH-FREQUENCY DATA"</i> <i>Tahun 2025 :</i> <i>1. IEEE: "Analysis of the Impact of Global Uncertainty on the Indonesian Economy Using Impulse Response Functions in Structural Vector Autoregressive Models"</i> <i>Tahun 2026 :</i> <i>IEEE: "A Hybrid GARCH-MIDAS-XGBoost Model for Forecasting Indonesian Exchange Rate Volatility under the Uncovered Interest Rate Parity"</i>

	2. <i>University of AEGEAN: "Segmentation of Tuberculosis Cases in East Java Using SEM-PLS Ward Clustering"</i> 3. <i>IEEE: "Spatio-Temporal Forecasting of Air Quality in Surabaya, Sidoarjo, and Gresik Using Generalized Space-Time Autoregressive Integrated Moving Average (GSTARIMA)"</i> 4. <i>Pattimura University: "Nowcasting Growth at Risk in Indonesia: Application of MIDAS-Quantile Regression Model"</i> 5. <i>AIP: "Comparison of ARIMA and GSTAR Models for Forecasting Air Pollution in Surabaya"</i> 6. <i>AIP Publishing: "Forecasting the Number of Foreign Tourist Arrivals Using Time Series Intervention Analysis Based on SARIMA and Log-Linear Poisson Autoregressive Model"</i> 7. <i>IEEE: "Network-Based Systemic Risk Analysis of Indonesian Banking Stocks Measured with SFI, SHI, and SNRI Indices"</i> 8. <i>State Islamic Institute of Palopo: "Forecasting Land Acquisition Financing Requirements for Optimizing Budget Execution in National Strategic Projects: A Time Series Approach Using ARIMA and Artificial Neural Network"</i> 9. <i>IEEE: "Hybrid LASSO-SVQR Framework for Modeling Nonlinear Systemic Risk Dependencies"</i> 10. <i>IEEE: "GEVReg-MIDAS-SSVS for Mixed-Frequency Time Series Interval Forecasting"</i>		
Activities in specialist bodies over the last 5 years	Workload Assessor		2022
	"Introduction to Microsoft SQL Server Database" (X N)	Training	2023
	"Big Data Analyst Training with Python" (Domestic External Institution Surabaya)	Training	2024
	"AWARENESS & INTERNAL AUDITOR OF EDUCATIONAL ORGANIZATIONS MANAGEMENT SYSTEMS (EOMS) ISO 21001:2018" (Intertek Academy Indonesia Sepuluh Nopember Institute of Technology (ITS))	Training	2025

Environmental and Health Statistics and Data Science Laboratory

Name	<i>Prof. Dr. Ir. Setiawan, M.S.</i>
Post	<i>Professor</i>
Academic career	<i>Initial academic appointment</i> <i>IPB</i> <i>Habilitation [German post-doctoral qualification] (subject)</i> <i>IPB</i> <i>Doctorate (subject)</i> <i>IPB</i>
Employment	<i>Lecture</i> <i>ITS</i> <i>1987</i>
Research and development projects over the last 5 years	<i>Tahun 2022 :</i> <i>1. ARIMAX and FFNN Models for Forecasting Cash Inflow and Outflow at Bank Indonesia</i> <i>2. Panel Data Simultaneous Equation Modeling in Small Area Estimation for Poverty Mapping</i> <i>3. Doctoral Dissertation Research Decree 2022: Panel Data Simultaneous Equation Modeling in Small Area Estimation for Poverty Mapping</i> <i>Tahun 2023 :</i> <i>1. Detection and Handling of Outliers in Spatial Panel Simultaneous Equations and Its Application to Economic Growth in ASEAN-China Region Countries</i> <i>2. Development of Spatial Exponential Matrices in Seemingly Unrelated Regression and Its Application to Sectoral GRDP Modeling</i> <i>3. Development of GSTAR Model with Exogenous Variables (Metric and Non-Metric) and Activity-Based Weighting</i> <i>4. Doctoral Dissertation Research Decree 2023: Detection and Handling of Outliers in Spatial Panel Simultaneous Equations and Its Application to Economic Growth in ASEAN-China Region Countries</i> <i>5. Doctoral Dissertation Research Decree 2023: Development of Spatial Exponential Matrices in Seemingly Unrelated Regression and Its Application to Sectoral GRDP Modeling</i> <i>Tahun 2024 :</i> <i>1. 2024 Research Progress Report: Development of Threshold Spatial Vector Autoregressive Model with Exogenous Variables (TSpVARX) Using the Quasi Maximum Likelihood Estimation Method</i> <i>2. 2024 Research Progress Report: Forecasting SO₂ in Surabaya City Using the SETAR Method as an Early Warning Against Environmental Conditions</i> <i>3. ITS DEPARTMENT RESEARCH DECREE 2024: Evaluation of the Goodness of Outlier Data Modeling with the Robust Seemingly Unrelated Regression (SUR) Approach (Case Study: Stock Price Modeling of the Banking Sector on the Indonesia Stock Exchange and Sectoral GRDP in Java Island)</i>

	4. <i>ITS DEPARTMENT RESEARCH DECREE 2024: SO2 Forecasting in Surabaya City Using the SETAR Method as an Early Warning for Environmental Conditions</i> 5. <i>ITS PARTNERSHIP RESEARCH DECREE 2024: Development of Threshold Spatial Vector Autoregressive Model with Exogenous Variables (TSpVARX) Using Quasi Maximum Likelihood Estimation Method</i> 6. <i>Doctoral Dissertation Research Decree 2024: Detection and Handling of Outliers in Spatial Panel Simultaneous Equations and Its Application to Economic Growth in ASEAN-China Countries</i> 7. <i>Doctoral Dissertation Research Decree 2024: Development of Spatial Exponential Matrix in Seemingly Unrelated Regression and Its Application to Sectoral GRDP Modeling</i> <i>Tahun 2025 :</i> 1. <i>2025 Research Progress Report: Risk Analysis of the Five Largest Market Capitalization Stocks Using VaR and CoVaR Methods with a QRNN Approach</i> 2. <i>2025 Research Progress Report: Cluster Profiling of Claims from General Insurance and Conventional Reinsurance Companies Amid Global Uncertainty Using the HCPC (Hierarchical Clustering On Principal Components) Method</i> 3. <i>2025 Research Progress Report: Mapping Unusual (Anomaly) Transaction Patterns in Credit Data: A Noise Detection Approach</i> 4. <i>2025 ITS Department Research Decree: Risk Analysis of the Five Largest Market Capitalization Stocks Using VaR and CoVaR Methods with a QRNN Approach</i> 5. <i>2025 ITS Department Research Decree: Cluster Profiling of Claims from General Insurance and Conventional Reinsurance Companies Amid Global Uncertainty Using the HCPC (Hierarchical Clustering On Principal Components) Method</i> 6. <i>Research Decree of the ITS Department in 2025: Mapping Unusual Transaction Patterns (ANOMALY) in Credit Data: A Noise Detection Approach</i> 7. <i>Research Decree of the ITS Department in 2025: Modeling the Williamson Index and Gini Ratio with a Dynamic Spatial Econometric Model Approach</i> <i>Tahun 2026 :</i> 1. <i>2026 Research Progress Report: Dynamic Decoupling Analysis between Renewable Energy, Economic Growth, and CO2 Emissions in Indonesia: An Integrated VECM and Machine Learning Approach</i> 2. <i>2026 Research Progress Report: Comparative Analysis between Fintech Loans and Conventional Loans in Indonesia Using a LASSO-Based Instrumental Variables Approach</i> 3. <i>Research Progress Report for 2026: Detection and Handling of Outliers in Spatial Seemingly Unrelated Regression Models with the Spatial Variance Shift Outlier Model Framework (Case Study: GRDP Modeling)</i> 4. <i>2026 Research Progress Report: Evaluation of Regional Gross Domestic Product Modeling in West Kalimantan Province Using Dynamic Panel Data Regression with the Arellano-Bond Generalized Method of Moments Approach and Static Panel Data Regression with the Ordinary Least Squares Approach</i>
--	---

	5. <i>2026 Research Progress Report: Modeling of GRDP in the Manufacturing Industry Sector in the Gerbang Kertosusila Plus Area, East Java Province Using a Spatial Econometrics Approach</i> 6. <i>2026 Research Progress Report: Forecasting Exchange Rate Volatility of ASEAN Countries: A Regime-Switching Approach Based on Macroeconomic Fundamental Indicators</i> 7. <i>2026 Research Progress Report: Predicting Imbalanced Classification of Village Backwardness Status in East Java Using a Combination Approach of Sampling Methods with Conventional Logistic Regression, Ridge Logistic Regression, and Kernel Discriminant Methods</i> 8. <i>2026 Research Progress Report: Variance Shift Outlier Model (VSOM) with Simplified Critical Values to Handle Influential Observations (Case Study on Spatio-Temporal Econometric Models)</i>
Industry collaborations over the last 5 years	<i>Tahun 2022 :</i> 1. <i>"Expert Staff: 'Assistance in Consultancy Services for the Preparation of the Gini Index of Mojokerto City in 2022'"</i> 2. <i>"Expert Staff: 'Preparation of Digital Literacy for Disaster Mitigation in the Pacitan, Trenggalek, and Tulungagung Regions'"</i> 3. <i>"Thematic Community Service Decree Funded by the ITS Department 2022: Empowerment of Women through Shibori Batik Entrepreneurship in Keputih Village, Sukolilo District, Surabaya City, East Java Province"</i> 4. <i>"ITS Community Service Decree 2022: Preparation of the Farmer Exchange Rate Evaluation Document in Tuban Regency in 2022"</i> 5. <i>"ITS Priority Community Service Decree 2022: The Thousand Prosthetic Hands Movement"</i> 6. <i>"ITS Product-Based Community Service Decree 2022: Strengthening Women's Capacity through Ecoprint Entrepreneurship in Keputih Village, Sukolilo District, Surabaya City, East Java Province"</i> <i>Tahun 2023 :</i> 1. <i>"Thematic ABMAS Decree Funded by ITS Department 2023: Empowerment of Miftahul Ulum Islamic Boarding School Students through Ecoprint Training"</i> 2. <i>"ITS Product-Based ABMAS Decree 2023: Empowerment of Al Hidayah Islamic Boarding School Students in Support of the One Boarding School One Product Program"</i> 3. <i>"ITS Product-Based ABMAS Decree 2023: Budget Tracking Measurement in Efforts to Evaluate Budgeting Mechanisms and Program Efficiency Levels for the Prevention and Reduction of Stunting in Tuban Regency, East Java Province"</i> <i>Tahun 2024 :</i> 1. <i>"ITS COMMUNITY SERVICE DECREE FOR 2024: Preparation of the Williamson Index Document for Tuban Regency for 2023"</i> <i>Tahun 2025 :</i> 1. <i>"ITS Community Service Decree 2025: Preparation of Evaluation Documents on Farmer Exchange Rates in Tuban Regency 2025"</i> 2. <i>"ITS Thematic Community Service Decree (Department Fund) 2025: Empowerment of Roudlotul Hidayah Islamic Boarding School Students"</i>

	<i>through Ecoprint and Digital Marketing Training Location: Pakis Village, Trowulan District, Mojokerto Regency, East Java Province"</i> 3. <i>"ITS Priority Community Service Decree 2025: 1000 Digital Marketing UMI Movement: Ultra Micro Enterprises in Surabaya, Gresik, Sidoarjo, and Surrounding Areas"</i> 4. <i>"ITS Thematic Community Service Decree (Department Fund) 2025: Empowerment of Religious Study Groups through Ecoprint Training"</i> 5. <i>"2025 Community Service Progress Report: Empowerment of Religious Study Groups through Ecoprint Training"</i> 6. <i>"2025 Community Service Progress Report: Empowerment of Roudlotul Hidayah Islamic Boarding School Students through Ecoprint and Digital Marketing Training Location: Pakis Village, Trowulan District, Mojokerto Regency, East Java Province"</i> <i>Tahun 2026 :</i> 1. <i>"2026 Abmas Progress Report: Empowering the Badas Village Community through Ecoprint Production Training and Marketing Aspects with the Core-Plasma Concept"</i> 2. <i>"2026 Abmas Progress Report: Ecoprint Training for Teachers and Students of SMA IPIEMS Surabaya along with Its Marketing"</i> 3. <i>"2026 Abmas Progress Report: Partial Least Square (PLS)-Based Structural Equation Modeling (SEM) Training to Improve Research Quality in the Economics Education Program at STKIP PGRI Jombang"</i> <i>Partners</i>
Patents and proprietary rights	<i>"Video on Strengthening Women's Capacity Through Ecoprint Entrepreneurship in Keputih Village, Sukolilo District, Surabaya City, East Java Province"</i> 2022 <i>"Video Recording Work"</i> 2023 <i>"Infographic of the Free Nutritious Food Program (MBG) in East Java"</i> 2025 <i>Community Service Video on Eco Print Steam Technique Training for Women's Study Group in Dlanggu, Mojokerto Regency</i> 2025 <i>"Probit Analysis Using Excel and SAS Software in Nutrition, Health, Economics, Social Sciences, Agriculture, and Others"</i> 2026 <i>"Community Service Poster – Eco-Print Training in Trowulan, Mojokerto"</i> 2026

Important publications over the last 5 years	<i>Tahun 2022 :</i> 1. ITS Scientific Publication Center (PPI ITS): "Analysis of the Ranking of State Universities with Legal Entity Status (PTN-BH) in Indonesia Based on Research Publication Indicators at International Institutions" 2. Horizon Research Publishing Corporation: "Advancement of Generalized Method of Moment Estimation (GMM) For Spatial Dynamic Panel Simultaneous Equations Models with Fixed Time Effect" 3. Department of Mathematics, Faculty of Science and Technology, Sunan Ampel State Islamic University: "A Functional Form of The Zenga Curve Based on Rohde's Version of the Lorenz Curve" 4. UNU Blitar: "Is It Feasible to Change a Prostitution Localization? Exploring Community Empowerment Issue" 5. Statistics Study Program, FMIPA, Bandung Islamic University: "Modeling Non-Food Engel Curves with Bayesian Quantile Regression in Papua Province" <i>Tahun 2023 :</i> 1. Growing Science: "A Modified Generalized Estimating Equation Approach for Simultaneous Spatial Durbin Panel Model: Case Study of Economic Growth in ASEAN Countries" 2. Growing Science: "Hybrid SSA-TBATS to improve forecasting accuracy on export value data in Indonesia" 3. IEEE Xplore: "Fast Maximum Likelihood Estimation of Big Data Spatial Autoregressive Model: Matrix Exponential Spatial Specification Approach" 4. Growing Science: "Data forecasting performance evaluation of threshold spatial vector autoregressive with exogenous variables" 5. Elsevier ScienceDirect: "The Adjusted SNR and Its Application for Selection Lorenz Function of Income Inequality Analysis" 6. The 3rd International Conference on Science, Mathematics, Environment and Education (ICoSMEE): "Nowcasting of daily consumer price index using time series regression and support vector regression" 7. DRPM ITS Surabaya: "Smart Village Desa Klagen Based on Digital Application for Achieving Excellent Village Services" <i>Tahun 2024 :</i> 1. Ahmad Dahlan University: "Computation of spatial error model with matrix exponential spatial specification approach" 2. Multidisciplinary Digital Publishing Institute (MDPI): "Addition of Subset and Dummy Variables in the Threshold Spatial Vector Autoregressive with Exogenous Variables Model to Forecast Inflation and Money Outflow" 3. AIP Publishing: "Empirical Best Linear Unbiased Predictions of Small Area Estimation with Panel Data for Estimating Household Consumption Per Capita Expenditure" 4. Hungarian Central Statistical Office: "The Extended Amato Index and Its Application to Income Data" 5. Scientific Oasis doo Belgrade: "The New Measures of Lorenz Curve Asymmetry: Formulation and Hypothesis Testing" 6. Hungarian Central Statistical Office: "Threshold Spatial Vector Autoregressive with Metric Exogenous Variables (TSpVARX) for Regional Inflation and Money Outflow Prediction"
---	---

	7. Elsevier: "Spatial Vector Autoregressive with Metric Exogenous Variable (SpVARX) for Inflation and Outflow Forecasting" 8. Springer, Singapore: "Small Area Estimation of Mean Years of Schooling Under Time Series and Cross-sectional Models" 9. Springer, Singapore: "Outlier Detection in Simultaneous Equations with Panel Data" 10. Elsevier B. V.: "Panel Data Modeling: Identifying and Handling Outliers with the VSOM Approach" Tahun 2025 : 1. Institute of Electrical and Electronics Engineers (IEEE) : "Interval Forecasting Using GEV Regression With Stochastic Search Variable Selection: A Simulation Study and Its Application to Forecast Imported Meat Price Range" 2. AIP Publishing : "The new adjusted SNR in determining order of the autoregressive model" 3. Elsevier : "Small area estimation of consumption per capita expenditure under simultaneous equation Rao-Yu model" 4. IEEE : "Outlier Detection and Handling In Spatial Autoregressive Models With Variance Shift Outlier Models (VSOM) : (Case Study: GDRP Data of Agriculture Sector in Java Island)" 5. Elsevier : "Maximum likelihood estimation of matrix exponential spatial specification on seemingly unrelated regression-spatial autoregressive model" Tahun 2026 : 1. AIP : "Comparison ARIMA and GSTAR Model to Forecasting Air Pollution in Surabaya" 2. Scopus (IEEE) : "Multilevel Confirmatory Factor Analysis for Modelling the Determinants of Malnutrition among Under-Five Children in Indonesia"		
Activities in specialist bodies over the last 5 years	Introduction to Microsoft SQL Server Database (Lembaga Eksternal Dalam Negeri Surabaya)	Pelatihan	2023
	Pelatihan Big Data Analyst with Python (Lembaga Eksternal Dalam Negeri Surabaya)	Pelatihan	2024

Name	<i>Santi Puteri Rahayu, S.Si., M.Si., Ph.D.</i>
Post	<i>Senior Lecture</i>
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] (subject) ITS</i> <i>Doctorate (subject) Univ. Malaysia Pahang</i>
Employment	<i>Lectore ITS 1998</i>
Research and development projects over the last 5 years	<i>Tahun 2022 :</i> <i>2022 Basic Research Decree: Development of Extreme Value Theory Methods for Modeling and Predicting Risk in Extreme Imbalance Data in the Development of Rating Systems</i> <i>2022 Department Research Decree (Batch 2) ITS: Analysis of the Impact Evaluation of the COVID-19 Pandemic on the Liquidity Classification of LQ45 Sharia Stocks Using SMOTE-Binary Logistic Regression and SMOTE-Fisher Discriminant Methods</i> <i>Development of Extreme Value Theory Methods for Modeling and Predicting Risk in Extreme Imbalance Data in the Development of Rating Systems</i> <i>Analysis of the Impact Evaluation of the COVID-19 Pandemic on the Liquidity Classification of LQ45 Sharia Stocks Using SMOTE-Binary Logistic Regression and SMOTE-Fisher Discriminant Methods</i> <i>Tahun 2023 :</i> <i>1. Department Research Decree (Batch 2) ITS 2023: Modeling and Evaluation of the Accuracy of Financial Distress Prediction in Transportation Sector Companies in Indonesia using SMOTE-Logistic Regression and Exact SMOTE-Logistic Regression</i> <i>2. Modeling and Evaluation of the Accuracy of Financial Distress Prediction in Transportation Sector Companies in Indonesia using SMOTE-Logistic Regression and Exact SMOTE-Logistic Regression</i> <i>Tahun 2024 :</i> <i>Master's Thesis Research Decree 2024: Random Forest with Adaptive Synthetic Sampling – Nominal Continuous and Cost Sensitive Learning on Imbalanced Bank Financing Data Classification</i> <i>ITS Department Research Decree 2024: Evaluation of the Goodness of Outlier Data Modeling with a Robust Seemingly Approach Unrelated Regression (SUR) (Case Study: Modeling Stock Prices in the Banking Sector of the Indonesia Stock Exchange and Sectoral GDP on Java Island)</i> <i>2024 Research Progress Report: Development of a Model to Quantify Risk Dependence and Select Risk Factors Based on Quantile Regression Neural Network Model with LASSO Regularization</i>

	4. <i>2024 Research Progress Report: Study on the Evaluation of Windowing Effects, Synthetic Feature Generation, and Feature Selection on Statistical and Machine Learning Models</i> <i>Tahun 2025 :</i> 1. <i>2025 PTM Decree: Parameter Estimation and Hypothesis Testing in Zero-inflated Ordered Probit Regression with Correlated Errors</i> 2. <i>2025 ITS Department Research Decree: Comparative Study of the Goodness of Modeling Methods between Logistic Regression and Binary Probit Regression</i> 3. <i>2025 ITS Scientific Research Decree: Modeling Based on Extreme Value Distribution and Risk Factor Selection with Stochastic Search Variable Selection</i> 4. <i>2025 ITS Department Research Decree: Adaptive Sparse Group Lasso for Intensity Function Estimation of Multivariate Point Processes</i> 5. <i>2025 Research Progress Report: Adaptive Sparse Group Lasso for Intensity Function Estimation of Multivariate Point Processes</i> <i>Tahun 2026 :</i> 1. <i>2026 Research Progress Report: Prediction of Imbalanced Classification on Village Underdevelopment Status in East Java Using a Combination Approach between Sampling Methods and Conventional Logistic Regression, Ridge Logistic Regression, and Kernel Discriminant Methods</i> 2. <i>2026 Research Progress Report: Forecasting Stock Returns of the Coal Subsectors Characterized by High and Low Volatility Using ARIMA–GARCH Hybrid LSTM Method</i> 3. <i>2026 Research Progress Report: Forecasting Exchange Rate Volatility of ASEAN Countries: A Regime Switching Approach Based on Macroeconomic Fundamental Indicators</i> 4. <i>2026 Research Progress Report: Dynamic Decoupling Analysis between Renewable Energy, Economic Growth, and CO2 Emissions in Indonesia: An Integrated VECM and Machine Learning Approach</i> 5. <i>2026 Research Progress Report: Comparative Analysis between Fintech Credit and Conventional Credit in Indonesia Using LASSO-Based Instrumental Variables Approach</i> 6. <i>2026 Research Progress Report: Detection and Handling of Outliers in Spatial Seemingly Unrelated Regression Models with the Spatial Variance Shift Outlier Model Framework (Case Study: GRDP Modeling)</i> 7. <i>2026 Research Progress Report: Evaluation of Gross Regional Domestic Product Modeling in West Kalimantan Province using Dynamic Panel Data Regression with the Arellano–Bond Generalized Method of Moments Approach and Static Panel Data Regression with the Ordinary Least Squares Approach</i>
Industry collaborations over the last 5 years	<i>Tahun 2022 :</i> 1. <i>Thematic ABMAS Decree Funded by the ITS Department in 2022: Women's Empowerment through Shibori Batik Entrepreneurship in Keputih Sub-district, Sukolilo District, Surabaya City, East Java Province</i> 2. <i>Product-Based ABMAS ITS Decree in 2022: Strengthening Women's Capacity through Ecoprint Entrepreneurship in Keputih Sub-district, Sukolilo District, Surabaya City, East Java Province</i>

	<i>Tahun 2023 :</i> <i>Thematic ABMAS Decree Funded by the ITS Department in 2022: Women's Empowerment through Shibori Batik Entrepreneurship in Keputih Sub-district, Sukolilo District, Surabaya City, East Java Province</i> <i>Product-Based ABMAS ITS Decree in 2022: Strengthening Women's Capacity through Ecoprint Entrepreneurship in Keputih Sub-district, Sukolilo District, Surabaya City, East Java Province</i> <i>Tahun 2025 :</i> <i>Thematic ABMAS Decree (Department Funds) ITS Year 2025: Empowerment of Santri at Roudlotul Hidayah Islamic Boarding School through Ecoprint and Digital Marketing Training. Location: Pakis Village, Trowulan District, Mojokerto Regency, East Java Province.</i> <i>Thematic ABMAS Decree (Department Funds) ITS Year 2025: Empowerment of Religious Study Groups through Ecoprint Training.</i> <i>ABMAS Progress Report Year 2025: Empowerment of Religious Study Groups through Ecoprint Training.</i> <i>ABMAS Progress Report Year 2025: Empowerment of Santri at Roudlotul Hidayah Islamic Boarding School through Ecoprint and Digital Marketing Training. Location: Pakis Village, Trowulan District, Mojokerto Regency, East Java Province.</i> <i>Tahun 2026 :</i> <i>ABMAS Progress Report 2026: Empowerment of the Badas Village Community through Ecoprint Production Training and Marketing Aspects with the Core-Plasma Concept</i> <i>ABMAS Progress Report 2026: Ecoprint Training for Teachers and Students at SMA IPIEMS Surabaya, including Marketing</i> <i>ABMAS Progress Report 2026: Structural Equation Modeling (SEM) Training Based on Partial Least Squares (PLS) for Improving Research Quality in the Economic Education Study Program at STKIP PGRI Jombang</i> <i>Partners</i>
Patents and proprietary rights	<i>Capacity Building Video for Women Through Ecoprint Entrepreneurship in Keputih Village, Sukolilo District, Surabaya City, East Java Province</i> 2022 <i>Community Service Video on Eco-Making Training Print Steam Techniques for Mothers' Study Groups in Dlanggu, Mojokerto Regency</i> 2025 <i>Community Service Poster - Eco-Print Training in Trowulan Mojokerto</i> 2026 <i>Trend Analysis and Donation Program Segmentation</i> 2026

	<i>Dashboard of LAZISMU East</i> <i>Java Using Clustering Method</i>
Important publications over the last 5 years	<i>Tahun 2022 :</i> 1. MDPI: "A Comparison of Bivariate Zero-Inflated Poisson Inverse Gaussian Regression Models with and without Exposure Variables" 2. "Bivariate Zero-Inflated Generalized Poisson Regression on Modeling Stillbirth and Maternal Death" 3. "Clustering Stock Prices of the Financial Sector Using K-Means Clustering With Dynamic Time Warping" 4. "Comparison of Vector Autoregressive and Long Short Term Memory for Forecasting the Air Pollution Index in Jakarta" 5. Department of Statistics ITS and the Forum of Higher Education in Statistics (FORSTAT): "Determination of a New Office Location for the Financial Services Authority (OJK) in North Sumatra Province Using a Combination of Factor Analysis and Fuzzy-Based Cluster Analysis Methods" 6. Unipa Surabaya: "Clustering Economic Growth (GRDP) and Expenditures in East Java Based on the Number of SMEs and Influencing Factors Using a Simultaneous Equation Model" 2. "STRENGTHENING WOMEN'S CAPACITY THROUGH ECOPRINT ENTREPRENEURSHIP" 3. "Parameter Estimation and Statistical Test on Zero-Inflated Poisson Inverse Gaussian Regression Model" 4. "Parameter Estimation and Statistical Test on Bivariate Zero-Inflated Poisson Inverse Gaussian with Exposure Variable" <i>Tahun 2023 :</i> 1. Growing Science: "Fuzzy Support Vector Machine for Classification of Time Series Data: A Simulation Study" 2. AIP Publishing: "Multilevel Analysis of Programme for International Student Assessment (PISA) 2018 in Indonesia" <i>Tahun 2024 :</i> 1. IEEE: "Applying kernel logistic regression in data mining to classify credit risk" 2. IEEE: "Credit risk classification using kernel logistic regression with optimal parameter" 3. Springer, Cham: "Conditional Value-at-Risk modeling using hybrid LASSO-QRNN to quantify the market risk dependence on oil and gas companies' stock in Indonesia" 4. IEEE: "Random forest with adaptive synthetic sampling-nominal continuous and cost-sensitive learning on imbalanced binary classification" 5. AIP Conference Proceedings: "Parameters Estimation and Hypothesis Testing of Bivariate Probit Models with BHHH Iteration" 6. IEEE: "Multivariate Spatial Modelling of Tree Species Distribution Using Adaptive Sparse Group Lasso: Case Study in Barro Colorado Island Plot" 7. Politeknik Statistika STIS: "Modeling Multi-Output Back-Propagation DNN for Forecasting Indonesian Export-Import" <i>Tahun 2025 :</i> 1. Islamic University of Indonesia: "A Zero-Inflated Ordered Probit Approach to Modeling Household Poverty Levels"

--	---

Name	<i>Prof. Dr.rer.pol. Dedy Dwi Prastyo, S.Si., M.Si.</i>		
Post	<i>Head of the Department of Statistics</i>		
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] ITS</i> <i>Doctorate HUB, Germany</i>		
Employment	<i>Lecture ITS 2008</i> <i>Professor ITS 2025</i>		
Research and development projects over the last 5 years	<i>Tahun 2022 :</i> <i>1. Development of the Extreme Value Theory Method for Modeling and Risk Prediction on Extreme Imbalance Data in the Development of Rating Systems</i> <i>2. Decree of Basic Research 2022: Development of the Extreme Value Theory Method for Modeling and Risk Prediction on Extreme Imbalance Data in the Development of Rating Systems</i> <i>Tahun 2023 :</i> <i>1. Development of a GSTAR Model with Exogenous Variables (Metric and Non-Metric) and Activity-Based Weighting</i> <i>2. Development of a Hybrid Model Based on Machine Learning and MGSTAR for Multivariate Forecasting</i> <i>3. Development of Singular Spectrum Analysis-Vector with a State Dependent Model Approach (Case Study: Indonesia's Export Forecasting)</i> <i>4. ITS Research Partnership Decree (Batch 2) 2023: Development of a Hybrid Model Based on Machine Learning and MGSTAR for Multivariate Forecasting</i> <i>5. Doctoral Dissertation Research Decree 2023: Development of Singular Spectrum Analysis-Vector with a State Dependent Model Approach (Case Study: Indonesia's Export Forecasting)</i> <i>Tahun 2024 :</i> <i>1. 2024 Research Progress Report: Time Series Intervention Analysis on International Tourist Visit Count Data Using Log-Linear Poisson Autoregressive and Poisson Autoregressive (PAR(p)) Models</i> <i>2. 2024 Research Progress Report: Development of Threshold Spatial Vector Autoregressive Model with Exogenous Variables (TSpVARX) Using Quasi Maximum Likelihood Estimation Approach</i> <i>3. 2024 Research Progress Report: Development of a Model to Quantify Risk Dependence and Select Risk Factors based on Quantile Regression Neural Network Model with LASSO Regularization</i> <i>4. 2024 Research Progress Report: Evaluation Study of the Effects of Windowing, Synthetic Feature Generation, and Feature Selection on Statistical and Machine Learning Models</i>		

	5. <i>2024 Master's to Doctoral Superior Research Decree: Development of a Robust Classification Method based on Random Forest for Imbalanced Response Cases</i> 6. <i>2024 ITS Partnership Research Decree: Development of Threshold Spatial Vector Autoregressive Model with Exogenous Variables (TSpVARX) using the Quasi Maximum Likelihood Estimation Method</i> 7. <i>2024 ITS Department Research Decree: Time Series Intervention Analysis on International Tourist Visit Count Data using Log-Linear Poisson Autoregressive and Poisson Autoregressive (PAR(p)) Models</i> <i>Tahun 2025 :</i> 1. <i>SK PDD 2025: Exploration of Model-Based Clusterwise Multi-Output Neural Network through Stochastic Simulation on Multivariate Time Series Data</i> 2. <i>SK PDD 2025: Development of Expectile Regression Neural Network Model on Mixed-Frequency Time Series Data for Economic and Financial Risk Analysis</i> 3. <i>2025 Research Progress Report: Exploration of Model-Based Clusterwise Multi-Output Neural Network through Stochastic Simulation on Multivariate Time Series Data</i> 4. <i>2025 Research Progress Report: Development of Financial Products as a Natural Disaster Risk Mitigation Strategy to Support Indonesia's Financial Resilience</i> 5. <i>SK PMDSU 2025: Development of Robust Classification Methods Based on Random Forest for Imbalanced Response Cases</i> 6. <i>ITS Scientific Research SK 2025: Modeling Based on Extreme Value Distribution and Risk Factor Selection Using Stochastic Search Variable Selection</i> 7. <i>Department Research Decree Batch 2 ITS 2025: Financial Product Development as a Natural Disaster Risk Mitigation Strategy in Supporting Indonesia's Financial Resilience</i> 8. <i>Department Research Decree ITS 2025: Assessment of Financial Risk Dependence Using Conditional Value-At-Risk Based on Quantile Regression and Extreme Value Theory</i> 9. <i>Department Research Decree ITS 2025: Comparative Study of Model Fit between Binary Logistic Regression and Probit Regression Methods</i> <i>Tahun 2026 :</i> 1. <i>2026 Research Progress Report: Development of a Multivariate Quantile Regression Forest Model for Interpreting Conditional Value-at-Risk</i> 2. <i>2026 Research Progress Report: Development of a Penalized Support Vector Quantile Regression (Penalized-SVQR) Model for Financial Risk Modeling</i> 3. <i>Research Progress Report for 2026: Forecasting Exchange Rate Volatility of ASEAN Countries: A Regime-Switching Approach Based on Macroeconomic Fundamental Indicators</i> 4. <i>2026 Research Progress Report: Prediction of Imbalanced Classification on Village Backwardness Status in East Java Using a Combined Approach of Sampling Methods with Conventional Logistic Regression, Ridge Logistic Regression, and Kernel Discriminant Analysis</i> 5. <i>2026 Research Progress Report: Development of a Robust Expectile-based Vector Autoregressive (EVAR) Model for Financial Systemic Risk Analysis</i>
--	---

	6. <i>2026 Research Progress Report: Dynamic Decoupling Analysis between Renewable Energy, Economic Growth, and CO2 Emissions in Indonesia: An Integrated VECM and Machine Learning Approach</i> 7. <i>2026 Research Progress Report: Comparative Analysis of Fintech Credit and Conventional Credit in Indonesia Using a LASSO-based Instrumental Variables Approach</i> 8. <i>Research Progress Report for 2026: Detection and Handling of Outliers in Spatial Seemingly Unrelated Regression Models with the Spatial Variance Shift Outlier Model Framework (Case Study: GRDP Modeling)</i>
Industry collaborations over the last 5 years	<i>Tahun 2022 :</i> 1. <i>"ITS Departmental Thematic ABMAS Decree 2022: Women's Empowerment through Shibori Batik Entrepreneurship in Keputih Subdistrict, Sukolilo District, Surabaya City, East Java Province"</i> 2. <i>"ITS Product-Based ABMAS Decree 2022: Strengthening Women's Capacity through Ecoprint Entrepreneurship in Keputih Subdistrict, Sukolilo District, Surabaya City, East Java Province"</i> <i>Tahun 2023 :</i> 1. <i>"2023 ITS DEPARTMENTAL THEMATIC COMMUNITY SERVICE DECREE (SK ABMAS): Empowerment of Miftahul Ulum Islamic Boarding School Students through Ecoprint Training"</i> 2. <i>"2023 ITS PRODUCT-BASED COMMUNITY SERVICE DECREE (SK ABMAS): Empowerment of Al Hidayah Islamic Boarding School Students in Supporting the One Pesantren, One Product Program"</i> <i>Tahun 2024 :</i> 1. <i>"Expert: Study on the Readiness of the Electric Vehicle and Charging Station Ecosystem in Indonesia"</i> <i>Tahun 2025 :</i> 1. <i>"Thematic ABMAS Decree (Department Funds) ITS 2025: Empowerment of Study Groups through Ecoprint Training"</i> 2. <i>"Thematic ABMAS Decree (Department Funds) ITS 2025: Empowerment of Santri at Pondok Pesantren Roudlotul Hidayah through Ecoprint and Digital Marketing Training Location: Pakis Village, Trowulan Subdistrict, Mojokerto Regency, East Java Province"</i> 3. <i>"ABMAS Progress Report 2025: Empowerment of Study Groups through Ecoprint Training"</i> 4. <i>"Progress Report on Community Service in 2025: Empowerment of Roudlotul Hidayah Islamic Boarding School Students through Ecoprint and Digital Marketing Training" Lokasi : Desa Pakis, Kecamatan Trowulan, Kabupaten Mojokerto Provinsi Jawa Timur"</i> <i>Tahun 2026 :</i> 1. <i>"Progress Report of Community Service 2026: Empowering the Badas Village Community through Ecoprint Production Training and Marketing Aspects of the Products with the Core-Plasma Concept"</i> 2. <i>"Progress Report of Community Service 2026: Ecoprint Training for Teachers and Students of IPIEMS High School Surabaya Along with Its Marketing"</i>

	3. <i>"Progress Report of Community Service 2026: Structural Equation Modeling (SEM) Training Based on Partial Least Square (PLS) for Improving Research Quality in the Economic Education Study Program at STKIP PGRI Jombang"</i> <i>Partners</i>
Patents and proprietary rights	<i>"Video on Strengthening Women's Capacity Through Ecoprint Entrepreneurship in Keputih Village, Sukolilo District, Surabaya City, East Java Province"</i> 2022 <i>"Data Analytics Training Video for Bank Syariah Indonesia (BSI) Region VIII Surabaya"</i> 2024 <i>"Community Service Video: Eco Print Making Training Using the Steam Technique for Women in the Dlanggu Quran Study Group, Mojokerto Regency"</i> 2025 <i>"Community Service Poster - Eco-Print Training in Trowulan Mojokerto"</i> 2026
Important publications over the last 5 years	<i>Tahun 2022 :</i> <i>Elsevier : "Advances in pretreatment technology for handling the palm oil mill effluent: Challenges and prospects"</i> <i>Pusat Publikasi Ilmiah (PPI) ITS : "Analisis Perangkingan Perguruan Tinggi Negeri Berbadan Hukum (PTN-BH) di Indonesia Berdasarkan Indikator Publikasi Penelitian pada Lembaga Internasional"</i> <i>"Analysis of Freight Mode Characteristics on The Northern Coastline Route using Mixed Data based Cluster Analysis"</i> <i>Elsevier : "Bioremediation of micropollutants using living and non-living algae - Current perspectives and challenges"</i> <i>"Clustering Stock Prices of Financial Sector Using K-Means Clustering With Dynamic Time Warping"</i> <i>"Drought Characterization In The Corong River Basin Using Meteorological Analysis"</i> <i>"Forecasting Electricity Consumption Based on Economics and Social Indicators Using Var Model with Exogenous Variable: Evidence From East Java Province"</i> <i>IEEE : "Gamma Regression for Modeling the Education Index of Cities in Java"</i> <i>Indonesian Society for Knowledge and Human Development (Insight) : "Monthly Inflow Forecasting of Three Multi-Purpose Reservoirs"</i> <i>MDPI : "Mutual Information-Based Variable Selection on Latent Class Cluster Analysis"</i> <i>11. Madaniya: "Strengthening Statistical and Data Science Literacy in Students of SMP Negeri 30 Surabaya through Educational Activities"</i>

	12. MDPI : <i>"The Geographically Weighted Multivariate Poisson Inverse Gaussian Regression Model and Its Applications"</i> 13. <i>"Uncertainty Analysis Study on Seakeeping Tests of Benchmark Model"</i> 14. <i>"Robustness of Support Vector Regression and Random Forest Models: A Simulation Study"</i> Tahun 2023 : 1. Growing Science : <i>"A hybrid model of spatial autoregressive–multivariate adaptive generalized Poisson regression spline"</i> 2. Institute for Research and Community Service (LPPM-ITS): <i>"Risk Analysis of Food & Beverage Subsector and Clothing & Textile Retail Stocks on the Indonesia Stock Exchange Using Conditional Value-at-Risk with ARMA-GARCH and Extreme Value Theory Approaches"</i> 3. Postgraduate Program of Syiah Kuala University & Indonesian Soil Science Society, Aceh Regional Chapter: <i>"Assessment of Hydrometeorological Drought in the Corong River Basin, Indonesia"</i> 4. <i>"Benchmarking hierarchical Bayesian small area estimators in the percentage of poverty at sub-districts level in Central Java"</i> 5. <i>"Clustering Stock Prices of Industrial and Consumer Sector Companies in Indonesia Using Fuzzy C-Means and Fuzzy C-Medoids Involving ACF and PACF"</i> 6. AIP Publishing : <i>"Comparison of Multivariate Adaptive Poisson Regression Spline and Multivariate Adaptive Generalized Poisson Regression Spline"</i> 7. Department of Statistics, Faculty of Science and Mathematics, Universitas Diponegoro : <i>"Corporate Financial Distress Prediction using Statistical Extreme Value-Based Modeling and Machine Learning"</i> 8. growing science. : <i>"Data forecasting performance evaluation of threshold spatial vector autoregressive with exogenous variables"</i> 9. AIP Publishing : <i>"Estimation of Value at Risk with ARMAX and GARCHX Variation During COVID-19 Pandemic Period (Case Study: IDX30 Stock Data in Banking Sub-Sector on Indonesia Stock Exchange)"</i> 10. University of Dubrovnik, Croatia : <i>"Experimental Seakeeping and Uncertainty Analysis of Benchmark Ship Model in Regular Head and Beam Waves"</i> 11. <i>"Forecasting meteorological drought through SPEI with SARIMA model"</i> 12. Polish Academy of Sciences (PAN), Institute of Technology and Life Sciences – National Research Ins : <i>"Modelling causality between agricultural and meteorological drought indices in the Corong River basin, East Java Indonesia"</i> 13. AIP Publishing : <i>"Multilevel analysis of programme for international student assessment (PISA) 2018 in Indonesia"</i> 14. IEEE : <i>"Network–Based Systemic Risk Analysis of Indonesian Banking Stocks Measured with SFI, SHI, and SNRI Indices"</i> 15. International Association of Engineers : <i>"Parameter Estimation of Spatial Error Model –Multivariate Adaptive Generalized Poisson Regression Spline"</i> 16. <i>"Performance evaluation of Bootstrap–Linear recurrent formula and Bootstrap–Vector singular spectrum analysis in the presence of structural break"</i> 17. Springer : <i>"Performance Evaluation of Bootstrap–Linear Recurrent Formula and Bootstrap–Vector Singular Spectrum Analysis in the Presence of Structural Break"</i>
--	--

	18. "Nowcasting of daily consumer price index using time series regression and support vector regression" 19. "Value at risk estimation with hybrid-SVR-GARCH-KDE model for LQ45 portfolio optimization" Tahun 2024 : 1. University of New Mexico : "A Comprehensive Analysis of Neutrosophic Bonferroni Mean Operator" 2. Multidisciplinary Digital Publishing Institute (MDPI) : "Addition of Subset and Dummy Variables in the Threshold Spatial Vector Autoregressive with Exogenous Variables Model to Forecast Inflation and Money Outflow" 3. Elsevier : "Adjusted SNR for Generalized Extreme Value Mixture Autoregressive Model in Actuarial Data" 4. Department of Statistics, Faculty of Science and Mathematics, Universitas Diponegoro : "APPLICATION OF THE DYNAMIC FACTOR MODEL ON NOWCASTING SECTORAL ECONOMIC GROWTH WITH HIGH-FREQUENCY DATA" 5. penerbit.uthm.edu.my/ojs/index.php/ijie : "Assessment of Agricultural Drought Using the Normalized Difference Drought Index (NDDI) to Prediction Drought at Corong River Basin" 6. Springer, Cham : "Conditional Value-At-Risk Modelling Using Hybrid LASSO-QRNN to Quantify the Market Risk Dependence on Oil and Gas Companies' Stock in Indonesia" 7. Department of Statistics, Faculty of Science and Mathematics, Universitas Diponegoro : "Ensemble-Based Logistic Regression on High-Dimensional Data: A Simulation Study" 8. ITB Press : "Estimation of Missing Values in Economic Issues Using Cluster-based Multiple Imputation" 9. AIP Publishing (AIP Conference Proceeding) : "Identification of land use for crops in Jawa Timur province based on multispectral imaging by combining multi-layer density-based spatial clustering of applications with noise and time-weighted dynamic time wrapping" 10. Faculty of Economic and Business Universitas Islam Negeri (UIN) Syarif Hidayatullah Jakarta : "Impact of COVID-19 Vaccination and Financial Policies on Indonesia's Property Loan Growth" 11. Elsevier : "Modeling and Forecasting Return Volatilities of Inter-Capital Market Indices using GARCH-Fractional Cointegration Model Variation" 12. Springer Nature Singapore : "Modeling Earthquake Catalog in Sumatra by Space-Time Epidemic-Type Aftershock Sequences Model: Combining Davidon-Fletcher-Powell and Stochastic Declustering Algorithms" 13. Elsevier : "Modeling the Volatility of World Energy Commodity Prices Using the GARCH-Fractional Cointegration Model" 14. Springer Nature : "Performance of T2-based PCA mix control chart with KDE control limit for monitoring variable and attribute characteristics" 15. IEEE Explore : "Rare Event Classification Based on Binary Generalized Extreme Value-Additive Models" 16. Politeknik Statistika STIS : "Modeling Multi-Output Back-Propagation DNN for Forecasting Indonesian Export-Import" 17. LPPM Universitas Kristen Petra : "The Relationship between Hydro-Agricultural Drought in the Corong River Basin: A Causal Time Series Regression Model"
--	---

	18. Hungarian Central Statistical Office : "Threshold spatial vector autoregressive with metric exogenous variables (TSpVARX) for regional inflation and money outflow prediction" 19. Springer Nature Singapore : "The Impact of Clustering-Based Sequential Multivariate Outliers Detection in Handling Missing Values" 20. Springer International Publishing : "Survival support vector machines: A simulation study and its health-related application" 21. Elsevier : "Spatial Vector Autoregressive with Metric Exogenous Variable (SpVARX) for Inflation and Outflow Forecasting" 22. MDPI : "State-Dependent Model Based on Singular Spectrum Analysis Vector for Modeling Structural Breaks: Forecasting Indonesian Export" 23. IEEE : "Scenarios to Handle Shifts Data Pattern Using Neural Network for Forecasting Indonesian GDP Based on Financial Growth at Risk" 24. AIP Publishing (AIP Conference Proceeding) : "Small area estimation of poverty severity index for Kecamatan (sub-district) in Surabaya city in 2020 using empirical best linear unbiased prediction method" Tahun 2025 : 1. IEEE : "Analysis of the Impact of Global Uncertainty on the Indonesian Economy with Impulse Response Function in the Structural Vector Autoregressive Models" 2. Elsevier : "Beyond architecture: Hyperparameter optimization for YOLOv8m in multi-class textile defect detection" 3. IEEE : "Bivariate Poisson Inverse Gamma INAR(1) Regression Model: Healthcare Service Visits by Health Insurance Members Case Study" 4. "Comparison of RACOG and RACOG-RUS for Classifying Imbalanced Data on Gradient Boosting and Naive Bayes Performance" 5. International Information and Engineering Technology Association : "Enhancing LSTM-Based Models for Electricity Consumption Forecasting with Bayesian Hyperparameter Tuning" 6. IEEE : "Fragility and Hazard Analysis on the Composite Index Risk-Return Using Expectile Regression Neural Network" 7. IEEE : "Generalized Extreme Value Regression for Prediction of Meat Import Price Range in Indonesia" 8. IEEE : "HMM-Based Mixture of Gaussian Process Functional Regressions for Seasonal Time Series Forecasting Under Multimodal Distributions: A Case Study on the Hourly Prediction of Land Surface Temperature" 9. IEEE : "Hybrid LASSO-Quantile Regression and Support Vector Regression for Estimating Conditional Value-at-Risk of Banking Stock Returns in Indonesia" 10. IEEE : "Interval Forecasting of Stock Price Movement using QRNN and Hybrid LASSO-QRNN Models with Technical Indicator Inputs" 11. IEEE : "Interval Forecasting of Stock Price Movements with Technical Indicator Input using Hybrid LASSO-Quantile Regression and Support Vector Regression" 12. Institute of Electrical and Electronics Engineers (IEEE) : "Interval Forecasting Using GEV Regression With Stochastic Search Variable Selection: A Simulation Study and Its Application to Forecast Imported Meat Price Range" 13. IEEE : "Interval Forecasting Using GEV Regression With Stochastic Search Variable Selection: A Simulation Study and Its Application to Forecast Imported Meat Price Range"
--	---

14. Springer : "Model-Based Clusterwise Neural Network in Time Series Clustering of Stock Price"
15. Universitas Brawijaya (UB) : "Perbandingan Complexity Invariant Distance (CID) dan Dynamic Time Warping (DTW) dalam Analisis Kluster Deret Waktu pada Nilai Tukar Petani di Indonesia"
16. IEEE : "Performance Analysis of Random Forest with Sampling for River Water Quality Classification"
17. Springer : "Performance Comparison of Individual Risk Model Using VaR-POT with Its Risk Dependence Model Using Quantile Regression-Based CoVaR"
18. Institute for Research and Community Service (LPPM-ITS): "Forecasting Bitcoin, Ethereum, and Binance Prices Using the ARIMA (Autoregressive Integrated Moving Average) Method with Exogenous Variables"
19. Elsevier : "On the Bayesian generalized extreme value mixture autoregressive model with adjusted SNR in non-standard actuarial data"
20. AIP Publisings : "On the generalized extreme value mixture autoregressive model with expectation maximization estimator on the claims reserve data of general insurance companies in Indonesia"
21. Dr D. Pylarinos : "Performance Evaluation of Classification Methods Utilizing Resampling Techniques for Water Quality Prediction on Imbalanced Data"
22. Universitas Ahmad Dahlan : "Predicting financial distress in Indonesian life insurance companies with classification methods and synthetic features generation"
23. Green Publisher Indonesia : "Predictive Analytics of Rural Bank Quality Credit"
24. AIP Publishing : "Multivariate forecasting: Interdependency of meteorological and hydrological droughts in Corong river basin"
25. MDPI : "Systemic Risk Modeling with Expectile Regression Neural Network and Modified LASSO"
26. Andi Publisher : "STATISTIKA SPASIAL TITIK RESPON KONTINU"

Tahun 2026 :

1. Elsevier : "An accuracy-level method for robust evaluation in predictive analytics"
2. Elsevier : "An expectile-based neural network approach for mixed-frequency economic forecasting"
3. Tadris Matematika, Tarbiyah Faculty, Universitas Islam Negeri Sunan Kudus : "Banking Market Risk Modelling Using QAR-Based CoVaR with Quantile Regression"
4. Department of Data Science, Universitas Muhammadiyah Semarang : "CoVaR Modelling using QRNN Based on Quantile Regression And Quantile Autoregressive Models with Stochastic Search Variable Selection for LQ45"
5. World Scientific : "Dynamic Forward Intensities for Multiperiod Default"
6. IEEE : "Enhancing Solar Power Output Forecasting Using a Hybrid Transfer Function-LSTM"
7. AIP Publishing : "Estimating value-at-risk on Indonesian banking stock returns: A peaks over threshold approach"
8. AIP Publishing : "Forecasting number of foreign tourist arrivals using time series intervention analysis based on SARIMA and log-linear poisson autoregressive model"

	9. AIP Publishing : <i>"Identification of Banking Stock Risk Factors through Stochastic Search Variable Selection in a CoVaR Models Based on Quantile Regression and Quantile Autoregressive"</i> 10. IEEE : <i>"GEVReg-MIDAS-SSVS for Mixed-Frequency Time Series Interval Forecasting"</i> 11. IEEE : <i>"Hybrid LASSO-SVQR Framework for Modeling Nonlinear Systemic Risk Dependencies"</i> 12. Elsevier : <i>"An accuracy-level method for robust evaluation in predictive analytics"</i> 13. Elsevier : <i>"An expectile-based neural network approach for mixed-frequency economic forecasting"</i> 14. Elsevier : <i>"An expectile-based neural network approach for mixed-frequency economic forecasting"</i> 15. Department of Mathematics, Faculty of Science and Technology, UIN Sunan Gunung Djati Bandung : <i>"Identification of Banking Stock Risk Factors through Stochastic Search Variable Selection in a CoVaR Models Based on Quantile Regression and Quantile Autoregressive"</i> 16. Elsevier : <i>"Knowledge-driven nodes selection with modified LASSO regularization for neural network modeling in economic data forecasting"</i> 17. Pattimura University : <i>"Nowcasting Growth at Risk in Indonesia: Application of MIDAS-Quantile Regression Model"</i> 18. IEEE : <i>"Network-Based Systemic Risk Analysis of Indonesian Banking Stocks Measured with SFI, SHI, and SNRI Indices"</i> 19. Madaniya: <i>"Strengthening Statistical and Data Science Literacy in Students of SMP Negeri 30 Surabaya through Educational Activities"</i> 20. <i>"Markov-switching GARCH-machine learning for forecasting return volatility"</i> 21. RADJA PUBLIKA : <i>"The Effect of Product Attributes and Customer Reviews on Sales Performance on the Tokopedia E-Commerce Platform"</i> 22. American Institute of Physics : <i>"Second-order confirmatory factor analysis on the academic motivation scale using MIIV-2SLS estimator"</i>
--	--

Activities in specialist bodies over the last 5 years	"Pendidikan dan Pelatihan Instruktur PEKERTI-AA" (XN)	Pelatihan	2022
	"Workshop Silabus Minimal FORSTAT" (XN)	Pelatihan	2023
	"BigData with Hadoop and Spark" (XN)	Pelatihan	2023
	"Penggunaan ChatGPT untuk Penulisan Ilmiah Beretika" (XN)	Pelatihan	2023
	"Analisis Kebutuhan Pembelajaran Dalam Implikasi Manajemen Karier" (Pusat Pendidikan dan Pelatihan Pegawai Kementerian Pendidikan, Kebudayaan, Riset dan Teknologi)	Program Peningkatan Kompetensi	2024
	"Fullstack Machine Learning Model with Django and ReactJS" (Inixindo Surabaya)	Pelatihan	2024
	"International Professional Training & Certification CERTIFIED IN DATA SCIENCE" (PT. Humam Indonesia Manajemen)	Pelatihan	2024
	"Sekolah Kepemimpinan 2025" (Direktorat Sumber Daya Manusia dan Organisasi (SDMO) ITS)	Program Peningkatan Kompetensi	2025
	"Sekolah Teknis Pemimpin ITS" (Direktorat Sumber Daya Manusia dan Organisasi (SDMO) ITS)	Program Peningkatan Kompetensi	2025
	"Pelatihan Kompetensi PBJP Level-1" (Pusat Pelatihan SDM Pengadaan Barang/Jasa Lembaga Kebijakan Pengadaan Barang/Jasa Pemerintah)	Pelatihan	2025

Name	<i>Neni Alya Firdausanti, S.Si., M. Stat., Ph.D.</i>		
Post	<i>Lecture</i>		
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] (subject) ITS</i> <i>Doctorate (subject) Kumamoto University</i>		
Employment	<i>Lecture</i>	<i>ITS</i>	<i>2020</i>
Research and development projects over the last 5 years	<i>Tahun 2022 :</i> <i>1. ITS DEPARTMENT RESEARCH DECREE (BATCH 2) 2022: Impact Evaluation Analysis of the COVID-19 Pandemic on the Liquidity Classification of LQ45 Sharia Stocks using SMOTE-Binary Logistic Regression and SMOTE-Fisher Discriminant Methods</i> <i>2. ITS SELF-FUNDED RESEARCH DECREE 2022: Classification of Hepatitis Patients Using Support Vector Machine and Binary Logistic Regression</i> <i>3. ITS SELF-FUNDED RESEARCH DECREE 2022: COMPARISON OF LOGISTIC REGRESSION AND SUPPORT VECTOR MACHINES (SVM) IN CLASSIFICATION ON ECHOCARDIOGRAM DATASET</i> <i>4. Impact Evaluation Analysis of the COVID-19 Pandemic on the Liquidity Classification of LQ45 Sharia Stocks using SMOTE-Binary Logistic Regression and SMOTE-Fisher Discriminant Methods</i> <i>5. CLASSIFICATION OF HEPATITIS PATIENTS USING SUPPORT VECTOR MACHINE AND BINARY LOGISTIC REGRESSION</i> <i>6. COMPARISON OF LOGISTIC REGRESSION AND SUPPORT VECTOR MACHINES (SVM) IN CLASSIFICATION ON ECHOCARDIOGRAM DATASET</i> <i>Tahun 2023 :</i> <i>1. ITS DEPARTMENT RESEARCH DECREE (BATCH 2) 2023: Modeling and Evaluation of the Accuracy of Financial Distress Prediction in Transportation Sector Companies in Indonesia using SMOTE-Logistic Regression and Exact SMOTE-Logistic Regression</i> <i>2. Modeling and Evaluation of the Accuracy of Financial Distress Prediction in Transportation Sector Companies in Indonesia using SMOTE-Logistic Regression and Exact SMOTE-Logistic Regression</i> <i>Tahun 2024 :</i> <i>1. ITS INDEPENDENT RESEARCH DECREE 2024: Comparing Data-Based and Expert-Based Techniques for Improving Imputation in Ship Sensor Data</i> <i>Tahun 2025 :</i> <i>1. ITS DEPARTMENT RESEARCH DECREE 2025: Risk Analysis of the Five Largest Market Capitalization Stocks Using VaR and CoVaR Methods with a QRNN Approach</i> <i>2. ITS DEPARTMENT RESEARCH DECREE 2025: Cluster Profiling of Claims in Conventional General Insurance and Reinsurance Companies Amid Global Uncertainty Using the HCPC (Hierarchical Clustering on Principal Components) Method</i>		

	3. <i>ITS DEPARTMENT RESEARCH DECREE 2025: MAPPING UNUSUAL (ANOMALY) TRANSACTION PATTERNS IN CREDIT DATA: A NOISE DETECTION APPROACH</i> 4. <i>Research Progress Report 2025: Risk Analysis of the Five Largest Market Capitalization Stocks Using VaR and CoVaR Methods with a QRNN Approach</i> 5. <i>Research Progress Report 2025: Cluster Profiling of Claims in General Insurance and Conventional Reinsurance Companies Amid Global Uncertainty Using the HCPC (Hierarchical Clustering on Principal Components) Method</i> 6. <i>Research Progress Report 2025: MAPPING UNUSUAL (ANOMALY) TRANSACTION PATTERNS IN CREDIT DATA: A NOISE DETECTION APPROACH</i> <i>Tahun 2026 :</i> 1. <i>2026 Research Progress Report: Forecasting Stock Returns of Coal Subsectors with High and Low Volatility Characteristics Using the ARIMA–GARCH Hybrid LSTM Method</i> 2. <i>2026 Research Progress Report: FORECASTING EXCHANGE RATE VOLATILITY OF ASEAN COUNTRIES: A REGIME SWITCHING APPROACH BASED ON MACROECONOMIC FUNDAMENTAL INDICATORS</i> 3. <i>2026 Research Progress Report: Predicting Imbalanced Classification of Village Lag Status in East Java Using a Combination Approach Between Sampling Methods and Conventional Logistic Regression, Ridge Logistic Regression, and Kernel Discriminant Analysis</i> 4. <i>2026 Research Progress Report: Dynamic Decoupling Analysis Between Renewable Energy, Economic Growth, and CO2 Emissions in Indonesia: An Integrated VECM and Machine Learning Approach</i> 5. <i>2026 Research Progress Report: Comparative Analysis between Fintech Credit and Conventional Credit in Indonesia Using a LASSO-Based Instrumental Variables Approach</i> 6. <i>2026 Research Progress Report: Detection and Treatment of Outliers in Spatial Seemingly Unrelated Regression Models Using the Spatial Variance Shift Outlier Model Framework (Case Study: GDP Modeling)</i> 7. <i>2026 Research Progress Report: Development of a Robust Expectile-based Vector Autoregressive (EVAR) Model for Financial Systemic Risk Analysis</i> <i>Lap. Kemajuan Penelitian Tahun 2026: Pengembangan Model Multivariate Quantile Regression Forest untuk Penaksiran Conditional Value-at-Risk</i>
Industry collaborations over the last 5 years	<i>Tahun 2022 :</i> 1. <i>"ITS 2022 PRODUCT-BASED ABMAS DECREE: Strengthening Women's Capacity Through Ecoprint Entrepreneurship in Keputih Subdistrict, Sukolilo District, Surabaya City, East Java Province"</i> 2. <i>"ITS 2022 THEMATIC DEPARTMENT-FUNDED ABMAS DECREE: Women's Empowerment Through Shibori Batik Entrepreneurship in Keputih Subdistrict, Sukolilo District, Surabaya City, East Java Province"</i> <i>Tahun 2025 :</i> 1. <i>"Thematic ABMAS Decree (Department Funding) ITS 2025: Empowerment of Study Groups Through Ecoprint Training"</i> 2. <i>"Thematic ABMAS Decree (Department Funding) ITS 2025: Empowerment of Santri at Roudlotul Hidayah Islamic Boarding School"</i>

	<i>Through Ecoprint and Digital Marketing Training Location: Pakis Village, Trowulan District, Mojokerto Regency, East Java Province"</i> 3. <i>"2025 ABMAS Progress Report: Empowerment of Study Groups Through Ecoprint Training"</i> 4. <i>"2025 ABMAS Progress Report: Empowerment of Santri at Roudlotul Hidayah Islamic Boarding School Through Ecoprint and Digital Marketing Training Location: Pakis Village, Trowulan District, Mojokerto Regency, East Java Province"</i> <i>Tahun 2026 :</i> 1. <i>"Progress Report of Community Service 2026: Empowering the Badas Village Community Through Ecoprint Production Training and Marketing Aspects of the Products with Core-Plasma Concept"</i> 2. <i>"Progress Report of Community Service 2026: Ecoprint Training for Teachers and Students of SMA IPIEMS Surabaya Along with Its Marketing"</i> 3. <i>"Progress Report of Community Service 2026: Structural Equation Modeling (SEM) Training Based on Partial Least Square (PLS) for Improving Research Quality in the Economic Education Study Program at STKIP PGRI Jombang"</i> <i>Partners</i>
Patents and proprietary rights	<i>"Video on Strengthening Women's Capacity Through Ecoprint Entrepreneurship in Keputih Village, Sukolilo District, Surabaya City, East Java Province"</i> 2022 <i>"Infographic Analysis of the Queue and Service System of the Financial Services Authority Kediri"</i> 2025 <i>"Community Service Video on Eco Print Making Training Using the Steam Technique for Women in the Dlanggu Quran Study Group, Mojokerto Regency"</i> 2025 <i>"Poster Pengabdian Masyarakat - Pelatihan Eco-Print di Trowulan Mojokerto"</i> 2026
Important publications over the last 5 years	<i>Tahun 2022 :</i> 1. <i>Department of Statistics, Institut Teknologi Sepuluh Nopember : "Comparisons of Logistic Regression and Support Vector Machines in Classification of Echocardiogram Dataset"</i> 1. <i>"Strengthening Women's Capacity Through Ecoprint Entrepreneurship"</i> <i>Tahun 2024 :</i> 1. <i>Springer : "Noise-free sampling with majority framework for an imbalanced classification problem"</i>

	<i>Tahun 2025 :</i> <i>Department of Statistics ITS : "Deep Learning and Statistical Approaches for Forecasting the Indonesian Rupiah Exchange Rate"</i> <i>Tahun 2026 :</i> <i>Study Program of Statistics, Universitas Sebelas Maret, Surakarta, Indonesia : "Forecasting the U.S. Treasury Yield Curve Using the Hybrid Dynamic Nelson-Siegel and Long Short-Term Memory (LSTM) Method"</i>		
Activities in specialist bodies over the last 5 years	<i>"English as the Medium of Instruction (EMI) Training 2024" (Director of Global Partnerships)</i> <i>"International Training and Certification in Data Science (CDS)" (PT. Human Indonesia Management)</i> <i>Complete Data Wrangling & Data Visualisation With Python"</i> www.udemy.com <i>"Training of Trainer (ToT) on Sampling Techniques for 2025" (BPS Training Center)</i>	<i>Pelatihan</i> <i>Pelatihan</i> <i>Pelatihan</i> <i>Pelatihan</i>	<i>2024</i> <i>2024</i> <i>2024</i> <i>2025</i>

Name	Veniola Forestryani, S.Si., M.Stat.		
Post	Assistant Expert		
Academic career	<i>Initial academic appointment</i> Universitas Jember <i>Habilitation [German post-doctoral qualification] (subject)</i> ITS		
Employment	Lecture	ITS	2023
Research and development projects over the last 5 years	<i>Tahun 2024 :</i> <i>2024 Research Progress Report: TIME SERIES INTERVENTION ANALYSIS ON INTERNATIONAL TOURIST VISIT COUNT DATA USING LOG–LINEAR POISSON AUTOREGRESSIVE AND POISSON AUTOREGRESSIVE (PAR(p)) MODELS</i> <i>2024 Research Progress Report: Forecasting SO2 in Surabaya City Using the SETAR Method as an Early Warning for Environmental Conditions</i> <i>ITS DEPARTMENT RESEARCH DECREE 2024: TIME SERIES INTERVENTION ANALYSIS ON INTERNATIONAL TOURIST VISIT COUNT DATA USING LOG–LINEAR POISSON AUTOREGRESSIVE AND POISSON AUTOREGRESSIVE (PAR(p)) MODELS</i> <i>ITS DEPARTMENT RESEARCH DECREE 2024: Forecasting SO2 in Surabaya City Using the SETAR Method as an Early Warning for Environmental Conditions</i> <i>ITS INDEPENDENT FUND RESEARCH DECREE 2024: THE SIGNIFICANCE OF TBP (GUARANTEE INTEREST RATE) REDUCTION, COVID-19 VACCINATION, AND LTV/FTV (LOAN TO VALUE / FINANCE TO VALUE) RELAXATION ON PROPERTY CREDIT GROWTH IN INDONESIA</i> <i>Tahun 2025 :</i> <i>2025 Research Progress Report: Risk Analysis of the Five Largest Market Capitalization Stocks Using VaR and CoVaR Methods with a QRNN Approach</i> <i>2025 Research Progress Report: Cluster Profiling of General Insurance and Conventional Reinsurance Company Claims Amid Global Uncertainty Conditions Using the HCPC Method (Hierarchical Clustering On Principal Components)</i> <i>ITS DEPARTMENT RESEARCH DECREE 2025: Risk Analysis of the Five Largest Market Capitalization Stocks Using VaR and CoVaR Methods with a QRNN Approach</i> <i>ITS DEPARTMENT RESEARCH DECREE 2025: Cluster Profiling of General Insurance and Conventional Reinsurance Company Claims Amid Global Uncertainty Using the HCPC (Hierarchical Clustering On Principal Components) Method</i> <i>ITS DEPARTMENT RESEARCH DECREE 2025: MAPPING UNUSUAL (ANOMALOUS) TRANSACTION PATTERNS IN CREDIT DATA: A NOISE DETECTION APPROACH</i>		

	6. <i>ITS DEPARTMENT RESEARCH DECREE 2025: Modeling the Williamson Index and Gini Ratio Using a Dynamic Spatial Econometric Model Approach</i> <i>Tahun 2026 :</i> 1. <i>2026 Research Progress Report: Forecasting Stock Returns of Coal Subsectors Characterized by High and Low Volatility Using ARIMA–GARCH Hybrid LSTM Method</i> 2. <i>2026 Research Progress Report: FORECASTING VOLATILITY OF ASEAN COUNTRIES' EXCHANGE RATES: REGIME SWITCHING APPROACH BASED ON MACROECONOMIC FUNDAMENTAL INDICATORS</i> 3. <i>2026 Research Progress Report: Prediction of Imbalanced Classification on the Backwardness Status of Villages in East Java Using a Combination Approach between Sampling Methods and Conventional Logistic Regression, Ridge Logistic Regression, and Kernel Discriminant Analysis Methods</i> 4. <i>2026 Research Progress Report: EVALUATION OF REGIONAL GROSS DOMESTIC PRODUCT MODELING IN WEST KALIMANTAN PROVINCE USING DYNAMIC PANEL DATA REGRESSION WITH THE ARELLANO–BOND GENERALIZED METHOD OF MOMENTS APPROACH AND STATIC PANEL DATA REGRESSION WITH THE ORDINARY LEAST SQUARES APPROACH</i> 5. <i>2026 Research Progress Report: MODELING GROSS REGIONAL DOMESTIC PRODUCT OF THE MANUFACTURING INDUSTRY SECTOR IN THE GERBANGKERTOSUSILA AREA PLUS EAST JAVA PROVINCE USING A SPATIAL ECONOMETRIC APPROACH</i>										
Industry collaborations over the last 5 years	<i>Project title</i> <i>Partners</i>										
Patents and proprietary rights	<table> <tr> <td><i>Data Analytics Training Video for Bank Syariah Indonesia (BSI) Region VIII Surabaya</i></td> <td>2024</td> </tr> <tr> <td><i>Infographic Portrait of Violence Against Women in East Java</i></td> <td>2025</td> </tr> <tr> <td><i>Videographics of Stunting Indicators in East Java: Who Needs More Attention?</i></td> <td>2025</td> </tr> <tr> <td><i>Community Service Video on Training in Eco Print Creation Using the Steam Technique for Women in the Study Group in Dlanggu, Mojokerto Regency</i></td> <td>2025</td> </tr> <tr> <td><i>Community Service Poster - Eco-Print Training in Trowulan Mojokerto</i></td> <td>2026</td> </tr> </table>	<i>Data Analytics Training Video for Bank Syariah Indonesia (BSI) Region VIII Surabaya</i>	2024	<i>Infographic Portrait of Violence Against Women in East Java</i>	2025	<i>Videographics of Stunting Indicators in East Java: Who Needs More Attention?</i>	2025	<i>Community Service Video on Training in Eco Print Creation Using the Steam Technique for Women in the Study Group in Dlanggu, Mojokerto Regency</i>	2025	<i>Community Service Poster - Eco-Print Training in Trowulan Mojokerto</i>	2026
<i>Data Analytics Training Video for Bank Syariah Indonesia (BSI) Region VIII Surabaya</i>	2024										
<i>Infographic Portrait of Violence Against Women in East Java</i>	2025										
<i>Videographics of Stunting Indicators in East Java: Who Needs More Attention?</i>	2025										
<i>Community Service Video on Training in Eco Print Creation Using the Steam Technique for Women in the Study Group in Dlanggu, Mojokerto Regency</i>	2025										
<i>Community Service Poster - Eco-Print Training in Trowulan Mojokerto</i>	2026										

	<i>Bekasi City GDP Dashboard</i> <i>2024 Economic Performance & Leading Sectors</i> 2026 <i>Trend Analysis and Program Donation Segmentation</i> 2026 <i>Dashboard of LAZISMU East Java using Clustering Method</i>
Important publications over the last 5 years	<i>Tahun 2022 :</i> 1. <i>"MULTI-RESPONSE OPTIMIZATION OF DIELECTRIC FLUID MIXTURE IN EDM USING GREY RELATIONAL ANALYSIS (GRA) IN TAGUCHI METHOD"</i> <i>Tahun 2024 :</i> 1. <i>AIP Publishing : "Forecasting number of foreign tourist arrivals using time series intervention analysis based on SARIMA and log-linear poisson autoregressive model"</i> 2. <i>Faculty of Economic and Business Universitas Islam Negeri (UIN) Syarif Hidayatullah Jakarta : "Impact of COVID-19 Vaccination and Financial Policies on Indonesia's Property Loan Growth"</i> 3. <i>Universitas Cokroaminoto : "Strategi Pelayanan dan Pemasaran melalui Pelatihan Data Analytics di Bank X"</i> <i>Tahun 2025 :</i> 1. <i>Department of Statistics ITS : "Deep Learning and Statistical Approaches for Forecasting the Indonesian Rupiah Exchange Rate"</i>

Activities in specialist bodies over the last 5 years	<i>“Pelatihan dan Sertifikasi MCF (Microsoft Certified Fundamentals)” (Trust Unified System)</i>	<i>Pelatihan</i>	<i>2024</i>
	<i>“Technical Guidance for PL-KUMKM Enumerator Coordinators 2024” (DEPARTMENT OF COOPERATIVES AND MICRO AND SMALL ENTERPRISES)</i>	<i>Pelatihan</i>	<i>2024</i>
	<i>“Basic Training (Latsar) for Prospective Permanent Non-Civil Servant Employees of ITS Batch II Year 2024” (Directorate of Human Resources and Organization)</i>	<i>Diklat Prajab</i>	<i>2024</i>
	<i>“Basic Skills Improvement Program for Instructional Techniques (PEKERTI)” (Director of Academic Development and Learning Innovation)</i>	<i>Pekerti</i>	<i>2025</i>
	<i>“Basic Skills Improvement Program for Instructional Techniques (PEKERTI)” (Director of Academic Development and Learning Innovation)</i>	<i>Pelatihan</i>	<i>2025</i>
	<i>“Capacity Building Workshop for Young Lecturers of FSAD ITS: Successful Strategies for Further Studies and Excellent Research” (Faculty of Science and Data Analytics, Sepuluh Nopember Institute of Technology)</i>		

Environmental and Health Statistics and Data Science Laboratory

Name	<i>Prof. Dr. Bambang Widjanarko Otok, S.Si., M.Si.</i>		
Post	<i>Head of the Environmental and Health Statistics and Data Science Laboratory</i>		
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] (subject) IPB</i> <i>Doctorate (subject) UGM</i>		
Employment	<i>Lecture ITS 1994</i> <i>Professor ITS 2022</i>		
Research and development projects over the last 5 years	<i>Tahun 2022 :</i> <i>2022 Doctoral Dissertation Research Decree: Effect Size Estimation and Homogeneity Testing in Meta-Analytic Structural Equation Modeling (MASEM) Using the Generalized Method of Moments (GMM)</i> <i>2022 Doctoral Dissertation Research Decree: Segmentation in Partial Least Squares Structural Equation Modeling Using Fuzzy Clustering</i> <i>2022 Decree on Higher Education Center of Excellence Basic Research: ARIMAX and FFNN Models for Forecasting Currency Inflow and Outflow at Bank Indonesia</i> <i>ARIMAX and FFNN Models for Forecasting Currency Inflow and Outflow at Bank Indonesia</i> <i>Segmentation in Partial Least Squares Structural Equation Modeling Using Fuzzy Clustering</i> <i>Effect Size Estimation and Homogeneity Testing in Meta-Analytic Structural Equation Modeling (MASEM) Using the Generalized Method of Moments (GMM)</i> <i>Tahun 2023 :</i> <i>2023 Doctoral Dissertation Research Grant: Segmentation in Partial Least Squares Structural Equation Modeling Using Fuzzy Clustering</i> <i>2023 Regular Fundamental Research Grant: Development of Segmentation in Partial Least Squares Using Multivariate Adaptive Regression Splines</i> <i>Development of Segmentation in Partial Least Squares Using Multivariate Adaptive Regression Splines</i> <i>Segmentation in Partial Least Squares Structural Equation Modeling Using Fuzzy Clustering</i> <i>Tahun 2024 :</i> <i>2024 Regular Fundamental Research Grant: Development of Segmentation in Partial Least Squares Using Multivariate Adaptive Regression Splines</i> <i>2024 ITS Scientific Research Grant: Detection Method for Unobserved Heterogeneity in Structural Equation Models</i>		

	3. <i>2024 ITS Departmental Research Grant: Survival Analysis of Stroke Patients at Haji General Hospital Surabaya Using Cox Regression</i> 4. <i>2024 ITS Departmental Research Grant: Parameter Estimation for the Multivariate Adaptive Inverse Gaussian Regression Spline Model on Household Per Capita Consumption Expenditure</i> 5. <i>2024 Research Progress Report: Development of Segmentation in Partial Least Squares Using Multivariate Adaptive Regression Splines</i> 6. <i>2024 Research Progress Report: Survival Analysis of Stroke Patients at Haji General Hospital Surabaya Using Cox Regression</i> 7. <i>2024 Research Progress Report: Parameter Estimation for the Multivariate Adaptive Inverse Gaussian Regression Spline Model on Household Per Capita Consumption Expenditure</i> 8. <i>2024 Research Progress Report: Detection Method for Unobserved Heterogeneity in Structural Equation Models</i> <i>Tahun 2025 :</i> 1. <i>2025 PMDSU Grant: Bootstrap Aggregating Multivariate Adaptive Bivariate Regression Splines (Bagging MABRS) for Binary Responses</i> 2. <i>2025 PT-LM Grant: Development of a Hybrid Educational Media Model on Nutrition and Developmental Stimulation for Stunted, Wasted, and Underweight Children using the SEM-MARS Approach</i> 3. <i>2025 PTM Grant: Combination of PLS-SEM, Principal Component Analysis (PCA), and Importance-Performance Analysis (IPA) regarding Severe Malnutrition Status in Toddlers</i> 4. <i>2025 ITS Indonesian Collaborative Research (RKI) Grant: Development of Heterogeneity Detection in Latent Variables using a Spatial SEM-MARS Segmentation Model</i> 5. <i>2025 ITS Scientific Research Grant: Development of Structural Equation Modeling Methods for Hierarchical and Unbalanced Data Structures</i> 6. <i>2025 ITS Departmental Research Grant: Survival Analysis of Risk Factors for Recurrent Stroke using the Counting Process Method</i> 7. <i>2025 ITS Departmental Research Grant: Binary Response Classification using Multivariate Adaptive Regression Splines and Random Forest</i> 8. <i>2025 ITS Departmental Research Grant: The Influence of Social Media and Religiosity on Anxiety and Stress Levels using Fuzzy Support Vector Machine (SVM) and Structural Equation Modeling – Partial Least Squares (SEM-PLS)</i> 9. <i>2025 Research Progress Report: Survival Analysis of Risk Factors for Recurrent Stroke using the Counting Process Method</i> <i>Tahun 2026 :</i> 1. <i>2026 Research Progress Report: Structural Spatial Autoregressive Model with Latent Variables (SSAR-VLs) for Poverty Modeling</i> 2. <i>2026 Research Progress Report: Integration of Meta-Analysis into Structural Equation Modeling using the Generalized Method of Moments</i> 3. <i>2026 Research Progress Report: On the Technology Acceptance Model Using Bayesian Structural Equation Modeling Fernandez-Steel Skew Normal (TAM-SEM-FSSN) in E-Learning Adoption</i> 4. <i>2026 Research Progress Report: Bivariate Cox Copula Survival Modeling Using the Pseudo Maximum Likelihood Approach</i> 5. <i>2026 Research Progress Report: The Influence of Service Quality (SERVQUAL) and the Implementation of the Enduro Motor Service</i>
--	---

	<i>Strategy on Customer Satisfaction and Loyalty: A Study at Pertamina International Timor-Leste</i> 2026 Research Progress Report: Development of Spatial Multivariate Adaptive Generalized Poisson Regression Spline with Small Area Estimation 2026 Research Progress Report: Survival Analysis of Acute Leukemia Patients at Airlangga University Hospital Using Cox Regression 2026 Research Progress Report: Survival Analysis of Thyroid Cancer Patients Using Cox Proportional Hazards Regression at Surabaya Oncology Hospital 2026 Research Progress Report: Bivariate Zero-Inflated Poisson Generalized Inverse Gaussian Regression (Case: Number of Maternal Postpartum Deaths and Number of Neonatal Deaths) 2026 Research Progress Report: Comparing Determinants of Healthy Life Expectancy (HALE) Across All Countries: A Two-Phase Advanced Structural Equation Model Analysis
Industry collaborations over the last 5 years	<i>Tahun 2022 :</i> 2022 ITS Product-Based Community Service (ABMAS) Decree: Community Empowerment-Based Waste Management at the Gronjong Wariti Tourism Site, Mejono-Plemahan Village, Kediri 2022 ITS Department-Funded Thematic Community Service (ABMAS) Decree: Statistical Mentoring and Training to Improve Research Quality among Lecturers at the Insan Cendekia Medika Institute of Technology, Science, and Health, Jombang <i>Tahun 2023 :</i> 2023 ITS Departmental Fund Decree for Thematic Community Service: Mentoring to Improve Data Analysis Quality in Scientific Publications for the Academic Community of STIKES Majapahit Mojokerto <i>Tahun 2025 :</i> 2025 Community Service Progress Report: Empowerment of *Santri* (Islamic Boarding School Students) at Roudlotul Hidayah Islamic Boarding School through Ecoprint and Digital Marketing Training. Location: Pakis Village, Trowulan District, Mojokerto Regency, East Java Province. 2025 Community Service Progress Report: Mentoring to Improve Data Analysis Quality in Scientific Publications and Research for Faculty Members of the Faculty of Psychology, Hang Tuah University, Surabaya. 2025 Community Service Progress Report: Capacity Building for Lecturers regarding Statistical Data Analysis Quality at the Nursing Academy, Ngawi Regency. 2025 ITS Thematic Community Service Decree (Departmental Funding): Empowerment of *Santri* (Islamic Boarding School Students) at Roudlotul Hidayah Islamic Boarding School through Ecoprint and Digital Marketing Training. Location: Pakis Village, Trowulan District, Mojokerto Regency, East Java Province. 2025 ITS Thematic Community Service Decree (Departmental Funding): Mentoring to Improve Data Analysis Quality in Scientific Publications and Research for Faculty Members of the Faculty of Psychology, Hang Tuah University, Surabaya.

	6. 2025 ITS Thematic Community Service Decree (Departmental Funding): Capacity Building for Lecturers regarding Statistical Data Analysis Quality at the Nursing Academy, Ngawi Regency. Tahun 2026 : 1. 2026 Community Service Progress Report: Partial Least Squares (PLS)-Based Structural Equation Modeling (SEM) Training to Enhance Research Quality in the Economic Education Study Program at STKIP PGRI Jombang 2. 2026 Community Service Progress Report: Improving the Quality of Statistical Data Analysis through Faculty Capacity Building at Universitas Muhammadiyah Sidoarjo Partners
Patents and proprietary rights	Statistical Catalog: Modeling the Human Development Index in Central Java Using a Geographic-Spatial Approach 2018 Ridge Regression in Calibration Models with Symmetric Padding Extension-Daubechies Wavelet Transform Preprocessing 2019 Propensity Score for Health Data 2019 A New Method for Regression Curve Estimation Using a Mixed Smoothing Spline and Kernel Model 2021 Clustering Stunting in East Java Province Using Response-Based Unit Segmentation in Partial Least Squares (REBUS-PLS) 2022 Product-Based Community Service Video: Community Empowerment-Based Waste Management in Gronjong Wariti Tourism Village 2022 SEMAR Package 2023 Binary Logistic Regression Module for the 'Abang' Package 2023 Likert Bar Analysis 2023 "Geographically Weighted Bivariate Generalized Poisson 2024

	<i>Regression (GWBGPR)"</i> <i>Computer Program</i> <i>Video on Mentoring for</i> <i>Improved Data Analysis</i> <i>Quality at the Faculty of</i> <i>Health Sciences, Wiraraja</i> <i>University Sumenep, by the</i> <i>Environmental Health</i> <i>Statistics Laboratory,</i> <i>Department of Statistics, FSAD</i> <i>ITS</i> <i>"MARS for Latent Variables</i> <i>(MARSEL)" Computer Program</i> <i>"ResiPLS" Computer Program</i> <i>"Latent Finder" Computer</i> <i>Program</i> <i>ArtVice Video</i> <i>Samaan Map Generator</i> <i>Nutritional Status Education</i> <i>Model for Toddlers in</i> <i>Southeast Sulawesi (Mozaik</i> <i>Sultra)</i> <i>Application for Predicting the</i> <i>Number of Underweight</i> <i>Toddlers</i> <i>Infographic on Visit Trends</i> <i>and Feedback for Integrated</i> <i>Statistical Services</i> <i>WWell Mental Health</i> <i>Dashboard</i> <i>Video Recording of Community</i> <i>Service at the Ngawi Regency</i> <i>Government Nursing Academy</i> <i>Kediri City Stunting Dashboard</i> <i>Program</i>	2024 2024 2024 2024 2024 2025 2025 2025 2025 2025 2025 2025 2025
Important publications over the last 5 years	Tahun 2022 : 1. www.ijsr.net : "Effect Moderating Entrepreneurship Orientation on Intervening Variables Competitive Advantage Strategy Using Structural Equation Modeling" 2. www.iosrjournals.org : "Effect of Ability of Vegetable Materials Solutions and Environmental Conditions on Infertilization of Aedes AEGYPTI Mosquito Using Multivariate Adaptive Regression SPLINES (Mars)" 3. Scientific Foundation SPIROSKI : "Habits model of elderly with diabetes mellitus in the coastal area of Madura Indonesia"	

4. www.ijsr.net : "Model for Selecting the Impact of Traffic Conclusion in Manado City Using Structural Equation Modeling"
5. ITB Journal Publisher : "Partitional Clustering of Underdeveloped Area Infrastructure with Unsupervised Learning Approach: A Case Study in the Island of Java, Indonesia"
6. MDPI : "Segmentation in Structural Equation Modeling Using a Combination of Partial Least Squares and Modified Fuzzy Clustering"

Tahun 2023 :

1. Growing Science : "A hybrid model of spatial autoregressive-multivariate adaptive generalized Poisson regression spline"
2. INSIGHT - Indonesian Society for Knowledge and Human Development : "ANOVA Decomposition and Importance Variable Process in Multivariate Adaptive Regression Spline Model"
3. Scopus : "Applications of Meta-Analytic Second-Order Confirmatory Factor Analysis (Meta-SOCFA) in the Infrastructure of Underdeveloped Areas: An Empirical Studies in Java Island, Indonesia"
4. AIP Publishing : "Comparison of Multivariate Adaptive Poisson Regression Spline and Multivariate Adaptive Generalized Poisson Regression Spline"
5. International Journal of Applied Science and Research : "Cutting-edge Approach to Classifying Type II Diabetes Mellitus: Bagging, Boosting, Random Forest, and MARS Ensemble (Bag-Boost-RF-MARS)"
6. Elsevier B.V. : "Determination of the best multivariate adaptive geographically weighted generalized Poisson regression splines model employing generalized cross-validation in dengue fever cases"
7. "Estimation of poverty model effect size in Indonesia using meta-analytic structural equation modeling (MASEM)"
8. GEOMATE International Society, Japan : "Evaluation of the Success of the Tofu Industrial Wastewater Treatment Plant Using Structural Equation Modeling"
9. "Factor affecting the severity of the dengue fever using multivariate adaptive regressionspline (Mars) method"
10. "Parameter Estimation and Hypothesis Testing of Multivariate Adaptive Bivariate Generalized Poisson Regression Spline"
11. International Association of Engineers : "Parameter Estimation of Spatial Error Model – Multivariate Adaptive Generalized Poisson Regression Spline"
12. DRPM ITS : "Community-Based Waste Management for Composting at Gronjong Wariti Tourism Site Using Perforated Bricks"
13. "Performance Evaluation of Bootstrap-Linear Recurrent Formula and Bootstrap-Vector Singular Spectrum Analysis in the presence of Structural Break"
14. "Segmentation of Public Health Status Using Finite Mixture Partial Least Square Structural Equation Model"
15. IOP Publisher : "Redesigning the Wastewater Treatment Plant for the Tofu Industry in Ledok Kulon Village, Bojonegoro Regency"
16. Department of Statistics, Faculty of Science and Mathematics, Universitas Diponegoro : "SIMULATION STUDY FOR UNDERSTANDING THE PERFORMANCE OF PARTIAL LEAST SQUARES-MODIFIED FUZZY CLUSTERING (PLSMFC) IN FINDING GROUPS UNDER STRUCTURAL EQUATION MODEL"
17. "Social Influence and Facilitating Conditions Drive E-learning Adoption"

	18. PagePress : <i>"Spatial determinants affected maternal mortality of East Java province during the covid-19 pandemic era, in 2020–2021"</i> 19. PagePress : <i>"Stunting incident prevention: a systematic literature review"</i> 20. Asian Institute of Research : <i>"The Influence of Strategic Leadership, Organizational Learning, And Organizational Culture on Organizational Performance Through Organizational Citizenship Behavior in Timor-Leste National Police Using Structural Equation Modeling"</i> 21. Scopus : <i>"Segmentation of stunting, wasting, and underweight in Southeast Sulawesi using geographically weighted multivariate Poisson"</i> Tahun 2024 : 1. Scopus : <i>"Comparing Life Expectancy Determinants Between Indonesia and Oman from 1980 to 2020"</i> 2. Springer : <i>"Comparing Life Expectancy Determinants Between Indonesia and Oman from 1980 to 2020"</i> 3. Thai Statistical Association : <i>"Comparison of ARIMAX and Feedforward Neural Network in Forecasting Cash Outflow Inflow at Bank Indonesia East Java Region"</i> 4. Scopus : <i>"Estimation curve of multivariate adaptive biresponse fuzzy clustering means regression splines approach to stunting and wasting cases in Southeast Sulawesi"</i> 5. Scopus : <i>"Modified Multivariate Adaptive Regression Spline and Generalized Poisson Regression"</i> 6. Scopus : <i>"Multivariate Adaptive Fuzzy Clustering Means Regression Splines Model Using Generalized Cross-Validation (GCV) on Stunting Cases in Southeast Sulawesi"</i> 7. Scopus : <i>"Multivariate adaptive inverse Gaussian regression spline: Parameter estimation and statistical hypothesis testing"</i> 8. IEEE : <i>"On Identifying Anomaly Factor Scores Distribution in Estimating Structural Equation Model Using Bayesian Approach"</i> 9. STIKES MAJAPAHIT : <i>"Mentoring and Quality Enhancement of Data Analysis in Scientific Publications for the Academic Community of STIKES Majapahit Mojokerto"</i> 10. Universitas Wiraraja Sumenep : <i>"Improving the Quality of Data Analysis in Scientific Publications and Research among Faculty Members of the Faculty of Health Sciences"</i> 11. Scopus : <i>"Predictors of stunting, wasting, and being underweight in Indonesia: A literature review"</i> 12. Springer Nature Singapore : <i>"Probabilistic Seismic Hazard Analysis for Sulawesi-Maluku Region of Indonesia Using the Space–Time Epidemic-Type Aftershock Sequence Model"</i> 13. Department of Statistics, Faculty of Science and Mathematics, Universitas Diponegoro : <i>"RANDOM EFFECTS META-REGRESSION USING WEIGHTED LEAST SQUARES (CASE STUDY: EFFECTIVENESS OF ACCEPTANCE AND COMMITMENT THERAPY IN REDUCING DEPRESSION)"</i> 14. Scopus : <i>"Segmentation of stunting, wasting, and underweight in Southeast Sulawesi using geographically weighted multivariate Poisson"</i> 15. Elsevier : <i>"Segmentation of toddler nutritional status using REBUS and FIMIX partial least square in Southeast Sulawesi"</i>
--	---

	16. UNPATTI : <i>"SIMILARITY CHECKING OF CCTV IMAGES USING PEARSON CORRELATION: IMPLEMENTATION WITH PYTHON"</i> 17. CV. Publikasi Indonesia : <i>"The Influence of Work Environment, Management Support, Organizational Culture, and Employee Engagement on Employee Performance Through Employee Satisfaction"</i> Tahun 2025 : 1. Green Publisher Indonesia : <i>"Actual Purchase on Live Streaming TikTok Shop: The Influence of Trust, Flow Experience, and IT Affordance"</i> 2. Bantul, Yogyakarta, Indonesia : <i>"Analysis of the Impact of the Implementation of Priority Service Policy on Customer Satisfaction"</i> 3. Scientific oasis : <i>"Bayesian Restructuring Technology Acceptance Model (TAM) with Moderating Lecture Self-Managing in E-Learning Adoption"</i> 4. SPRINGER : <i>"Information Systems for Intelligent Systems"</i> 5. Matematika ITS : <i>"Gamma Regression Model for Analyzing Expenditure Indices of Regencies/Cities in Sumatra"</i> 6. Multidisciplinary Digital Publishing Institute (MDPI) : <i>"Moderating Technology Acceptance Model on Resident Empowerment in Support for Sustainable Tourism"</i> 7. Elsevier : <i>"Modified partial least square structural equation model with multivariate adaptive regression spline: Parameter estimation technique and applications"</i> 8. SCIK Publishing Corporation : <i>"MULTIVARIATE ADAPTIVE BIVARIATE REGRESSION SPLINES (MABRS) BINARY RESPONSE FOR MODELING STROKE AND HYPERTENSION IN RSKD DADI CITY MAKASSAR"</i> 9. iee.org : <i>"Partial Least Square Segmentation Modeling Using PATHMOX on Tuberculosis Patient Data"</i> 10. Elsevier : <i>"Segmentation of partial least squares structural equation modelling using kernel K-means clustering (PLS SEM KKC)"</i> 11. American Institute of Physics Scopus : <i>"Selection of the Optimal Basis Function on Nutritional Status of Toddlers in Southeast Sulawesi Using Continue Biresponses Nonparametric Regression Model Using MARS"</i> 12. Springer Nature : <i>"The Effect of Community Attachment and Community Satisfaction on Support Tourism Through Perceived Benefits and Perceived Costs on Tourism"</i> 13. Springer : <i>"The Influence of Knowledge Transfer on Change Management in Indonesia's Creative Industry"</i> 14. American Institute of Physics Scopus : <i>"The Moderation of Organizational Culture Towards Organizational Innovation on Employee Performance Through Job Satisfaction in the Banking Industry Using Structural Equation Modeling (Case Study on DBS Bank)"</i> 15. LLC CPC Business Perspectives : <i>"Influence of knowledge transfers on the achievement of change management in the creative industry"</i> Tahun 2026 : 1. Elsevier : <i>"Combination of partial least square structural equation modeling scheme of principal component analysis with importance performance analysis"</i> 2. IOP Conference Series: Earth and Environmental Science : <i>"Community Disaster Resilience through Nutritional Status and Health Interventions in Indonesia: PLS SEM Wild Bootstrap Approach"</i>
--	---

	3. <i>Universitas Pattimura : "COMPARISON OF BINARY PROBIT REGRESSION AND FOURIER SERIES NONPARAMETRIC LOGISTIC REGRESSION IN MODELING DIABETES STATUS"</i> 4. <i>American Institute of Physics : "Developing PLS algorithm: Utilizing PCA-power iterationbased weighting in R"</i> 5. <i>University of AEGEAN : "DEVELOPMENT OF NON-LINEAR SMALL AREA ESTIMATION USING THE MAGPRS APPROACH"</i> 6. <i>American Institute of Physics : "Enhancing segmentation in partial least square-based unified theory of acceptance and used of technology (UTAUT) models using K-means clustering"</i> 7. <i>Scopus : "Improving PLS-SEM with MARS: An Innovative Approach for Nonlinear Interactions Between Latent Variables"</i> 8. <i>Universitas Pattimura : "MODEL HYBRID MARS ARIMA FOR TRIBAL-BASED MALARIA PREDICTION IN TANAH BUMBU DISTRICT, SOUTH KALIMANTAN"</i> 9. <i>"Model Structural Equation Modelling (Studi Kasus: Kenyamanan Emosional Pasien Kanker Anak Berdasarkan Healing Environment)"</i> 10. <i>Department of Statistics, Faculty of Science and Mathematics, Universitas Diponegoro : "MODELING CHILD MALNUTRITION IN EAST JAVA USING THE INTEGRATION OF PARTIAL LEAST SQUARE WITH IMPORTANCE-PERFORMANCE ANALYSIS"</i> 11. <i>SCI-K Publishing Corporation : "MODELING HIV AND AIDS DATA IN TRENGGALEK AND PONOROGO WITH A BIVARIATE ZERO-INFLATED POISSON APPROACH"</i> 12. <i>University of AEGEAN : "MODELING REVISIT INTENTION IN MEDICAL TOURISM UNDER DIGITAL TRANSFORMATION: THE MEDIATING ROLE OF WORD OF MOUTH"</i> 13. <i>American Institute of Physics : "Moderating structural equation modeling (MSEM) on product attributes of drekle'sskincare using principal component analysis (PCA)"</i> 14. <i>Scopus (IEEE) : "Moderation Effects in Structural Equation Modeling: A Comprehensive Approach to Complex Relationships"</i> 15. <i>Scopus (IEEE) : "Multilevel Confirmatory Factor Analysis for Modelling the Determinants of Malnutrition among Under-Five Children in Indonesia"</i> 16. <i>American Institute of Physics : "Parameter estimation of multivariate adaptive regression spline (MARS) – longitudinal (Case study: Open unemployment rate in East Java)"</i> 17. <i>Universitas Pattimura : "PARTIAL LEAST SQUARES – MULTIGROUP ANALYSIS ON THE EFFECT OF LEADERSHIP ON WORK CULTURE AND LECTURER PERFORMANCE"</i> 18. <i>American Institute of Physics : "Prediction-oriented segmentation partial least square for child undernutrition case in East Java"</i> 19. <i>Universitas Pattimura : "QUANTILE BASED PLS-SEM WITH WILD BOOTSTRAP"</i> 20. <i>American Institute of Physics : "Second-order confirmatory factor analysis on the academic motivation scale using MIIV-2SLS estimator"</i> 21. <i>University of AEGEAN : "SEGMENTATION OF TUBERCULOSIS CASES IN EAST JAVA USING SEM-PLS WARD CLUSTERING"</i> 22. <i>American Institute of Physics : "The application of inner weight PCA in SEM-PLS for stunting model development"</i>
--	---

Activities in specialist bodies over the last 5 years	<i>Lecturer Workload Assessor</i>	<i>Professional</i>	<i>2022</i>
	<i>Microsoft Power BI Data Analyst (X)</i>	<i>Training</i>	<i>2023</i>
	<i>International Board of Standards (International Board of Standards)</i>	<i>Training</i>	<i>2024</i>
	<i>Awareness & Internal Auditor Training of M System for Educational Organizations ISO 21001:2018 (ITS)</i>	<i>Training</i>	<i>2025</i>

Name	<i>Prof. Dr. Purhadi, M.Sc.</i>		
Post	<i>Professor</i>		
Academic career	<i>Initial academic appointment</i>	<i>ITB</i>	<i>Year</i>
	<i>Habilitation [German post-doctoral qualification] (subject)</i>	<i>Waseda University</i>	<i>Year</i>
	<i>Doctorate (subject)</i>	<i>UGM</i>	<i>Year</i>
Employment	<i>Lecture</i>	<i>ITS</i>	<i>1987</i>
	<i>Professor</i>	<i>ITS</i>	<i>2023</i>
Research and development projects over the last 5 years	<i>Tahun 2022 :</i> <i>2022 ITS Scientific Research Decree: Modeling Stunting Risk Among Children Under Five in Probolinggo Regency Using a Bivariate Polynomial Ordinal Logistic Regression Approach</i> <i>Modeling Stunting Risk Among Children Under Five in Probolinggo Regency Using a Bivariate Polynomial Ordinal Logistic Regression Approach</i> <i>Tahun 2023 :</i> <i>2023 Master's Thesis Research Grant: Geographically Weighted Bivariate Poisson Log-Normal Regression Model (Case Study: Number of Obstetric and Neonatal Complications in East Java Province, 2021)</i> <i>The Dantzig selector and sparse group lasso for high-dimensional geospatial data</i> <i>2023 Domestic Collaborative Research Grant: The Dantzig selector and sparse group lasso for high-dimensional geospatial data</i> <i>2023 ITS Scientific Research Grant (Batch 2): Bivariate Polynomial Logistic Regression Model Approach for Modeling Poverty Depth and Severity Levels in Java</i> <i>2023 Doctoral Dissertation Research Grant: Geographically and Temporally Weighted Ordinal Logistic Regression Model</i> <i>2023 Regular Fundamental Research Grant: Development of Segmentation in Partial Least Squares Using Multivariate Adaptive Regression Splines</i> <i>2023 ITS Departmental Research Grant (Batch 2): Survival Analysis of COVID-19 Patients at Haji General Hospital Surabaya Using Cox Regression</i> <i>Geographically Weighted Bivariate Poisson Log-Normal Regression Model (Case Study: Number of Obstetric and Neonatal Complications in East Java Province, 2021)</i> <i>Bivariate Polynomial Logistic Regression Model Approach to Modeling Poverty Depth and Severity in Java</i> <i>Development of Segmentation in Partial Least Squares Using Multivariate Adaptive Regression Splines</i> <i>Regularization Method for Spatio-temporal Point Processes</i> <i>Geographically and Temporally Weighted Ordinal Logistic Regression Model</i>		

	13. <i>Survival Analysis of COVID-19 Patients at Haji General Hospital Surabaya Using Cox Regression</i> <i>Tahun 2024 :</i> 1. <i>ITS Partnership Research Grant (2024): Regularization Method for Spatio-temporal Point Process</i> 2. <i>ITS Disciplinary Research Grant (2024): Method for Detecting Unobserved Heterogeneity in Structural Equation Models</i> 3. <i>Fundamental Research Grant – Regular (2024): Development of Segmentation in Partial Least Squares Using Multivariate Adaptive Regression Splines</i> 4. <i>2024 Research Progress Report: Method for Detecting Unobserved Heterogeneity in Structural Equation Models</i> 5. <i>2024 Research Progress Report: Development of Segmentation in Partial Least Squares Using Multivariate Adaptive Regression Splines</i> <i>Tahun 2025 :</i> 1. <i>2025 PFR Grant: Bivariate survival copula analysis of cataract patients during blindness: Cataract cases at Undaan Eye Hospital, Surabaya.</i> 2. <i>2025 PMDSU Grant: Geographically and Temporally Weighted Multivariate Generalized Log-Normal Regression.</i> 3. <i>2025 ITS Indonesian Collaborative Research (RKI) Grant: Development of Heterogeneity Detection in Latent Variables using a Spatial SEM-MARS Segmentation Model.</i> 4. <i>2025 Research Progress Report: Bivariate survival copula analysis of cataract patients during blindness: Cataract cases at Undaan Eye Hospital, Surabaya.</i> <i>Tahun 2026 :</i> 1. <i>2026 Research Progress Report: Bivariate Zero-Inflated Poisson Generalized Inverse Gaussian Regression (Case Study: Maternal Postpartum Deaths and Neonatal Deaths)</i> 2. <i>2026 Research Progress Report: Integrating Meta-Analysis into Structural Equation Modeling using the Generalized Method of Moments</i> 3. <i>2026 Research Progress Report: Geographically and Temporally Weighted Generalized Weibull Regression Model</i> 4. <i>2026 Research Progress Report: Structural Spatial Autoregressive Model with Latent Variables (SSAR-VLs) for Poverty Modeling</i> 5. <i>2026 Research Progress Report: Survival Analysis of Acute Leukemia Patients at Airlangga University Hospital using Cox Regression</i>
Industry collaborations over the last 5 years	<i>Tahun 2022 :</i> 1. <i>2022 ITS Department-Funded Thematic Community Service (ABMAS) Decree: Statistical Mentoring and Training to Enhance Research Quality for Faculty Members at the Insan Cendekia Medika Institute of Technology, Science, and Health, Jombang</i> 2. <i>2022 ITS Product-Based Community Service (ABMAS) Decree: Community Empowerment-Based Waste Management at the Gronjong Wariti Tourism Site, Mejono-Plemahan Village, Kediri</i>

	<i>Tahun 2023 :</i> <i>2023 ITS Departmental Thematic Community Service (ABMAS) Decree: Mentoring on Improving Data Analysis Quality in Scientific Publications for the Academic Community of STIKES Majapahit Mojokerto</i> <i>Tahun 2025 :</i> <i>ITS Thematic Community Service Decree (Departmental Funding) 2025: Mentoring to Improve Data Analysis Quality in Scientific Publications and Research for Faculty Members at the Faculty of Psychology, Hang Tuah University Surabaya</i> <i>ITS Thematic Community Service Decree (Departmental Funding) 2025: Capacity Building for Lecturers regarding Statistical Data Analysis Quality at the Nursing Academy, Ngawi Regency</i> <i>2025 Community Service Progress Report: Mentoring to Improve Data Analysis Quality in Scientific Publications and Research for Faculty Members at the Faculty of Psychology, Hang Tuah University Surabaya</i> <i>2025 Community Service Progress Report: Capacity Building for Lecturers regarding Statistical Data Analysis Quality at the Nursing Academy, Ngawi Regency</i> <i>Tahun 2026 :</i> <i>2026 Community Service Progress Report: Improving the Quality of Statistical Data Analysis through Lecturer Capacity Building at Universitas Muhammadiyah Sidoarjo</i> <i>Partners</i>
Patents and proprietary rights	<i>Video on Product-Based Community Service: Community Empowerment-Based Waste Management in Gronjong Wariti Tourism Village</i> 2022 <i>Program Komputer "Geographically Weighted Bivariate Generalized Poisson Regression (GWBGPR)"</i> 2024 <i>Video on Mentoring for Improving Data Analysis Quality at the Faculty of Health Sciences, Universitas Wiraraja Sumenep, by the Environmental Health Statistics Laboratory, Department of Statistics, FSAD ITS</i> 2024 <i>"Latent Finder" Computer Program</i> 2024 <i>"MARS for Latent Variables (MARSEL)" Computer Program</i> 2024

	<i>3D Distortion Visualization Dashboard</i> 2025 <i>Video Recording of Community Service Activities at the Ngawi Regency Government Nursing Academy</i> 2025
Important publications over the last 5 years	<i>Tahun 2022 :</i> 1. MDPI : "A Comparison of Bivariate Zero-Inflated Poisson Inverse Gaussian Regression Models with and without Exposure Variables" 2. "Bivariate Binary Logistic Regression With Fisher Scoring and BHHH Iteration" 3. "Bivariate Zero-Inflated Generalized Poisson Regression on Modelling Stillbirth and Maternal Death" 4. "Gamma Regression for Modeling the Education Index of Cities in Java" 5. MDPI : "A Comparison of Bivariate Zero-Inflated Poisson Inverse Gaussian Regression Models with and without Exposure Variables" 6. "Bivariate Binary Logistic Regression With Fisher Scoring and BHHH Iteration" 7. "Bivariate Zero-Inflated Generalized Poisson Regression on Modelling Stillbirth and Maternal Death" 8. "Gamma Regression for Modeling the Education Index of Cities in Java" 9. "Parameter estimation and statistical test on bivariate zero inflated Poisson Inverse Gaussian with exposure variable" 10. "Parameter estimation and statistical test on zero inflated Poisson inverse Gaussian regression model" 11. "Parameter estimation and hypothesis testing on three parameters log normal regression" 12. SCIK Publishing Corporation, Communications in Mathematical Biology and Neuroscience (CMBN) : "Parameter Estimation And Hypothesis Testing The Second Order Of Bivariate Binary Logistic Regression (S-BBLR) Model With Berndt Hall-Hall-Hausman (BHHH) Iterations" 13. ITB Journal Publisher : "Partitional Clustering of Underdeveloped Area Infrastructure with Unsupervised Learning Approach: A Case Study in the Island of Java, Indonesia" 14. "Parameter Estimation of The Bivariate Polynomial Ordinal Logistic Regression Model" 15. MDPI : "The Geographically Weighted Multivariate Poisson Inverse Gaussian Regression Model and Its Applications" <i>Tahun 2023 :</i> 1. Scopus : "Applications of Meta-Analytic Second-Order Confirmatory Factor Analysis (Meta-SOCFA) in the Infrastructure of Underdeveloped Areas: An Empirical Studies in Java Island, Indonesia" 2. Scopus : "Applications of Meta-Analytic Second-Order Confirmatory Factor Analysis (Meta-SOCFA) in the Infrastructure of Underdeveloped Areas: An Empirical Studies in Java Island, Indonesia" 3. Copyright ©2023 by IEEE : "Parameter Estimation and the Goodness-of-fit Test for the Multivariate Generalized Gamma Distribution" 4. DRPM ITS : "Community-Based Waste Management for Composting at Gronjong Wariti Tourism Site Using Perforated Bricks " 5. MDPI : "The t-Distribution Approach to the Second-Order Multiresponse Surface Model of Paracetamol Tablets Quality Characteristics"

	6. IEEE : "The Usage of Ensemble Model Output Statistics for Calibration and Short-term Weather Forecast" Tahun 2024 : 1. Ram Arti : "A Spatial Error Model in Structural Equation for the Human Development Index Modeling" 2. ACM International Conference Proceeding Series : "Hypothesis Testing of Spatial and Temporal Weighted Ordinal Logistic Regression" 3. Tahun 2024 : 4. Ram Arti : "A Spatial Error Model in Structural Equation for the Human Development Index Modeling" 5. ACM International Conference Proceeding Series : "Hypothesis Testing of Spatial and Temporal Weighted Ordinal Logistic Regression" 6. STIKES MAJAPAHIT : " Mentoring and Quality Enhancement of Data Analysis in Scientific Publications for the Academic Community of STIKES Majapahit Mojokerto " 7. Universitas Wiraraja Sumenep : " Improving the Quality of Data Analysis in Scientific Publications and Research among Faculty Members of the Faculty of Health Sciences " 8. Elsevier : "Segmentation of toddler nutritional status using REBUS and FIMIX partial least square in Southeast Sulawesi" 9. Elsevier : "Segmentation of toddler nutritional status using REBUS and FIMIX partial least square in Southeast Sulawesi" 10. Elsevier : "Spatial clustering based on geographically weighted multivariate generalized gamma regression" 11. Springer : "Statistical Inferences for Multivariate Generalized Gamma Regression Model" Tahun 2025 : 1. IEEE : "Analysis of Hospitalization-Recovery Duration for DHF Patients at RSUD Haji, East Java Utilizing the Three-Parameter Log-Logistic Regression" 2. IEEE : "Bivariate Poisson Inverse Gamma INAR(1) Regression Model: Healthcare Service Visits by Health Insurance Members Case Study" 3. Elsevier : "Estimation of parameters and hypothesis testing of multivariate spatial autoregressive model" 4. Elsevier : "Explore poverty with statistical modeling: The bivariate polynomial binary logit regression (BPBLR)" 5. IEEE : "Estimation of Baseline Hazard Function with B-Spline in Additive Hazard Model" 6. AIP Publishing. : "Parameter estimation and hypothesis testing of bivariate poisson generalized inverse gaussian regression model" 7. Elsevier : "Modified partial least square structural equation model with multivariate adaptive regression spline: Parameter estimation technique and applications" 8. ELSEVIER : "Multivariate Spatial Autoregressive Model with Latent Variables: Application to Economic Growth Modeling" 9. IEEE : "Model Fit and Determinants of Maternal Mortality Using Zero-Inflated Poisson Generalized Inverse Gaussian Regression" 10. IEEE : "Intelligent Spatial Count Modeling with Geographically Weighted Poisson-GIG Regression" 11. E3S Web of Conferences 650, 02037 (2025) : "Geographically Weighted Probit Ordinal Regression Model Estimation"
--	--

	12. Hungarian Central Statistical Office : "Geographically and temporally weighted multivariate generalised gammaregression for modelling three educational indicators in Central Java, Indonesia" 13. IEEE : "Analysis of Hospitalization-Recovery Duration for DHF Patients at RSUD Haji, East Java Utilizing the Three-Parameter Log-Logistic Regression" 14. IEEE : "Bivariate Poisson Inverse Gamma INAR(1) Regression Model: Healthcare Service Visits by Health Insurance Members Case Study" 15. Elsevier : "Estimation of parameters and hypothesis testing of multivariate spatial autoregressive model" 16. Elsevier : "Explore poverty with statistical modeling: The bivariate polynomial binary logit regression (BPBLR)" 17. IEEE : "Estimation of Baseline Hazard Function with B-Spline in Additive Hazard Model" 18. AIP Publishing. : "Parameter estimation and hypothesis testing of bivariate poisson generalized inverse gaussian regression model" 19. Elsevier : "Modified partial least square structural equation model with multivariate adaptive regression spline: Parameter estimation technique and applications" 20. ELSEVIER : "Multivariate Spatial Autoregressive Model with Latent Variables: Application to Economic Growth Modeling" 21. IEEE : "Model Fit and Determinants of Maternal Mortality Using Zero-Inflated Poisson Generalized Inverse Gaussian Regression" 22. IEEE : "Intelligent Spatial Count Modeling with Geographically Weighted Poisson-GIG Regression" 23. E3S Web of Conferences 650, 02037 (2025) : "Geographically Weighted Probit Ordinal Regression Model Estimation" 24. Hungarian Central Statistical Office : "Geographically and temporally weighted multivariate generalised gammaregression for modelling three educational indicators in Central Java, Indonesia" 25. MDPI : "Parameter Estimation of Geographically and Temporally Weighted Elastic Net Ordinal Logistic Regression" 26. ES3S : "Spatial Analysis of the Human Development Index in Central Java Using Geographically Weighted Generalized Log Gamma Regressio" 27. Inferensi : "Spatial Extreme Value Analysis of Extreme Rainfall Using the Extremal-t Process" 28. Andi Publisher : "STATISTIKA SPASIAL TITIK RESPON KONTINU" Tahun 2026 : 1. Elsevier : "A construction of statistical inferences in geographically weighted univariate log-gamma regression" 2. Elsevier : "A multivariate correlated poisson generalized inverse gaussian regression model for dependent count data: Estimation and testing procedures" 3. Pandawa Institute : "Bivariate Survival Copula Analysis of Cataract Patients During Blindness: Cataract Cases at Undaan Eye Hospital, Surabaya" 4. Scopus : "Improving PLS-SEM with MARS: An Innovative Approach for Nonlinear Interactions Between Latent Variables" 5. Elsevier : "A construction of statistical inferences in geographically weighted univariate log-gamma regression"
--	--

	6. Elsevier : "A multivariate correlated poisson generalized inverse gaussian regression model for dependent count data: Estimation and testing procedures" 7. Pandawa Institute : "Bivariate Survival Copula Analysis of Cataract Patients During Blindness: Cataract Cases at Undaan Eye Hospital, Surabaya" 8. Scopus : "Improving PLS-SEM with MARS: An Innovative Approach for Nonlinear Interactions Between Latent Variables" 9. American Institute of Physics : "Prediction-oriented segmentation partial least square for child undernutrition case in East Java" 10. University of AEGEAN : "SEGMENTATION OF TUBERCULOSIS CASES IN EAST JAVA USING SEM-PLS WARD CLUSTERING" 11. American Institute of Physics : "The application of inner weight PCA in SEM-PLS for stunting model development"
Activities in specialist bodies over the last 5 years	Lecturer Workload Assessor 2022 Intertek Academy Certification 2025 Best Paper Award 2023 Best Paper Award 2024 Best Paper 2025

Name	<i>Dr. Sutikno, S.Si, M.Si.</i>
Post	<i>Head of the Center for Regional Potential Studies and Community Empowerment</i>
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] (subject) IPB</i> <i>Doctorate (subject) IPB</i>
Employment	<i>Lecture ITS 1997</i>
Research and development projects over the last 5 years	<i>Tahun 2022 :</i> <i>1. Development of a Proxy Means Test Model to Determine Community Welfare Levels in Surabaya City Using Least Absolute Shrinkage and Selection Operator (LASSO) Regression, Quantile Regression, and Robust Regression Methods</i> <i>2. Development of Small Area Estimation Using Spatial Point Processes to Estimate Poverty Rates in Kendal Regency, Central Java</i> <i>3. Spatial Empirical Best Linear Unbiased Prediction (SEBLUP) for Village-Level Poverty Mapping in Kendal Regency</i> <i>4. ITS Scientific Research Grant (Batch 2, 2022): Development of Small Area Estimation Using Spatial Point Processes to Estimate Poverty Rates in Kendal Regency, Central Java</i> <i>5. ITS Departmental Research Grant (Batch 2, 2022): Spatial Empirical Best Linear Unbiased Prediction (SEBLUP) for Village-Level Poverty Mapping in Kendal Regency</i> <i>Tahun 2023 :</i> <i>1. Geographically Weighted Bivariate Poisson Log-Normal Regression Model (Case Study: Number of Obstetric and Neonatal Complications in East Java Province, 2021)</i> <i>2. Modified Epidemic Type Aftershock Sequences (Modified ETAS): A Model for Earthquake Distribution Incorporating Geological Factors</i> <i>3. 2023 Master's Thesis Research Decree: Geographically Weighted Bivariate Poisson Log-Normal Regression Model (Case Study: Number of Obstetric and Neonatal Complications in East Java Province, 2021)</i> <i>4. 2023 ITS Scientific Research Decree: Modified Epidemic Type Aftershock Sequences (Modified ETAS): A Model for Earthquake Distribution Incorporating Geological Factors</i> <i>5. 2023 Domestic Collaborative Research Decree: Study on Social Vulnerability in the Agrarian Reform Acceleration Program (PPRA)</i> <i>Tahun 2024 :</i> <i>1. 2024 Decree on Oil Palm Plantation Research and Development (Oil Palm Plantation Fund Management Agency): Prototype of a DC Electric-Powered Wheelbarrow to Improve Ergonomics and Resource Productivity in Smallholder Oil Palm Plantations</i> <i>2. 2024 Research Progress Report: Parameter Estimation for the Multivariate Adaptive Inverse Gaussian Regression Spline Model on Household Per Capita Consumption Expenditure</i>

	3. <i>2024 Research Progress Report: Prototype of a DC Electric-Powered Wheelbarrow to Improve Ergonomics and Resource Productivity in Smallholder Oil Palm Plantations</i> 4. <i>2024 Research Progress Report: Regularization method for point processes on linear networks</i> 5. <i>2024 Decree on Scientific Research (ITS): Regularization method for point processes on linear networks</i> 6. <i>2024 Decree on Departmental Research (ITS): Parameter Estimation for the Multivariate Adaptive Inverse Gaussian Regression Spline Model on Household Per Capita Consumption Expenditure</i> <i>Tahun 2025 :</i> 1. <i>2025 Research Progress Report: The influence of HDI levels, regional fiscal capacity, and village self-reliance on regional competitiveness: a case study of regencies in Java</i> 2. <i>2025 Research Progress Report: SISERA: Development of a Child-Friendly School Information System to Support Tuban Regency as a Child-Friendly Regency</i> 3. <i>2025 PT-LM Decree: Development of a Hybrid Educational Media Model on Nutrition and Developmental Stimulation for Stunted, Wasted, and Underweight Children using the SEM-MARS approach</i> 4. <i>2025 ITS Patriot Expedition Team Decree: Design for the Development of Specific Superior Commodities in Transmigration Areas</i> 5. <i>2025 ITS Scientific Research Decree: The influence of HDI levels, regional fiscal capacity, and village self-reliance on regional competitiveness: a case study of regencies in Java</i> 6. <i>2025 ITS Scientific Research Decree: SISERA: Development of a Child-Friendly School Information System to Support Tuban Regency as a Child-Friendly Regency</i> 7. <i>2025 ITS Departmental Research Decree: Binary Response Classification Using Multivariate Adaptive Regression Splines and Random Forest</i> <i>Tahun 2026 :</i> 1. <i>2026 Research Progress Report: High-resolution prediction of traffic accident risk using spatio-temporal point processes on a linear network</i> 2. <i>2026 Research Progress Report: Optimization of Machine Learning Methods using Cost-Sensitive Learning to Improve Electricity Theft Detection Performance at PLN UID West Java</i> 3. <i>2026 Research Progress Report: Development of Integrated Furniture Design to Optimize Spatial Function in Studio Apartments: A Case Study of Apartments in Surabaya</i> 4. <i>2026 Research Progress Report: Development of a Geographically Weighted Regression-Spatial Error Model for NJOP Estimation to Improve Local Property Tax (PBB) Valuation Accuracy</i>
Industry collaborations over the last 5 years	<i>Tahun 2022 :</i> 1. <i>"ITS 2022 Priority Community Service Decree: '1,000 Product Packaging Designs' Movement for OPOP (One Pesantren One Product)"</i> 2. <i>"ITS 2022 Product-Based Community Service Decree: Capacity Building for Regional Government Agencies in Formulating Strategies to Achieve Key Performance Indicators (IKU) for Tuban Regency"</i> 3. <i>"ITS 2022 Thematic Community Service Decree (Department-Funded): Statistical Mentoring and Training to Improve Research Quality for</i>

	<i>Faculty Members at the Insan Cendekia Medika Institute of Technology, Science, and Health, Jombang"</i> 4. <i>"ITS 2022 Community Service Decree: Consultancy Services for Public Satisfaction Survey Assessment – Probolinggo City Regional House of Representatives (DPRD) Secretariat"</i> 5. <i>"ITS 2022 Community Service Decree: Consultancy Services for Employee/Internal Satisfaction Survey – Dr. Mohamad Saleh Regional General Hospital (RSUD), Probolinggo City"</i> 6. <i>"ITS 2022 Community Service Decree: Study on the Preparation of the Research and Development Master Plan (RIK) Document"</i> 7. <i>"ITS 2022 Community Service Decree: Consultancy Support for the Formulation of the Social Piety Index"</i> 8. <i>"ITS 2022 Community Service Decree: Consultancy Support for the Formulation of Key Performance Indicators for the Mojokerto City Government"</i> 9. <i>"ITS 2022 Community Service Decree: Support for the Preparation of Profiles on Population, Family Planning, and Family Development"</i> 10. <i>"ITS 2022 Community Service Decree: Preparation of Expenditure Standard Analysis, Basic Unit Prices for Work, and Standard Unit Prices for 2023"</i> 11. <i>"ITS 2022 Community Service Decree: Preparation of the 2022 Farmers' Terms of Trade (NTP) Evaluation Document for Tuban Regency"</i> 12. <i>"Decree" ITS Community Service 2022: Preparation of the 2021 Gross Regional Domestic Product (GRDP) Evaluation Document at the District Level, Tuban Regency</i> 13. <i>ITS Community Service Decree 2022: Preparation of the 2024–2026 Regional Development Plan (RPD) Document, Kapuas Regency</i> 14. <i>"ITS Community Service Decree (2022): Formulation of Basic Unit Costs for Activities (HSPK), Unit Price Standards (SSH), and Regional Expenditure Standard Analysis (ASB) for Kapuas Regency (2023)"</i> 15. <i>"ITS Community Service Decree (2022): Preparation of the Social Piety Index (IKS) Study for Jombang Regency (2022)"</i> 16. <i>"ITS Community Service Decree (2022): Preparation of the Master Plan for the Sekoto Final Waste Disposal Site (TPAS), Kediri Regency"</i> 17. <i>"ITS Community Service Decree (2022): Survey regarding 'Project On-Farm Monitoring' among partner farmers"</i> 18. <i>"ITS Community Service Decree (2022): Survey regarding 'Tobacco Farmer Income Study' among partner farmers"</i> 19. <i>"ITS Community Service Decree (2022): Public Satisfaction Survey for Dr. Mohamad Saleh General Hospital"</i> 20. <i>"Expert Personnel: 'Development of Digital Literacy for Disaster Mitigation in the Pacitan, Trenggalek, and Tulungagung Regions'"</i> 21. <i>"Expert Personnel: 'Formulation of General Cost Standards (SBU) and Unit Price Standards (SSH) for 2023'"</i> 22. <i>"Expert Personnel: 'Consultancy Assistance for the Formulation of the Gini Index for Mojokerto City (2022)'"</i> 23. <i>"Expert Personnel: 'Preparation of the Regional Poverty Rate Evaluation Document for Tuban Regency (2021)'"</i> 24. <i>"Expert Personnel: 'Preparation of the Gross Regional Domestic Product (GRDP) Document at the District Level for Tuban Regency (2021)'"</i> 25. <i>"Expert Personnel: 'Formulation of Basic Unit Costs for Activities (HSPK) and Regional Expenditure Standard Analysis (ASB) for Kapuas Regency' Year 2023"</i>
--	--

	26. <i>Expert: "Formulation of Key Performance Indicators for the Mojokerto City Government"</i> <i>Tahun 2023 :</i> 1. <i>"2023 ITS Product-Based Community Service Decree: Community capacity building: (SASIH) Downstreaming clean water infrastructure provision to alleviate water scarcity in Pacitan Regency"</i> 2. <i>"2023 ITS Product-Based Community Service Decree: Potential of fortified rice to enhance food economic value-added in Tuban Regency"</i> 3. <i>"2023 ITS Product-Based Community Service Decree: Empowering Kenjeran fishing communities through institutional capacity building and skill enhancement toward becoming independent MSMEs"</i> 4. <i>"2023 ITS Department-Funded Thematic Community Service Decree: Mentoring on improving data analysis quality in scientific publications for the academic community of STIKES Majapahit Mojokerto"</i> 5. <i>"2023 ITS Community Service Decree: Analysis and compilation of the Food Security and Vulnerability Atlas for Tuban Regency, 2023"</i> 6. <i>"2023 ITS Community Service Decree: ALP Farm Monitoring"</i> 7. <i>"2023 ITS Community Service Decree: Problem identification and formulation of strategic issues regarding infrastructure and regional development in East Java"</i> 8. <i>"2023 ITS Community Service Decree: Consultancy services for the public satisfaction survey assessment of the Probolinggo City Regional House of Representatives (DPRD) Secretariat"</i> 9. <i>"2023 ITS Community Service Decree: Implementation of activities to formulate Basic Unit Prices for Activities (HSPK) and Regional Expenditure Standard Analysis (ASB) for Kapuas Regency, 2024"</i> 10. <i>"2023 ITS Community Service Decree: Consultancy support for compiling the Social Piety Index of Mojokerto City, 2023"</i> 11. <i>"2023 ITS Community Service Decree: Compilation of Expenditure Standard Analysis, Price Compilation" ...Work Unit Costs and Formulation of Unit Price Standards for 2023"</i> 12. <i>"ITS Community Service Decree (2023): Formulation of General Cost Standards (SBU) and Unit Price Standards (SSH) for 2024"</i> 13. <i>"ITS Community Service Decree (2023): Formulation of Unit Price Standards (Formulation of Unit Price Standards and General Cost Standards) for Fiscal Year 2025"</i> 14. <i>"ITS Community Service Decree (2023): Formulation of Unit Price Standards for the Tuban Regency Government for Fiscal Year 2024"</i> 15. <i>"ITS Community Service Decree (2023): Formulation of Unit Price Standards for Banyuwangi Regency for 2024"</i> 16. <i>"ITS Community Service Decree 2023: Study on Indonesian Tobacco Farmers' Expenditures"</i> 17. <i>"ITS Community Service Decree 2023: Preparation of Standard Expenditure Analysis, Basic Unit Costs of Work, and Standard Unit Prices for 2023"</i> 18. <i>"ITS Community Service Decree 2023: Preparation of the 2022 Poverty Rate Evaluation Document for Tuban Regency"</i> 19. <i>"ITS Community Service Decree 2023: Preparation of the 2023 Farmers' Terms of Trade Evaluation Document for Tuban Regency"</i> 20. <i>"ITS Community Service Decree 2023: Preparation of the 2023 Stunting Mapping and Situation Analysis Document for Tuban Regency"</i>
--	---

	21. <i>"ITS Community Service Decree 2023: Preparation of the 2022 Williamson Index Document for Tuban Regency"</i> 22. <i>"ITS Community Service Decree 2023: Preparation of the 2023–2027 Research and Development Master Plan Document for Lembata Regency"</i> 23. <i>"ITS Community Service Decree 2023: Calculation of Indicator Achievements in the Infrastructure and Regional Development Sector"</i> 24. <i>"ITS Community Service Decree 2023: Preparation of the 2023–2038 Technical Planning and Waste Management (PTMP) Plan for Kediri Regency"</i> Tahun 2024 : 1. <i>"Author of the community service article titled 'Synergy of Islamic Boarding School Cooperatives in Building Economic Sustainability through Business Collaboration and Operational Management' in *Jurnal Sewagati*, Vol. 8, No. 6, 2024. DOI: 10.12962/j2613"</i> 2. <i>"Author: 'Optimization of the Heating Process in Plastic Waste Management at Robries'"</i> 3. <i>"ITS Product-Based Community Service (ABMAS) Decree 2024: Capacity Building for Planning Personnel at the Regional Development Planning, Research, and Development Agency (Bappeda Litbang) of Tuban Regency"</i> 4. <i>"Author: 'Community Capacity Strengthening: SASIH (Clean Water Downstreaming)—Downstreaming Clean Water Infrastructure Provision to Alleviate Water Scarcity Areas in Pacitan Regency"</i> 5. <i>"ITS Domestic Partnership Community Service (ABMAS) Decree 2024: Training for the 2024 BRILiaN Village Program Deepening"</i> 6. <i>"ITS Community Service Decree 2024: Analysis of Poverty Line Components and Control Strategies"</i> 7. <i>"ITS Community Service Decree 2024: Implementation of the Detailed Spatial Plan (RDTR) Formulation for the Pujon Urban Area, Kapuas Regency"</i> 8. <i>"ITS Community Service Decree 2024: Consultancy Assistance for Formulating Key Performance Indicators (KPIs) for the Mojokerto City Government, 2024"</i> 9. <i>"ITS Community Service Decree 2024: Conducting a Community Needs Assessment Study to Strengthen Local Wisdom in Economic, Social, and Cultural Sectors"</i> 10. <i>"ITS Community Service Decree 2024" 2024: Preparation of the 2023 Williamson Index Document for Tuban Regency"</i> 11. <i>"ITS Community Service Decree 2024: Analysis and Preparation of the 2024 Food Security and Vulnerability Atlas Document for Tuban Regency"</i> 12. <i>"ITS Community Service Decree 2024: Farmer Living Income and ALP Monitoring"</i> 13. <i>"ITS Community Service Decree 2024: Expert Services for Tracing PBB-P2 (Rural and Urban Land and Building Tax) Receivables"</i> 14. <i>"ITS Community Service Decree 2024: Analysis of the Utilization of Innovation-Based Superior Products for Poverty Alleviation"</i> 15. <i>"ITS Community Service Decree 2024: Preparation of the 2025–2029 Regional Food and Nutrition Action Plan Document for Tuban Regency"</i> 16. <i>"ITS Community Service Decree 2024: Development of the Infrastructure Service Satisfaction Index for Kediri Regency"</i>
--	---

	17. <i>"ITS Community Service Decree 2024: Development of the Social Piety Index for Mojokerto City (2024)"</i> 18. <i>"ITS Community Service Decree 2024: Formulation of General Cost Standards (SBU) and Unit Price Standards (SSH) for 2025"</i> 19. <i>"ITS Community Service Decree 2024: Formulation of Goods Unit Price Standards for 2025"</i> 20. <i>"ITS Community Service Decree 2024: Formulation of Unit Price Standards for Tuban Regency Government (Fiscal Year 2025)"</i> <i>Tahun 2025 :</i> <i>"2025 Community Service Progress Report: Mentoring to Improve Data Analysis Quality in Scientific Publications and Research for Faculty Members at the Faculty of Psychology, Hang Tuah University Surabaya"</i> <i>"2025 Community Service Progress Report: Enhancing Lecturer Capacity in Statistical Data Analysis Quality at the Nursing Academy, Ngawi Regency"</i> <i>"2025 ITS Priority Community Service Decree: '1,000 Digital Marketing' Movement for Ultra-Micro Enterprises (UMi) in Surabaya, Gresik, Sidoarjo, and Surrounding Areas"</i> <i>"2025 ITS Thematic Community Service Decree (Departmental Funding): Mentoring to Improve Data Analysis Quality in Scientific Publications and Research for Faculty Members at the Faculty of Psychology, Hang Tuah University Surabaya"</i> <i>"2025 ITS Thematic Community Service Decree (Departmental Funding): Enhancing Lecturer Capacity in Statistical Data Analysis Quality at the Nursing Academy, Ngawi Regency"</i> <i>"2025 ITS Product-Based Community Service Decree: Optimizing the Commercialization of Purple Sweet Potato Flour and Noodles to Foster Food Self-Sufficiency in Gresik Regency"</i> <i>"2025 ITS Product-Based Community Service Decree: Optimizing Soft-Shell Crab 'Apartment' Cultivation through Environmental and Feed Management in Romokalisari Urban Village, Benowo District, Surabaya, East Java"</i> <i>"Decree on Community Service by the Ministry of Transmigration's 'Patriot Expedition' Team, titled: 'Development Design for Specific Superior Commodities in the Seulimeum Transmigration Area, Aceh Besar Regency, Province...'"</i> Aceh <i>"2025 ABMAS Community Service Decree (Aceh-Sumatra Disaster Response): Technology-Based Flood Emergency Management Model: Hygienic Public Kitchens and Economic Strengthening for Affected Households"</i> <i>1. "2025 ITS Community Service Decree: Analysis and Preparation of the 2025 Food Security and Vulnerability Atlas for Tuban Regency"</i> <i>2. "2025 ITS Community Service Decree: Health, Safety, and Environment (HSE) Assessment: Clove Harvesting and Post-Harvesting"</i> <i>"2025 ITS Community Service Decree: Consultancy Services for Public Satisfaction Survey Assessment – Probolinggo City Regional House of Representatives (DPRD) Secretariat"</i> <i>"2025 ITS Community Service Decree: Consultancy Services for the Detailed Spatial Plan (RDTR) of the Pujon Urban Area (Continuation Phase)"</i> <i>"2025 ITS Community Service Decree: Non-Tobacco Income of Contracted Tobacco Farmers (Sadhana)"</i>
--	---

	15. <i>"2025 ITS Community Service Decree: Work Package for Other Regional Tax Surveys"</i> 16. <i>"ITS Community Service Decree 2025: Advisory Services for the Formulation of the 2024 Mojokerto City Youth Development Index"</i> 17. <i>"ITS Community Service Decree 2025: Provision of Physical Testing Activities for the Investigation of Alleged Corruption Related to Goods and Services Procurement Projects in Southern Sumatra (Fiscal Years 2019–2023)"</i> 18. <i>"ITS Community Service Decree 2025: Measurement of the 2025 National Vigilance Index (IKN) for Probolinggo City"</i> 19. <i>"ITS Community Service Decree 2025: Preparation of the 2025 Farmers' Terms of Trade (NTP) Evaluation Document for Tuban Regency"</i> 20. <i>"ITS Community Service Decree 2025: Preparation of the Calculation Formulation Document for Value Added in the Agriculture, Livestock, and Fishery Sectors of Tuban Regency"</i> 21. <i>"ITS Community Service Decree 2025: Preparation of the 2025–2029 Regional Medium-Term Development Plan (RPJMD) Document for Kapuas Regency"</i> 22. <i>"ITS Community Service Decree 2025: Preparation of a Standardization Study for Child-Friendly Basic Education Facilities in Tuban Regency"</i> 23. <i>"ITS Community Service Decree 2025: Preparation of SSH, SBU, ASB, and HSPK for the 2026 Regional Budget (APBD) and the 2025 Revised Regional Budget (PAPBD)"</i> 24. <i>"Community Service Decree" ITS Community Service 2025: Formulation of General Cost Standards (SBU) and Unit Price Standards (SSH) for Mojokerto City Government for 2026</i> 25. <i>ITS Community Service 2025: Formulation of Unit Price Standards for Tuban Regency Government for Fiscal Year 2026</i> <i>Tahun 2026 :</i> 1. <i>"2026 Community Service Progress Report: Improving the Quality of Statistical Data Analysis through Faculty Capacity Building at Universitas Muhammadiyah Sidoarjo"</i> 2. <i>"2026 Community Service Progress Report: Technology-Based Flood Emergency Response Model: Hygienic Public Kitchens and Economic Strengthening for Affected Households"</i> 3. <i>"2024 ITS Community Service Decree: Drafting the Regional Action Plan (RAD) for Tuberculosis Control in Tuban Regency (2025–2030)"</i> 4. <i>"2026 ITS Community Service Decree: Study on Fiscal Incentives for Groundwater Tax"</i> 5. <i>"2026 ITS Community Service Decree: Consultancy Services for Developing Key Performance Indicators (KPI) Analysis for the Mojokerto City Government (2026)"</i> 6. <i>"2026 ITS Community Service Decree: Service-Oriented Consultancy Services—Research Study and Technical Assistance for the Tuban Regency Government's Strategy to Address Structural Unemployment"</i> 7. <i>"2026 ITS Community Service Decree: Public Satisfaction Survey regarding Transportation Operations and Services during the 2026 *Lebaran* (Eid) Travel Period"</i> 8. <i>"2026 ITS Community Service Decree: Preparation of Physical and Non-Physical Expenditure Standard Analyses for the Palangka Raya City Government"</i>
--	--

	9. "2026 ITS Community Service Decree: Preparation of General Cost Standards (SBU) and Unit Price Standards (SSH) for the Mojokerto City Government (2027)" 10. ITS Community Service Decree (2026): Formulation of Government Unit Price Standards for Tuban Regency, Fiscal Year 2027 Partners	
Patents and proprietary rights	"Q&A Video with TPK Mothers on Stunting" 2022 "Video: 5 Ways to Prevent Stunting" 2022 "Video: Let's Work Together to Prevent Stunting!" 2022 "Video: With RAN PASTI, Stunting Is Increasingly Being Tackled!" 2022 "Video: Breastfeeding & Complementary Feeding Campaign" 2022 "Video: Brayung Village Stunting Prevention TikTok Campaign" 2022 "Video: Lakardowo Village TikTok Campaign" 2022 "Video: Madureso Village TikTok Campaign" 2022 "Video: Stunting Prevention with the 2022 'Desa Emas' Mojokerto KKN Program" 2022 "Video: Strengthening Regional Agency Capacity in Determining Strategies to Achieve Tuban Regency's Key Performance Indicators (IKU)" 2022 "Video: A Message from the Future – Gunungsari" 2022 "Stunting Prevention: 2022 'Desa Emas' (Golden Village) KKN Program, Mojokerto" 2022 "Lakardowo Village TikTok Campaign" 2022 "Madureso Village TikTok Campaign" 2022 2022	

	<i>"Q&A Session on Stunting with TPK (Local Assistance Team Members)"</i>	2022
		2022
	<i>"Let's Work Together to Prevent Stunting!"</i>	
	<i>"5 Ways to Prevent Stunting"</i>	
	<i>"Capacity Building for Regional Officials on Strategies to Achieve Regional Key Performance Indicators (IKU) in Tuban Regency"</i>	2022
		2022
	<i>"With RAN PASTI, Stunting Can Be Overcome!"</i>	2022
	<i>"A Message from the Future: Gunungsari"</i>	2022
	<i>"Brayung Village TikTok Campaign: Preventing Stunting"</i>	2023
	<i>"Breastfeeding & Complementary Feeding (MP-ASI) Campaign"</i>	
		2023
	<i>"An original creative work used for public education in Pacitan Regency"</i>	2023
	<i>"An original video work produced during a community service initiative"</i>	
	<i>"Community capacity building: (SASIH) Downstreaming clean water infrastructure provision to alleviate water scarcity in Pacitan Regency"</i>	2023
	<i>"Community capacity building: (SASIH) Downstreaming clean water infrastructure provision to alleviate water scarcity in Pacitan Regency"</i>	2024
	<i>"A creative work used for public education in Pacitan Regency"</i>	2024

	<i>"A video creation produced during a community service initiative"</i>	2024
	<i>"Community capacity building: (SASIH) Downstreaming clean water infrastructure provision to alleviate water scarcity in Pacitan Regency"</i>	2024
	<i>"Community capacity building: (SASIH) Downstreaming clean water infrastructure provision to alleviate water scarcity in Pacitan Regency"</i>	2025
	<i>"ITS and Pelindo Support Soft-Shell Crab Farmers through the 'Crab Apartment' System"</i>	2025
	<i>"Training of Trainers (ToT) for Ultra-Micro Business (UMi) Facilitators in North Luwu"</i>	2025
	<i>"Bivariate Spatial Autoregressive Model"</i>	2025
	<i>"ITS and Pelindo Support Soft-Shell Crab Farmers through the 'Crab Apartment' System"</i>	2025
	<i>"Training of Trainers (ToT) for Ultra-Micro Business (UMi) Facilitators in North Luwu"</i>	2025
	<i>"Introduction and Business Idea Planning Video for FOODIE"</i>	2025
	<i>"Video Recording of Community Service Activities at the Ngawi Regency Government Nursing Academy"</i>	2025
	<i>"Educational Model for Toddler Nutritional Status in Southeast Sulawesi (Mozaik Sultra)"</i>	2025
	<i>"Study on Standardization of Facilities for Child-Friendly Primary Schools"</i>	2025
	<i>"Policy Brief: Study on Standardization of Facilities"</i>	2025

	<i>for Child-Friendly Primary Schools"</i> 2026 <i>"SISERA: Web-Based Monitoring and Evaluation Information System for Child-Friendly Schools with Interactive Analytics"</i> 2026 <i>"Video on Optimizing Soft-Shell Crab Farming (Crab Apartment Method) through Environmental and Feed Management in Romokalisari, Surabaya"</i>
Important publications over the last 5 years	<i>Tahun 2022 :</i> <i>Hindawi : "Improving the Accuracy of Rainfall Prediction Using Bias-Corrected NMME Outputs: A Case Study of Surabaya City, Indonesia"</i> <i>APC-IEOM : "Gamma Regression for Modeling the Education Index of Cities in Java"</i> <i>SEWAGATI: "Poverty Alleviation Strategy in Tuban Regency Through the Integration of Programs Across Regional Government Agencies"</i> <i>Institut Teknologi Sepuluh Nopember : "Social Piety Index for Character Building in Indonesia: A Case Study of The Society of Mojokerto City"</i> <i>Tahun 2023 :</i> <i>Soft Computing in Data Science : "Cox Point Process with Ridge Regularization: A Better Approach for Statistical Modeling of Earthquake Occurrences"</i> <i>Elsevier B.V. : "Determination of the best multivariate adaptive geographically weighted generalized Poisson regression splines model employing generalized cross-validation in dengue fever cases"</i> <i>MDPI : "The t-Distribution Approach to the Second-Order Multiresponse Surface Model of Paracetamol Tablets Quality Characteristics"</i> <i>IEEE : "The Usage of Ensemble Model Output Statistics for Calibration and Short-term Weather Forecast"</i> <i>ITS Press : " Efforts Towards Self-Reliance for Food and Beverage MSMS "</i> <i>ITS Press : " Efforts Towards Self-Reliance for Non-Food and Beverage MSMEs "</i> <i>DRPM ITS Surabaya : " Klagen Village "Smart Village" Initiative: A Digital Application-Based Approach to Achieving Excellent Village Services "</i> <i>MDPI : "Research on Passengers' Preferences and Impact of High- Speed Rail on Air Transport Demand"</i> <i>Sewagati ITS : " Community Capacity Building: SASIH (Clean Water Downstreaming)—Downstreaming Clean Water Infrastructure Provision to Alleviate Water Scarcity in Pacitan Regency. "</i> <i>ITS Press : " Sustainable Area and Environmental Development"</i> <i>ITS Press : " Government Governance Support "</i> <i>PT ITS Tekno Sains : " Catalog of 1,000 Design Concepts for East Java OPOP (One Pesantren One Product) Packaging – Series 2"</i>

	<i>Tahun 2024 :</i> <i>Research and Development Center, Meteorology, Climatology, and Geophysics Agency: "Calibration of Indonesian Numerical Weather Prediction using Geostatistical Output Perturbation"</i> <i>Department of Statistics Diponegoro University : "Per Capita Consumption Estimation in Surabaya Using Ensemble Model Approach"</i> <i>STIKES MAJAPAHIT : " Mentoring and Quality Enhancement of Data Analysis in Scientific Publications for the Academic Community of STIKES Majapahit Mojokerto "</i> <i>Scopus : "Modified Multivariate Adaptive Regression Spline and Generalized Poisson Regression"</i> <i>Universitas Wiraraja Sumenep : " Improving the Quality of Data Analysis in Scientific Publications and Research among Faculty Members of the Faculty of Health Sciences "</i> <i>Scopus : "Multivariate adaptive inverse Gaussian regression spline: Parameter estimation and statistical hypothesis testing"</i> <i>Tahun 2025 :</i> <i>Mathematics Department, Universitas Islam Negeri Maulana Malik Ibrahim Malang : "Generalized Poisson SAR for Under-Five Pneumonia in Tuban Regency"</i> <i>Elsevier : "Estimation of parameters and hypothesis testing of multivariate spatial autoregressive model"</i> <i>Periodica Polytechnica Transportation Engineering : "Assessing the Impact of High-Speed Rail Development on Conventional Passenger Trains and Sustainability of Transportation in Indonesia"</i> <i>Sage Publications Ltd : "Spatial ensemble model output statistics for calibrating Indonesian numerical weather predictions"</i> <i>2. Inferensi : "Spatial Extreme Value Analysis of Extreme Rainfall Using the Extremal-t Process"</i> <i>3. Andi Publisher : " STATISTIKA SPASIAL TITIK RESPON KONTINU "</i> <i>Tahun 2026 :</i> <i>Scopus (IEEE) : "Moderation Effects in Structural Equation Modeling: A Comprehensive Approach to Complex Relationships"</i>		
Activities in specialist bodies over the last 5 years	<i>Workload Assessor</i> <i>Webinar on Performance Optimization through AI Technology (Human Resources Bureau, Ministry of Education, Culture, Research, and Technology)</i> <i>Webinar on Agile Civil Servants (WKMB, Ministry of Education, Culture, Research, and Technology)</i>	<i>Competency Enhancement Program</i> <i>Seminar</i>	<i>2022</i> <i>2024</i> <i>2024</i>

Name	<i>Santi Wulan Purnami, S.Si, M.Si., Ph.D.</i>
Post	<i>Senior Lecture</i>
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] (subject) UGM</i> <i>Doctorate (subject) Univ. Malaysia Pahang</i>
Employment	<i>Lecture ITS 1998</i>
Research and development projects over the last 5 years	<i>Tahun 2022 :</i> <i>2022 ITS Scientific Research Decree: Air Quality Forecasting in Surabaya City to Determine Air Pollutant Standard Index Categories Using a Hybrid Machine Learning Method</i> <i>Air Quality Forecasting in Surabaya City to Determine Air Pollutant Standard Index Categories Using a Hybrid Machine Learning Method</i> <i>Tahun 2023 :</i> <i>2023 Master's Thesis Research Grant: Piecewise Polynomial Smooth Support Vector Machine for Depression Detection Using Electroencephalogram (EEG) Signals</i> <i>2023 Domestic Collaborative Research Grant: Development of Cox Regression to Analyze the Impact of Hu Care Therapy on Chronic Disease Management to Enhance Medical Service Effectiveness at Nur Hidayah Hospital</i> <i>2023 Inter-University Collaborative Research Grant (Funded by ITS and ITS Partners): Cox Frailty Survival Regression Model for Evaluating Continuous Complementary Therapy for Chronic Diseases</i> <i>2023 ITS Partnership Research Grant (Batch 2): Development of Support Vector Machine Based on Smoothing Function for Depression Detection Using Electroencephalogram (EEG)</i> <i>2023 ITS Departmental Research Grant (Batch 2): Development of an Accurate Probability-Based Model for Sequence Alignment of Paired Data</i> <i>Cox Frailty Survival Regression Model for Evaluating Continuous Complementary Therapy for Chronic Diseases</i> <i>Development of Cox Regression to Analyze the Impact of Hu Care Therapy on Chronic Disease Management to Enhance Medical Service Effectiveness at Nur Hidayah Hospital</i> <i>Development of an Accurate Probability-Based Model for Sequence Alignment of Paired Data</i> <i>Piecewise Polynomial Smooth Support Vector Machine for Depression Detection Using Electroencephalogram (EEG) Signals</i> <i>Development of Support Vector Machine Based on Smoothing Function for Depression Detection Using Electroencephalogram (EEG)</i>

	<i>Tahun 2024 :</i> <i>2024 ITS Collaborative Research Grant: Development of a School Counseling Model Based on Indonesian Local Cultural Mental Health Values</i> <i>2024 Master's Thesis Research Grant: Semi-Supervised Fuzzy Clustering with Pairwise Constraints to Cluster Depression Levels Based on Electroencephalogram (EEG) Recordings</i> <i>2024 ITS Partnership Research Grant: An Accurate Statistical Model for Estimating Glomerular Filtration Rate in Chronic Kidney Disease Patients within a Specific Pediatric Population in Indonesia</i> <i>2024 ITS Partnership Research Grant: Clustering Time Series on Electroencephalogram Data to Assist in Mental Illness Detection</i> <i>2024 Regular Fundamental Research Grant: Utilization of Indonesian Natural Minerals as Modified Aluminosilicate-Based Catalysts for the Hydro-/Deoxygenation Reaction of Non-Edible Oils into Green Biofuel</i> <i>2024 Research Progress Report: An Accurate Statistical Model for Estimating Glomerular Filtration Rate in Chronic Kidney Disease Patients within a Specific Pediatric Population in Indonesia</i> <i>2024 Research Progress Report: Clustering Time Series on Electroencephalogram Data to Assist in Mental Illness Detection</i> <i>2024 Research Progress Report: Utilization of Indonesian Natural Minerals as Modified Aluminosilicate-Based Catalysts for the Hydro-/Deoxygenation Reaction of Non-Edible Oils into Green Biofuel</i> <i>Tahun 2025 :</i> <i>2025 PTM Grant: Hybrid Fuzzy Clustering and Bagging Support Vector Machine for Depression Level Classification in Mindfulness Therapy Based on Electroencephalogram Data</i> <i>2025 ITS Scientific Research Grant: Development of Structural Equation Modeling Methods for Hierarchical and Unbalanced Data Structures</i> <i>2025 ITS Departmental Research Grant: The Influence of Social Media and Religiosity on Anxiety and Stress Levels Using Fuzzy Support Vector Machine (SVM) and Structural Equation Modeling – Partial Least Square (SEM-PLS)</i> <i>Tahun 2026 :</i> <i>2026 Research Progress Report: Neo-Normal Mixture Hidden Markov Modeling for Epileptic Seizure Detection in EEG Signals</i> <i>2026 Research Progress Report: A Data-Driven Transcriptomic Approach to Identify Differentially Expressed Genes Related to Salinity Stress Tolerance in Rice</i> <i>2026 Research Progress Report: Impact of Global Geopolitical Risks on Cryptocurrency Price Stability: A Deep Learning Approach for an Early Warning System</i> <i>2026 Research Progress Report: Brain Connectivity Features for Depression Detection Using CNN on EEG Signals</i> <i>2026 Research Progress Report: The Relationship Between Neutrophil-Lymphocyte Ratio (NLR) and Positive and Negative Syndrome Scale (PANSS) Scores as Predictors of Hospitalization Duration for Schizophrenia Patients at Radjiman Wedyodiningrat Psychiatric Hospital, Lawang, Malang</i>
--	--

	2026 Research Progress Report: Identification of EEG Biomarkers Using Machine Learning Based on Cross-Domain Feature Extraction for Evaluating Mindfulness Therapy in Depressed Patients 2026 Research Progress Report: Geographically and Temporally Weighted Generalized Weibull Regression Model 2026 Research Progress Report: Application of Non-Toxic Antifouling Coatings on Metakaolin-Based Marine Concrete
Industry collaborations over the last 5 years	<i>Tahun 2022 :</i> "2022 ITS Thematic Community Service Decree (Departmental Funding): Statistical Mentoring and Training to Enhance Research Quality among Faculty Members at the Insan Cendekia Medika Institute of Technology, Science, and Health, Jombang" "2022 ITS Product-Based Community Service Decree: Community Empowerment-Based Waste Management at the Gronjong Wariti Tourism Site, Mejono-Plemahan Village, Kediri " <i>Tahun 2023 :</i> "2023 ITS Department-Funded Thematic Community Service Project: Education and Training to Build Individual and Social Awareness and Preparedness Regarding the Importance of Mental Health among ITATS Chemical Engineering Students" "2023 ITS Department-Funded Thematic Community Service Project: Mentoring to Improve Data Analysis Quality in Scientific Publications for the Academic Community of STIKES Majapahit Mojokerto" " <i>Tahun 2024 :</i> "Author: Education on Enhancing Skills for Recognizing and Managing Stress, Anxiety, and Depression Among University Students in East Surabaya" "2024 ITS Product-Based Community Service Decree: Exploring Groundwater Aquifer Potential as a Proactive Strategy to Address Clean Water Scarcity and Initial Community Empowerment Efforts in Jamberejo Village, Kedungadem District, Bojonegoro Regency, East Java Province" <i>Tahun 2025 :</i> "ITS Thematic Community Service Decree (Departmental Funding) 2025: Mentoring to Improve Data Analysis Quality in Scientific Publications and Research for Faculty Members at the Faculty of Psychology, Hang Tuah University Surabaya" "ITS Thematic Community Service Decree (Departmental Funding) 2025: Capacity Building for Lecturers on Statistical Data Analysis Quality at the Nursing Academy, Ngawi Regency" "2025 Community Service Progress Report: Mentoring to Improve Data Analysis Quality in Scientific Publications and Research for Faculty Members at the Faculty of Psychology, Hang Tuah University Surabaya" "2025 Community Service Progress Report: Capacity Building for Lecturers on Statistical Data Analysis Quality at the Nursing Academy, Ngawi Regency"

	<i>Tahun 2026 :</i> <i>"2026 Community Service Progress Report: Improving the Quality of Statistical Data Analysis through Faculty Capacity Building at Universitas Muhammadiyah Sidoarjo"</i> <i>"2026 Community Service Progress Report: School Empowerment through Website Development and Teacher Mentoring to Enhance Early Childhood Education Services in Purwoasri District, Kediri Regency" "</i> <i>Partners</i>	
Patents and proprietary rights	<i>"Product-Based Community Service Video: Community Empowerment-Based Waste Management in Gronjong Wariti Tourism Village"</i>	2022
	<i>"Community Service: Mental Health"</i>	2024
	<i>"Exploring Groundwater Aquifer Potential as a Proactive Strategy to Address Clean Water Scarcity in Jamberejo Village, Kedungadem District, Bojonegoro Regency, East Java Province"</i>	2024
	<i>"Video on Mentoring for Improving Data Analysis Quality at the Faculty of Health Sciences, Universitas Wiraraja Sumenep, Conducted by the Environmental Health Statistics Laboratory, Department of Statistics, FSAD ITS"</i>	2024
	<i>"Exploring Groundwater Aquifer Potential as a Proactive Strategy to Address Clean Water Scarcity in Jamberejo Village, Kedungadem District, Bojonegoro Regency, East Java Province"</i>	2024
	<i>"'Latent Finder' Computer Program"</i>	2024
	<i>"Video SiLancar"</i>	2024
	<i>"Video Glowify"</i>	2024

	<i>"video Bantu Tani"</i> 2024 <i>"Video Nexus Consultant"</i> 2024 <i>"video BinaBisnis"</i> 2024 <i>"Video StatLabs"</i> 2024 <i>"Video ANALYTIX"</i> 2024 <i>"Poster CKD-IND18"</i> 2024 <i>"Poster EGFR Meta-analysis"</i> 2024 <i>"Video KostKitchen"</i> 2024 <i>"video Foreneur"</i> 2024 <i>"Video SGen: Statistics Genius"</i> <i>"Infographic: Analysis of the Queue and Service System at the Financial Services Authority (OJK) Kediri"</i> 2025 <i>"WWell Mental Health Dashboard"</i> 2025 <i>"Video Recording of Community Service at the Ngawi Regency Government Nursing Academy" "</i> 2025
Important publications over the last 5 years	<i>Tahun 2022 :</i> <i>"Markov Switching Process Monitoring Brain Wave Movement in Autism Children"</i> <i>Tahun 2023 :</i> <i>EDP Sciences : "Influencing factors that improve mental conditions patients with complementary therapy at Nur Hidayah Hospital, Bantul, Yogyakarta"</i> <i>growing science : "Fuzzy support vector machine for classification of time series data: A simulation study"</i> <i>"Multiple period logit model using the maximum likelihood and Bayesian approach on data of breast cancer patients in C-Tech Laboratories Tangerang"</i> <i>Fakultas Ilmu Komputer Universitas Brawijaya : "EpCare: PROTOTYPE SISTEM DETEKTOR PRE-IKTAL PASIEN EPILEPSI BERBASIS FITUR CSI DARI SINYAL EKG 1 KANAL MENGGUNAKAN AD8232"</i> <i>DRPM ITS : " Community-Based Waste Management for Composting at Gronjong Wariti Tourism Site Using Perforated Bricks "</i> <i>ITS Press : " Sustainable Area and Environmental Development "</i>

	Tahun 2024 : 1. ITS Press, Surabaya : "Combine Sampling Support Vector Machine untuk Klasifikasi Data Imbalanced" 2. "Case Studies in Chemical and Environmental Engineering" 3. Elsevier : "Assessment of Q-value of serum creatinine in heterogenous population: Preliminary study of Indonesia initiative for renal function evaluation (INA-REN)" 4. Elsevier : "Assessment of estimated kidney function based on creatinine in indonesian adult populations: Calling for validation of performance" 5. "Application of data mining technique using best polynomial smoot support vector machine in breast cancer diagnosis" 6. IEEE : "Applying kernel logistic regression in data mining to classify credit risk" 7. " Analysis of Factors Influencing Family Planning Knowledge Among Adolescents Using Binary Logistic Regression " 8. "A Prediction of Rainfall Data Based On Support Vector Machine With Stochastic Gradient Descent." 9. Springer Berlin Heidelberg : "Data mining technique for medical diagnosis using a new smooth support vector machine" 10. " Early Detection of Cervical Cancer in Bogor City Using Binary Logistic Regression and Support Vector Machine (SVM) " 11. "Education to Improve the Ability to Recognize and Manage Stress, Anxiety, and Depression Among College Students in East Surabaya" 12. Faculty of Public Health, Diponegoro University: "The Effectiveness of Providing Nutritional Intake to Toddlers in Reducing the Percentage of Stunting in Indonesia: A Meta-Analysis" 13. "Enhancement of New Smooth Support Vector Machines for Classification Problems" 14. Association for Computing Machinery : "Copula-based Cox Regression to Modelling Bivariate Time-to-Event Data" 15. IEEE : "Credit risk classification using Kernel Logistic Regression with optimal parameter" 16. Satya Wacana University Press : "Comparison of e-insentive support vector regression and ?-support vector regression in nonlinear regression problem" 17. "KEYNOTE LECTURES" 18. "Face regocnition using smooth support vector machine based on eigenfaces" 19. " Modeling Treatment Recurrence in Cervical Cancer Patients at Dr. Soetomo Regional General Hospital Using Bayesian Geometric Regression and Bayesian Mixture-Geometric Regression" 20. Elsevier : "Jet-fuel range hydrocarbon production from Reutealis trisperma oil over Al-MCM-41 derived from Indonesian Kaolin with different Si/Al ratio" 21. ITS : "Parameter Estimation and Test Statistics for Bivariate Gamma Regression" 22. STIKES Majapahit: "Mentoring and Quality Improvement of Data Analysis in Scientific Publications for the Academic Community of STIKES Majapahit Mojokerto" 23. ITS: "Application of hybrid hierarchical clustering via mutual clustering to group regencies in East Java based on agricultural sector variables"
--	---

24. Universitas Wiraraja Sumenep: "Improving the quality of data analysis in scientific publications and research among Faculty of Health Sciences lecturers"
25. "Test of equality for nonparametric regression functions"
26. Hindawi (Applied Computational Intelligence and Soft Computing): "YOLO-UNet Architecture for Detecting and Segmenting Localized MRI Brain Tumor Images"
27. AIP Publishing (AIP Conference Proceedings): "Smooth support vector machine based on polynomial function for depression detection using electroencephalogram (EEG) signals"
28. "Smooth support vector machine for face recognition using principal component analysis"
29. Springer International Publishing: "Survival support vector machines: A simulation study and its health-related application"
30. Department of Statistics, Faculty of Science and Mathematics, Universitas Diponegoro (Media Statistika): "Random Effects Meta-Regression Using Weighted Least Squares (Case Study: Effectiveness of Acceptance and Commitment Therapy in Reducing Depression)"
31. "Forecasting daily average temperature and humidity in East Seram Regency using ARIMA Box-Jenkins"

Tahun 2025 :

1. IEEE : "Estimation of Baseline Hazard Function with B-Spline in Additive Hazard Model"
2. Malaysian Medical Association : "Mental state classification based on electroencephalogram (EEG) using multiclass support vector machine"
3. IEEE : "Kaplan-Meier Bivariate Survival and Cox Copula Regression : A Case Study on Cataract Patients at Undaan Hospital"
4. Universitas Lambung Mangkurat : " A Maximum Penalized Likelihood Approach to Estimating the Baseline Hazard Function in the Cox Model: A Case Study of Breast Cancer Patients "
5. Frontiers Media SA (Frontiers in Medicine) : "The varied Q creatinine in multi ethnics population and impact of adopting three different estimated glomerular filtration rates based on creatinine in adult populations: a ..."

Tahun 2026 :

1. IOP Conference Series: Earth and Environmental Science : "Community Disaster Resilience through Nutritional Status and Health Interventions in Indonesia: PLS SEM Wild Bootstrap Approach"
2. IEEE : "Comparative Analysis of Boosting Ensemble Methods for Classifying Depression Severity Using EEG Signals"
3. AIP Publishing LLC : "Parameter estimation and hypothesis testing of geographically weighted generalized log gamma regression model"
4. IEEE : "Interpretable Random Forest for Classifying Prostate Cancer Severity from Genomic Dataset"
5. Universitas Pattimura (BAREKENG) : "QUANTILE BASED PLS-SEM WITH WILD BOOTSTRAP"
6. Public Library of Science (PloS one) : "Performance of glomerular filtration rate equations using serum creatinine in children with congenital anomalies of the kidney and urinary tract"

Activities in specialist bodies over the last 5 years	<i>Workload Assessor</i>		<i>2022</i>
	<i>Microsoft Power BI Data Analyst (XN)</i>	<i>Training</i>	<i>2023</i>
	<i>New Competency Assessor Training (LSP ITS Surabaya)</i>	<i>Training</i>	<i>2024</i>

Name	<i>Jerry Dwi Trijoyo Purnomo, S.Si. M.Si, Ph.D.</i>		
Post	<i>Lectore</i>		
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] (subject) ITS</i> <i>Doctorate (subject) NCTU</i>		
Employment	<i>Lectore</i>	<i>ITS</i>	<i>2008</i>
Research and development projects over the last 5 years	<i>Tahun 2022 :</i> <i>ITS Institutional Research and Development Grant (Departmental Funds) – Batch 2, 2022: Assessing COVID-19 in Jakarta Using a Modified SIR Model in Smart Healthcare</i> <i>Master’s Thesis Research Grant, 2022: COVID-19 transmission risk in Surabaya: Modeling via an inhomogeneous spatial point process</i> <i>ITS Scientific Research Grant, 2022: COVID-19 transmission risk in Greater Surabaya: Modeling via an inhomogeneous spatio-temporal point process</i> <i>Assessing COVID-19 in Jakarta Using a Modified SIR Model in Smart Healthcare</i> <i>COVID-19 transmission risk in Greater Surabaya: Modeling via an inhomogeneous spatio-temporal point process</i> <i>COVID-19 transmission risk in Surabaya: Modeling via an inhomogeneous spatial point process</i> <i>Tahun 2023 :</i> <i>ITS Faculty Research Grant (Batch 2) 2023: Development of a learning module based on multi-criteria decision-making case studies</i> <i>Development of a learning module based on multi-criteria decision-making case studies</i> <i>ITS Departmental Research Grant (Batch 2) 2023: Survival analysis of COVID-19 patients at Haji General Hospital Surabaya using Cox regression</i> <i>Survival analysis of COVID-19 patients at Haji General Hospital Surabaya using Cox regression</i> <i>Tahun 2024 :</i> <i>2024 Regular Fundamental Research Grant Award: Development of segmentation in Partial Least Squares using Multivariate Adaptive Regression Splines</i> <i>2024 ITS Departmental Research Grant Award: Survival analysis of stroke patients at Haji General Hospital Surabaya using Cox regression</i> <i>2024 Research Progress Report: Development of segmentation in Partial Least Squares using Multivariate Adaptive Regression Splines</i> <i>2024 Research Progress Report: Survival analysis of stroke patients at Haji General Hospital Surabaya using Cox regression</i>		

	<i>Tahun 2025 :</i> 1. <i>2025 PFR Grant: Bivariate survival copula analysis of cataract patients during blindness: Cataract cases at Undaan Eye Hospital, Surabaya.</i> 2. <i>2025 PT-LM Grant: Development of a hybrid educational media model regarding nutrition and developmental stimulation for stunted, wasted, and underweight children using the SEM-MARS approach.</i> 3. <i>2025 ITS Faculty Research Grant: Strategic ambidexterity model to enhance the competitiveness of Indonesia's automotive component industry.</i> 4. <i>2025 ITS Faculty Research Grant: Structural Equation Modeling approach to examine factors influencing purchasing decisions via purchase intention in e-commerce companies.</i> 5. <i>2025 ITS Scientific Research Grant: Development of Structural Equation Modeling methods for hierarchical and unbalanced data structures.</i> 6. <i>2025 ITS Department Research Grant: Survival analysis of risk factors for recurrent stroke using the counting process method.</i> 7. <i>2025 ITS Department Research Grant: Harnessing probability-based clustering to uncover differential gene expression.</i> 8. <i>2025 Research Progress Report: Survival analysis of risk factors for recurrent stroke using the counting process method.</i> 9. <i>2025 Research Progress Report: Bivariate survival copula analysis of cataract patients during blindness: Cataract cases at Undaan Eye Hospital, Surabaya.</i> 10. <i>2025 Research Progress Report: Structural Equation Modeling approach to examine factors influencing purchasing decisions via purchase intention in e-commerce companies.</i> <i>Tahun 2026 :</i> 1. <i>2026 Research Progress Report: Survival analysis of thyroid cancer patients using Cox Proportional Hazards regression at Surabaya Oncology Hospital</i> 2. <i>2026 Research Progress Report: Bivariate Zero-Inflated Poisson Generalized Inverse Gaussian Regression (Case study: Maternal postpartum deaths and neonatal deaths)</i> 3. <i>2026 Research Progress Report: Integration of meta-analysis into structural equation modeling using the Generalized Method of Moments</i> 4. <i>2026 Research Progress Report: Bivariate Cox Copula survival modeling using the Pseudo Maximum Likelihood approach</i> 5. <i>2026 Research Progress Report: The impact of service quality (SERVQUAL) and the implementation of the Enduro Motor Service strategy on customer satisfaction and loyalty: A study at Pertamina International Timor Leste</i> 6. <i>2026 Research Progress Report: Survival analysis of acute leukemia patients at Airlangga University Hospital using Cox regression</i>
Industry collaborations over the last 5 years	<i>Tahun 2022 :</i> 1. <i>"2022 ITS Departmental Fund Decree for Thematic Community Service: Statistical mentoring and training to enhance the quality of research outputs among faculty members at the Insan Cendekia Medika Institute of Technology, Science, and Health, Jombang"</i>

	2. "2022 ITS Product-Based Community Service Decree: Community empowerment-based waste management at the Gronjong Wariti Tourism Site, Mejono-Plemahan Village, Kediri" " Tahun 2023 : 1. 2023 ITS Departmental Fund Decree for Thematic Community Service: Mentoring on improving data analysis quality in scientific publications for the academic community of STIKES Majapahit Mojokerto." Tahun 2025 : 1. "ITS Thematic Community Service Decree (Departmental Funding) 2025: Mentoring to improve data analysis quality in scientific publications and research for faculty members at the Faculty of Psychology, Hang Tuah University Surabaya" 2. "ITS Thematic Community Service Decree (Departmental Funding) 2025: Capacity building for lecturers regarding statistical data analysis quality at the Nursing Academy, Ngawi Regency" 3. "2025 Community Service Progress Report: Mentoring to improve data analysis quality in scientific publications and research for faculty members at the Faculty of Psychology, Hang Tuah University Surabaya" 4. "2025 Community Service Progress Report: Capacity building for lecturers regarding statistical data analysis quality at the Nursing Academy, Ngawi Regency" Tahun 2026 : 1. "2026 Community Service Progress Report: Improving the quality of statistical data analysis through faculty capacity building at Universitas Muhammadiyah Sidoarjo"
Patents and proprietary rights	"Product-Based Community Service Video: Community Empowerment-Based Waste Management in Gronjong Wariti Tourism Village" 2022 "Video on Mentoring to Improve Data Analysis Quality at the Faculty of Health Sciences, Wiraraja University Sumenep, Conducted by the Environmental Statistics Laboratory" 2024 "Department of Statistics, FSAD ITS" 2024 "'Latent Finder' Computer Program" 2024 "'MARS for Latent Variables (MARSEL)' Computer Program" 2024

	<i>"ResiPLS' Computer Program"</i> <i>"2024 East Java Natural Disaster Videographic"</i> 2025 <i>"Educational Model for Toddler Nutritional Status in Southeast Sulawesi (Mozaik Sultra)"</i> 2025 <i>"Video Recording of Community Service at the Ngawi Regency Government Nursing Academy"</i> 2025
Important publications over the last 5 years	<i>Tahun 2022 :</i> <i>1. "----delete-----"</i> <i>2. "Does Size Matter for Enhancing Company Resilience and Performance of Indonesian Trucking Company during COVID-19 Pandemic?"</i> <i>3. "Dynamic alteration of plasma levels of betatrophin in younger female onset obesity post acute moderate-intensity exercise training"</i> <i>4. ELSEVIER : "A study of the Indonesian trucking business: Survival framework for land transport during the Covid-19 pandemic"</i> <i>5. MDPI : "More Is More? The Inquiry of Reducing Greenhouse Gas Emissions in the Upstream Petroleum Fields of Indonesia"</i> <i>6. "Mixed estimators spline truncated, kernel, and Fourier series in nonparametric regression for longitudinal data"</i> <i>7. "Gaming Activities During the Covid-19 Pandemic Era: A Systematic Literature Review"</i> <i>8. Cell Press : "The early detection of type 1 diabetes mellitus and latent autoimmune diabetes in adults (LADA) through rapid test reverse-flow immunochromatography for glutamic acid decarboxylase 65 kDa (GAD65)"</i> <i>9. MDPI : "The Geographically Weighted Multivariate Poisson Inverse Gaussian Regression Model and Its Applications"</i> <i>10. "Supply Chain Disruptions during the COVID-19 Pandemic in General Trading Companies"</i> <i>11. Department of Statistics, Institut Teknologi Sepuluh Nopember : "Perbandingan Model Hybrid ARIMAX-FFNN-EGARCH dan Model Hybrid SETAR-Egarh untuk Peramalan (Studi Kasus: Data Cash Outflow dan Inflow Bank Indonesia Kota Kediri)"</i> <i>Tahun 2023 :</i> <i>1. Growing Science : "A hybrid model of spatial autoregressive-multivariate adaptive generalized Poisson regression spline"</i> <i>2. Growing Science : "A Modified Generalized Estimating Equation Approach for Simultaneous Spatial Durbin Panel Model: Case Study of Economic Growth in ASEAN Countries"</i> <i>3. AIP Publishing : "Comparison of Multivariate Adaptive Poisson Regression Spline and Multivariate Adaptive Generalized Poisson Regression Spline"</i> <i>4. ELSEVIER : "Dynamic alteration of plasma levels of betatrophin in younger female onset obesity post acute moderate-intensity exercise training"</i>

5. *"Factor affecting the severity of the dengue fever using multivariate adaptive regressionspline (Mars) method"*
6. *"Mixed Estimators Spline Truncated, Kernel, and Fourier Series in Nonparametric Regression for Longitudinal Data"*
7. *"Mixed Spline Truncated, Kernel, and Fourier Series Estimator in Biresponse Nonparametric Regression"*
8. *International Association of Engineers : "Parameter Estimation of Spatial Error Model -Multivariate Adaptive Generalized Poisson Regression Spline"*
9. *"Multiple period logit model using the maximum likelihood and Bayesian approach on data of breast cancer patients in C-Tech Laboratories Tangerang"*
10. *Universiti Kebangsaan Malaysia: "On the Earthquake Distribution Modeling in Sumatra by Cauchy Cluster Process: Comparing Log-Linear and Log-Additive Intensity Models"*
11. *DRPM ITS: "Community-Based Waste-to-Compost Management at Gronjong Wariti Tourism Site Using Ventilated Bricks"*

Tahun 2024 :

1. *Faculty of Public Health, Diponegoro University: "Effectiveness of Dietary Intake in Toddlers for Reducing the Prevalence of Stunting in Indonesia: A Meta-Analysis"*
2. *Faculty of Public Health, Diponegoro University: "Effectiveness of Dietary Intake in Toddlers for Reducing the Prevalence of Stunting in Indonesia: A Meta-Analysis"*
3. *"Weight Estimation Using Generalized Moving Average and Its Visualization"*
4. *"Assessing the Relationship Between Regional Economic Advancement and Digital Activity"*
5. *BIO Web of Conferences: "Breast Cancer Classification Procedure Using Machine Learning Techniques"*
6. *Scopus: "Estimation curve of multivariate adaptive biresponse fuzzy clustering means regression splines approach to stunting and wasting cases in Southeast Sulawesi"*
7. *Learning Gate: "Exploring the key success strategy for mobile game developers: A distinction between premium and freemium versions"*
8. *"Indonesian trucking business during the COVID-19 pandemic: Performance gap analysis and strategies to achieve better performance"*
9. *IEEE: "Integrating System Dynamics and Random Forest Algorithm for Sales Forecasting"*
10. *"The Form of Weighted Partial Spline Estimator in Semiparametric Models"*
11. *BIO Web of Conferences: "Survival Analysis and Critical Risk Factors in COVID-19 Patients Using Cox Regression"*
12. *IEEE: "Risk Assessment and Mitigation for Business Sustainability in the Coal Industry"*
13. *Universitas Wiraraja Sumenep: "Improving the Quality of Data Analysis in Scientific Publications and Research among Faculty Members of the Faculty of Health Sciences"*
14. *Department of Statistics, Diponegoro University: "Per Capita Consumption Estimation in Surabaya Using an Ensemble Model Approach"*

15. STIKES Majapahit: "Mentoring and Improving the Quality of Data Analysis in Scientific Publications for the Academic Community of STIKES Majapahit Mojokerto"
16. Springer, Singapore : "Outlier Detection in Simultaneous Equations with Panel Data"
17. Elsevier B. V. : "Panel data modeling: Identifying and handling outliers with the VSOM approach"
18. Scopus : "Multivariate Adaptive Fuzzy Clustering Means Regression Splines Model Using Generalized Cross-Validation (GCV) on Stunting Cases in Southeast Sulawesi"

Tahun 2025 :

1. Central Mining Institute : "A Bayesian network for business uncertainties in coal mining industry"
2. AIP Publishing LLC : "Confidence interval for mixed parameters of spline truncated and fourier series in nonparametric regression models"
3. Engineering and Technology Publishing : "An Outlook on the System Dynamics Approach to Boost the Adoption of Mobile Games"
4. UNUSA : "Betatrophin: A promising biomarker for metabolic syndrome and diabetes mellitus risk screening in teenagers"
5. AIP Publishing LLC : "Estimation confidence interval for mixed models of spline truncated and fourier series in semiparametric regression"
6. Operations and Supply Chain Management : "Fostering Supply Chain Agility through Transformational Leadership and Organizational Ambidexterity in the Indonesian Automotive Industry"
7. "Leveraging digital transformation and absorptive capacity for competitive advantage: Empirical insights from the automotive components sector"
8. Multidisciplinary Digital Publishing Institute (MDPI) : "Moderating Technology Acceptance Model on Resident Empowerment in Support for Sustainable Tourism"
9. Springer Nature : "The Effect of Community Attachment and Community Satisfaction on Support Tourism Through Perceived Benefits and Perceived Costs on Tourism"
10. ES3S : "Spatial Analysis of the Human Development Index in Central Java Using Geographically Weighted Generalized Log Gamma Regressio"
11. American Institute of Physics Scopus : "Selection of the Optimal Basis Function on Nutritional Status of Toddlers in Southeast Sulawesi Using Continue Biresponses Nonparametric Regression Model Using MARS"
12. iee.org : "Partial Least Square Segmentation Modeling Using PATHMOX on Tuberculosis Patient Data"

Tahun 2026 :

1. American Institute of Physics : "Developing PLS algorithm: Utilizing PCA-power iterationbased weighting in R"
2. Pandawa Institute : "Bivariate Survival Copula Analysis of Cataract Patients During Blindness: Cataract Cases at Undaan Eye Hospital, Surabaya"
3. American Institute of Physics : "The application of inner weight PCA in SEM-PLS for stunting model development"
4. Elsevier : "The effect of economic capital, social capital, human capital and physical capital on sustainable tourism development at hotels in the Nusa Dua area"

	5. <i>Ital Publication : "People Investment and Value Creation in Emerging Markets: Evidence Across Industries and Firm Sizes"</i> 6. <i>American Institute of Physics : "Parameter estimation of multivariate adaptive regression spline (MARS) – longitudinal (Case study: Open unemployment rate in East Java)"</i> 7. <i>AIP Publishing LLC : "Parameter estimation of multivariate adaptive regression spline (MARS) – longitudinal (Case study: Open unemployment rate in East Java)"</i> 8. <i>Universitas Pattimura : "Partial Least Squares – Multigroup Analysis on the Effect of Leadership on Work Culture and Lecturer Performance"</i>		
Activities in specialist bodies over the last 5 years	<i>Coaching interviewer IISMA (M)</i>	<i>Training</i>	<i>2023</i>
	<i>Coaching interviewer LPDP (M)</i>	<i>Training</i>	<i>2023</i>
	<i>Microsoft Certified Azure Data Fundamental (Microsoft)</i>	<i>Training</i>	<i>2024</i>
	<i>Deep Learning for Natural Language Processing (Inixindo Surabaya)</i>	<i>Training</i>	<i>2025</i>

Name	<i>Shofi Andari, S.Stat., M.Si., Ph.D.</i>		
Post	<i>Head of the Undergraduate Statistics Study Program, Department of Statistics</i>		
Academic career	<i>Initial academic appointment</i> <i>IPB</i> <i>Habilitation [German post-doctoral qualification]</i> <i>ITS</i> <i>Doctorate (subject)</i> <i>Doctoral Iowa State University, USA</i>		
Employment	<i>Lecturer</i>	<i>ITS</i>	<i>2014</i>
Research and development projects over the last 5 years	<i>Tahun 2023 :</i> <i>2023 Master's Thesis Research Grant: Piecewise Polynomial Smooth Support Vector Machine for Depression Detection Using Electroencephalogram (EEG) Signals</i> <i>2023 Domestic Collaborative Research Grant: Development of Cox Regression to Analyze the Impact of Hu Care Therapy on Chronic Disease Management to Enhance Medical Service Effectiveness at Nur Hidayah Hospital</i> <i>2023 Inter-University Collaborative Research Grant (ITS and ITS Partners): Cox Frailty Survival Regression Model for Evaluating Continuous Complementary Therapy for Chronic Diseases</i> <i>2023 ITS Partnership Research Grant (Batch 2): Development of Support Vector Machine Based on Smoothing Function for Depression Detection Using Electroencephalogram (EEG)</i> <i>2023 ITS Departmental Research Grant (Batch 2): Development of an Accurate Probability-Based Model for Sequence Alignment in Paired Data</i> <i>Cox Frailty Survival Regression Model for Evaluating Continuous Complementary Therapy for Chronic Diseases</i> <i>Development of Cox Regression to Analyze the Impact of Hu Care Therapy on Chronic Disease Management to Enhance Medical Service Effectiveness at Nur Hidayah Hospital</i> <i>Development of an Accurate Probability-Based Model for Sequence Alignment in Paired Data</i> <i>Piecewise Polynomial Smooth Support Vector Machine for Depression Detection Using Electroencephalogram (EEG) Signals</i> <i>Development of Support Vector Machine Based on Smoothing Function for Depression Detection Using Electroencephalogram (EEG)</i> <i>Tahun 2024 :</i> <i>SK Penelitian Tesis Magister tahun 2024: Semi-Supervised Fuzzy Clustering Dengan Pairwise Constraint Untuk Mengklasterkan Tingkat Depresi Berdasarkan Rekaman Electroencephalogram (EEG)</i> <i>SK Penelitian Kemitraan ITS tahun 2024: An Accurate Statistical Model for Estimating Glomerular Filtration Rate on Chronic Kidney Disease Patients in A Specific Children-Population in Indonesia</i> <i>SK Penelitian Kemitraan ITS tahun 2024: Clustering time series on electroencephalogram data to assist mental illnesses detecton</i>		

	4. <i>SK Penelitian Departemen ITS tahun 2024: Application of elastic net in survival regression for high-dimensional clinical and microarray data</i> 5. <i>Lap. Kemajuan Penelitian Tahun 2024: An Accurate Statistical Model for Estimating Glomerular Filtration Rate on Chronic Kidney Disease Patients in A Specific Children-Population in Indonesia</i> 6. <i>Lap. Kemajuan Penelitian Tahun 2024: Clustering time series on electroencephalogram data to assist mental illnesses detecton</i> 7. <i>Lap. Kemajuan Penelitian Tahun 2024: Application of elastic net in survival regression for high-dimensional clinical and microarray data</i> <i>Tahun 2025 :</i> 1. <i>SK PFR tahun 2025: Bivariate survival copula analysis of Cataract Patients during Blindness: Cataract cases at Undaan Eye Hospital, Surabaya.</i> 2. <i>SK PMDSU tahun 2025: Geographically and Temporally Weighted Multivariate Generalized Log-Normal Regression</i> 3. <i>SK PTM tahun 2025: Hybrid Fuzzy Clustering dan Bagging Support Vector Machine untuk Klasifikasi Tingkat Depresi dengan Terapi Mindfulness Berdasarkan Electroencephalogram</i> 4. <i>SK Penelitian Departemen ITS tahun 2025: Klasifikasi Respon Biner Menggunakan Multivariate Adaptive Regression Splines dan Random Forest</i> 5. <i>SK Penelitian Departemen Batch 2 ITS tahun 2025: Mathematical Modeling of Sukuk Ijarah Pricing with Asset Depreciation within the Framework of Geometric Brownian Motion and Option Structures</i> 6. <i>SK Penelitian Departemen ITS tahun 2025: Harnessing Probability-based Clustering to Uncover Differential Genes Expression</i> 7. <i>Lap. Kemajuan Penelitian Tahun 2025: Mathematical Modeling of Sukuk Ijarah Pricing with Asset Depreciation within the Framework of Geometric Brownian Motion and Option Structures</i> 8. <i>Lap. Kemajuan Penelitian Tahun 2025: Bivariate survival copula analysis of Cataract Patients during Blindness: Cataract cases at Undaan Eye Hospital, Surabaya.</i> <i>Tahun 2026 :</i> 1. <i>Lap. Kemajuan Penelitian Tahun 2026: Identification of EEG Biomarkers Using Machine Learning Based on Cross-Domain Feature Extraction for the Evaluation of Mindfulness Therapy in Depressed Patients</i> 2. <i>Lap. Kemajuan Penelitian Tahun 2026: Pendekatan data-driven transkriptomik untuk mengidentifikasi differentially expressed genes pada ketahanan padi terhadap stres salinitas</i> 3. <i>Lap. Kemajuan Penelitian Tahun 2026: Development of Spatial Multivariate Adaptive Generalized Poisson Regression Spline with Small Area Estimation</i> 4. <i>Lap. Kemajuan Penelitian Tahun 2026: Survival Modeling Pipeline for High-Dimensional Cancer Genomic Data Using Adaptively Penalized Regularized Regressions</i>
Industry collaborations over the last 5 years	<i>Tahun 2022 :</i> 1. <i>"SK 2022 ITS Product-Based Community Service: Community Empowerment-Based Waste Management at the Gronjong Wariti Tourism Site, Mejono-Plegahan Village, Kediri</i>

	<i>Tahun 2023 :</i> 1. "SK 2023 ITS Department-Funded Thematic Community Service: Empowering Students of Miftahul Ulum Islamic Boarding School through Ecoprint Training 2. "SK 2023 ITS Department-Funded Thematic Community Service: Mentoring on Improving Data Analysis Quality in Scientific Publications for the Academic Community of STIKES Majapahit Mojokerto " <i>Tahun 2024 :</i> 1. " Author: Education on Enhancing Skills for Recognizing and Managing Stress, Anxiety, and Depression Among University Students in East Surabaya " <i>Tahun 2025 :</i> 1. "2025 ITS Independent Community Service Grant: Molecular Marker Workshop (DNA Extraction & PCR) for Junior and Senior High School Teachers" 2. "2025 ITS Thematic Community Service Grant (Departmental Funding): Mentoring to Improve Data Analysis Quality in Scientific Publications and Research for Faculty Members at the Faculty of Psychology, Hang Tuah University Surabaya" 3. "2025 ITS Thematic Community Service Grant (Departmental Funding): Capacity Building for Lecturers on Statistical Data Analysis Quality at the Nursing Academy, Ngawi Regency"												
Patents and proprietary rights	<table> <tr> <td>"Product-Based Community Service Video: Community Empowerment-Based Waste Management in Gronjong Wariti Tourism Village"</td> <td>2022</td> </tr> <tr> <td>"Community Service: Mental Health"</td> <td>2024</td> </tr> <tr> <td>"Data Analytics Training Video for Bank Syariah Indonesia (BSI) – Surabaya Region VIII"</td> <td>2024</td> </tr> <tr> <td>"Video on Mentoring for Improving Data Analysis Quality at the Faculty of Science"</td> <td>2024</td> </tr> <tr> <td>"Health Study: Universitas Wiraraja Sumenep – Conducted by the Environmental Health Statistics Laboratory, Department of Statistics, FSAD ITS"</td> <td>2024</td> </tr> <tr> <td>"ResiPLS' Computer Program"</td> <td>2024</td> </tr> </table>	"Product-Based Community Service Video: Community Empowerment-Based Waste Management in Gronjong Wariti Tourism Village"	2022	"Community Service: Mental Health"	2024	"Data Analytics Training Video for Bank Syariah Indonesia (BSI) – Surabaya Region VIII"	2024	"Video on Mentoring for Improving Data Analysis Quality at the Faculty of Science"	2024	"Health Study: Universitas Wiraraja Sumenep – Conducted by the Environmental Health Statistics Laboratory, Department of Statistics, FSAD ITS"	2024	"ResiPLS' Computer Program"	2024
"Product-Based Community Service Video: Community Empowerment-Based Waste Management in Gronjong Wariti Tourism Village"	2022												
"Community Service: Mental Health"	2024												
"Data Analytics Training Video for Bank Syariah Indonesia (BSI) – Surabaya Region VIII"	2024												
"Video on Mentoring for Improving Data Analysis Quality at the Faculty of Science"	2024												
"Health Study: Universitas Wiraraja Sumenep – Conducted by the Environmental Health Statistics Laboratory, Department of Statistics, FSAD ITS"	2024												
"ResiPLS' Computer Program"	2024												

	"Airbnb Performance Dashboard" 2024 "CKD-IND18 Poster" 2024 "eGFR Meta-analysis Poster" 2024 "Scientific Poster: Cox-Regularization for High-Dimensional Data in Lung Adenocarcinoma Cases" 2024 "Scientific Poster: Application of the Hurdle Model to Address Excess Zeros in Maternal and Neonatal Mortality Data in Jember Regency" 2024 "Poster on Village Unit Cooperatives (KUD) in East Java Regencies/Cities" 2025 "Infographic: East Java Economic Growth in 2024" 2025 "Poster: Kedung Cowek Fishermen's Village" 2025 "Infographic: Trends in Visits and Feedback for Integrated Statistical Services" 2025 "Video Recording of Community Service Activities at the Ngawi Regency Government Nursing Academy" 2025
Important publications over the last 5 years	Tahun 2023 : 1. DRPM ITS: "Community Empowerment-Based Waste Management for Compost Production at Gronjong Wariti Tourism Site Using Perforated Bricks" 2. EDP Sciences : "Influencing factors that improve mental conditions patients with complementary therapy at Nur Hidayah Hospital, Bantul, Yogyakarta" Tahun 2024 : 1. Elsevier : "Assessment of estimated kidney function based on creatinine in indonesian adult populations: Calling for validation of performance" 2. Association for Computing Machinery : "Copula-based Cox Regression to Modelling Bivariate Time-to-Event Data" 3. " Education to Enhance Skills in Recognizing and Managing Stress, Anxiety, and Depression Among University Students in East Surabaya "

	4. <i>STIKES MAJAPAHIT : " Mentoring and Enhancing Data Analysis Quality in Scientific Publications for the Academic Community of STIKES Majapahit Mojokerto"</i> 5. <i>Universitas Wiraraja Sumenep : " Improving the Quality of Data Analysis in Scientific Publications and Research among Faculty Members of the Faculty of Health Sciences "</i> 6. <i>"Assessment of Q-value of serum creatinine in heterogenous population: Preliminary study of Indonesia initiative for renal function evaluation"</i> 7. <i>Elsevier : "Assessment of Q-value of serum creatinine in heterogenous population: Preliminary study of Indonesia initiative for renal function evaluation (INA-REN)"</i> <i>Tahun 2025 :</i> 1. <i>IEEE : "Analysis of Hospitalization-Recovery Duration for DHF Patients at RSUD Haji, East Java Utilizing the Three-Parameter Log-Logistic Regression"</i> 2. <i>Frontiers Media SA : "The varied Q creatinine in multi ethnics population and impact of adopting three different estimated glomerular filtration rates based on creatinine in adult populations: a ..."</i> 3. <i>IEEE : "Kaplan-Meier Bivariate Survival and Cox Copula Regression : A Case Study on Cataract Patients at Undaan Hospital"</i> 4. <i>Malaysian Medical Association : "Mental state classification based on electroencephalogram (EEG) using multiclass support vector machine"</i> 5. <i>AIP Publishing. : "Parameter estimation and hypothesis testing of bivariate poisson generalized inverse gaussian regression model"</i> 6. <i>INFERENSI : "Estimating Confidence Intervals for Hazard Ratio with Composite Covariates in the Cox Models"</i> <i>Tahun 2026 :</i> 1. <i>Elsevier : "A construction of statistical inferences in geographically weighted univariate log-gamma regression"</i> 2. <i>IEEE : "Comparative Analysis of Boosting Ensemble Methods for Classifying Depression Severity Using EEG Signals"</i> 3. <i>Pandawa Institute : "Bivariate Survival Copula Analysis of Cataract Patients During Blindness: Cataract Cases at Undaan Eye Hospital, Surabaya"</i> 4. <i>University of AEGEAN : "Development Of Non-Linear Small Area Estimation Using The MAGPRS Approach"</i> 5. <i>American Institute of Physics : "Enhancing segmentation in partial least square-based unified theory of acceptance and used of technology (UTAUT) models using K-means clustering"</i> 6. <i>IEEE : "Interpretable Random Forest for Classifying Prostate Cancer Severity from Genomic Dataset"</i> 7. <i>" Strengthening Statistical and Data Science Literacy among SMP Negeri 30 Surabaya Students through Educational Activities "</i>
--	--

Activities in specialist bodies over the last 5 years	<i>Introduction to Microsoft SQL Server Database (X)</i>	<i>Training</i>	<i>2023</i>
	<i>Machine Learning for Bioinformatics (X)</i>	<i>Training</i>	<i>2023</i>
	<i>Indonesia Bioinformatics Workshop 2024 Understanding Genomics and Biodiversity (INBIO Malang)</i>	<i>Training</i>	<i>2024</i>
	<i>Applied Approach (AA) Program (ITS Directorate of Academic Development and Learning Innovation)</i>	<i>Applied Approach</i>	<i>2025</i>
	<i>Workshop on eDNA-Based Analysis and Its Application in Biological Research (FSAD ITS)</i>	<i>Training</i>	<i>2025</i>
	<i>Deep Learning Training for Natural Language Processing (Inixindo)</i>	<i>Training</i>	<i>2025</i>

Name	<i>Achmad Choirudin, S.Si, M.Sc.</i>		
Post	<i>Head of the Bachelor of Data Science Program, Department of Statistics</i>		
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] ITS</i> <i>Doctorate (subject) Universite Grenoble Alpes</i>		
Employment	<i>Lecturer</i>	<i>ITS</i>	<i>2019</i>
Research and development projects over the last 5 years	<i>Tahun 2022 :</i> <i>Assessing COVID-19 in Jakarta Using Modified SIR Model in Smart Health Care</i> <i>COVID-19 transmission risk in Surabaya Raya: Modeling by inhomogeneous spatio-temporal point process</i> <i>COVID-19 transmission risk in Surabaya: Modeling by inhomogeneous spatial point process</i> <i>Development of Small Area Estimation using Spatial Point Processes to Estimate Poverty Rates in Kendal Regency, Central Java</i> <i>Air Quality Forecasting in Surabaya City to Determine Air Pollutant Standard Index Categories Using Hybrid Machine Learning Methods</i> <i>Prediction of Air Traffic in Indonesia Based on Google Trends and Econometric Data Using Deep Learning Methods</i> <i>SK PENELITIAN DEPARTEMEN (BATCH 2) ITS tahun 2022: Spatial Empirical Best Linear Unbiased Prediction (SEBLUP) for Village-Level Poverty Mapping in Kendal Regency</i> <i>SK KEILMUAN (BATCH 2) ITS tahun 2022: Development of Small Area Estimation Using Spatial Point Processes to Estimate Poverty Rates in Kendal Regency</i> <i>SK PENELITIAN KEILMUAN ITS tahun 2022: COVID-19 transmission risk in Surabaya Raya: Modeling by inhomogeneous spatio-temporal point process</i> <i>SK PENELITIAN KEILMUAN ITS tahun 2022: Air Quality Forecasting in Surabaya City to Determine Air Pollutant Standard Index Categories Using a Hybrid Machine Learning Method</i> <i>SK PENELITIAN PENGEMBANGAN INSTITUSI ITS (DANA DEPARTEMEN) BATCH 2 ITS tahun 2022: Assessing COVID-19 in Jakarta Using Modified SIR Model in Smart Health Care</i> <i>SK Penelitian Tesis Magister tahun 2022: COVID-19 transmission risk in Surabaya: Modeling by inhomogeneous spatial point process</i> <i>SK Penelitian Tesis Magister tahun 2022: Prediction of Air Traffic in Indonesia Based on Google Trends and Econometric Data Using Deep Learning Methods</i> <i>14. Spatial Empirical Best Linear Unbiased Prediction (SEBLUP) for Village-Level Poverty Mapping in Kendal Regency</i> <i>Tahun 2023 :</i> <i>Regularization Method for Spatio-temporal Point Process</i> <i>Model Geographically and Temporally Weighted Ordinal Logistic Regression</i>		

	3. <i>Modified Epidemic Type Aftershocks Sequences (Modified ETAS): A Model for Earthquake Distribution Involving Geological Factor</i> 4. <i>Modeling the risk of COVID-19 spread in East Java using an inhomogeneous spatial point process with piecewise constant covariates.</i> 5. <i>SK Penelitian Kerjasama – Dalam Negeri tahun 2023: The Dantzig selector and sparse group lasso for high dimensional geospatial data</i> 6. <i>SK Penelitian Disertasi Doktor tahun 2023: Model Geographically and Temporally Weighted Ordinal Logistic Regression</i> 7. <i>SK Penelitian Kerjasama – Dalam Negeri tahun 2023: The Dantzig selector and sparse group lasso for high dimensional geospatial data</i> 8. <i>SK Penelitian Tesis Magister tahun 2023: Modeling the risk of COVID-19 spread in East Java using an inhomogeneous spatial process with piecewise constant covariates.</i> 9. <i>The Dantzig selector and sparse group lasso for high dimensional geospatial data</i> <i>Tahun 2024 :</i> 1. <i>Lap. Kemajuan Penelitian Tahun 2024: Deep learning for highly multivariate log-Gaussian Cox processes</i> 2. <i>Lap. Kemajuan Penelitian Tahun 2024: Application of elastic net in survival regression for high-dimensional clinical and microarray data</i> 3. <i>Lap. Kemajuan Penelitian Tahun 2024: Regularization method for point processes on linear networks</i> 4. <i>SK PENELITIAN DEPARTEMEN ITS tahun 2024: Deep learning for similarity analysis of spatial point patterns of earthquake occurrences in Indonesia</i> 5. <i>SK PENELITIAN DEPARTEMEN ITS tahun 2024: Application of elastic net in survival regression for high-dimensional clinical and microarray data</i> 6. <i>SK PENELITIAN KEILMUAN ITS tahun 2024: Regularization method for point processes on linear networks</i> 7. <i>SK PENELITIAN KEMITRAAN ITS tahun 2024: Deep learning for highly multivariate log-Gaussian Cox processes</i> 8. <i>SK PENELITIAN KEMITRAAN ITS tahun 2024: Regularization Method for Spatio-temporal Point Process</i> 9. <i>SK Penelitian Tesis Magister tahun 2024: Forecasting Operating Pressure in Crude Oil Pipelines to Prevent Oil Congealing Using a Hybrid Method</i> <i>Tahun 2025 :</i> 1. <i>Lap. Kemajuan Penelitian Tahun 2025: Adaptive Sparse Group Lasso for Intensity Function Estimation of Multivariate Point Processes</i> 2. <i>Lap. Kemajuan Penelitian Tahun 2025: Disaster Risk Mitigation Innovation in Indonesia: Integrating Geophysics, Tourism, Social Communication, Statistics, and Economics</i> 3. <i>Lap. Kemajuan Penelitian Tahun 2025: EARTHQUAKE RISK MODELING IN THE FRAMEWORK OF CATSTROPHE MODELING WITH THE KANIADAKIS DISTRIBUTION APPROACH AS A NEW APPROACH IN DISASTER INSURANCE</i> 4. <i>Lap. Kemajuan Penelitian Tahun 2025: Spatial Point Process Intensity Modeling with Gradient Boosting Techniques</i> 5. <i>SK PENELITIAN DEPARTEMEN BATCH 2 ITS tahun 2025: EARTHQUAKE RISK MODELING IN THE FRAMEWORK OF CATSTROPHE MODELING</i>
--	--

	WITH THE KANIADAKIS DISTRIBUTION APPROACH AS A NEW APPROACH IN DISASTER INSURANCE 6. SK PENELITIAN DEPARTEMEN ITS tahun 2025: Adaptive Sparse Group Lasso untuk Estimasi Fungsi Intensitas Multivariate Point Processes 7. SK PENELITIAN FAKULTAS ITS tahun 2025: Machine Learning-Based Electricity Theft Detection Considering Customer Consumption Patterns and Geographical Conditions 8. SK PENELITIAN FAKULTAS ITS tahun 2025: Development of Sharia Banking Financing Strategies Based on Economic Sectors Using Optimized Predictive Analytics for Sustainable Finance 9. SK PENELITIAN KEMITRAAN TIPE B ITS tahun 2025: Spatial Point Process Intensity Modeling with Gradient Boosting Techniques 10. SK PMDSU tahun 2025: Bootstrap Aggregating Multivariate Adaptive Bivariate Regression Splines (Bagging MABRS) Respon Biner 11. SK RISET KOLABORASI INDONESIA (RKI) ITS tahun 2025: Disaster Risk Mitigation Innovation in Indonesia: Integrating Geophysics, Tourism, Social Communication, Statistics, and Economics Tahun 2026 : 1. Lap. Kemajuan Penelitian Tahun 2026: High resolution prediction of traffic accident risk using spatio-temporal point process on a linear network 2. Lap. Kemajuan Penelitian Tahun 2026: Integrasi few-shot learning dan augmentasi data pada neural network untuk klasifikasi data tidak seimbang 3. Lap. Kemajuan Penelitian Tahun 2026: Optimasi Metode Machine Learning dengan Cost Sensitive Learning untuk Peningkatan Performa Deteksi Pencurian Listrik di PLN UID Jawa Barat 4. Lap. Kemajuan Penelitian Tahun 2026: Pengembangan Geographically Weighted Regression–Spatial Error Model untuk Estimasi NJOP sebagai Upaya Peningkatan Akurasi Penilaian PBB Daerah 5. Lap. Kemajuan Penelitian Tahun 2026: Pengembangan Model Peramalan Cuaca Berbasis Kecerdasan Buatan dengan Analisis Horizon Prediksi untuk Mendukung Sistem Peringatan Dini 6. Lap. Kemajuan Penelitian Tahun 2026: Pipeline Pemodelan Survival pada Data Genomik Kanker Berdimensi Tinggi dengan Regularized Regressions Berpenalti Adaptif 7. Lap. Kemajuan Penelitian Tahun 2026: Prediksi Health Index Bearing Boiler Feedwater Pump Turbine dengan Metode Attention Mechanism–LSTM
Industry collaborations over the last 5 years	Tahun 2020 : 1. Editor of a National Scientific Journal (Inferensi)2020 2. SK ABMAS DANA DEPARTEMEN ITS tahun 2020: SUPERVISION OF UNDERSTANDING STATISTICS-BASED QUANTITATIVE RESEARCH METHODOLOGY IN THE FRAMEWORK OF IMPROVING THE QUALITY OF RESEARCH RESULTS IN THE LECTURERS' ENVIRONMENT OF MAJAPAHIT MOJOKERTO HEALTH COLLEGE Tahun 2021 : 1. SK ABMAS TEMATIK DANA DEPARTEMEN ITS tahun 2021: MENTORING AND TRAINING IN HEALTH STATISTICS IN THE FRAMEWORK OF IMPROVING THE QUALITY OF RESEARCH RESULTS IN THE LECTURERS'

	ENVIRONMENT OF THE FACULTY OF HEALTH SCIENCES, WIRARAJA UNIVERSITY <i>Tahun 2022 :</i> 1. SK ABMAS BERBASIS PRODUK ITS tahun 2022: <i>Community Empowerment-Based Waste Management at the Gronjong Wariti Tourism Site, Mejono-Plemahan Village, Kediri</i> 2. SK ABMAS TEMATIK DANA DEPARTEMEN ITS tahun 2022: <i>STATISTICS GUIDANCE AND TRAINING IN THE FRAMEWORK OF IMPROVING THE QUALITY OF RESEARCH RESULTS IN THE LECTURERS' ENVIRONMENT OF THE INSTITUTE OF SCIENCE AND HEALTH TECHNOLOGY INSAN CENDEKIA MEDIKA JOMBANG</i> <i>Tahun 2025 :</i> 1. <i>Lap. Kemajuan Abmas Tahun 2025: PENDAMPINGAN PENINGKATAN KUALITAS ANALISIS DATA DALAM PUBLIKASI ILMIAH DAN PENELITIAN DI LINGKUNGAN DOSEN FAKULTAS PSIKOLOGI UNIVERSITAS HANG TUAH SURABAYA</i> 2. <i>Lap. Kemajuan Abmas Tahun 2025: PENINGKATAN KAPASITAS DOSEN PADA KUALITAS ANALISIS DATA STATISTIKA DI LINGKUNGAN AKADEMI KEPERAWATAN, KABUPATEN NGAWI</i> 3. SK ABMAS TEMATIK (DANA DEPARTEMEN) ITS tahun 2025: <i>PENDAMPINGAN PENINGKATAN KUALITAS ANALISIS DATA DALAM PUBLIKASI ILMIAH DAN PENELITIAN DI LINGKUNGAN DOSEN FAKULTAS PSIKOLOGI UNIVERSITAS HANG TUAH SURABAYA</i> 4. SK ABMAS TEMATIK (DANA DEPARTEMEN) ITS tahun 2025: <i>PENINGKATAN KAPASITAS DOSEN PADA KUALITAS ANALISIS DATA STATISTIKA DI LINGKUNGAN AKADEMI KEPERAWATAN, KABUPATEN NGAWI</i> <i>Tahun 2026 :</i> 1. <i>Lap. Kemajuan Abmas Tahun 2026: PENINGKATAN KUALITAS ANALISIS DATA STATISTIKA MELALUI PENGUATAN KAPASITAS DOSEN DI UNIVERSITAS MUHAMMADIYAH SIDOARJO</i> <i>Partners</i>
Patents and proprietary rights	<i>Community Service Video: Sustainable Empowerment of Halal-Aware MSMEs in Madiun to Support the Halal Certification Process</i> 2021 <i>Product-Based Community Service Video: Community Empowerment-Based Waste Management in the Gronjong Wariti Tourism Village</i> 2022 <i>Video: Mentoring for Improving the Quality of Data Analysis at the Faculty of Health Sciences, Wiraraja University, Sumenep, by the Environmental Health</i> 2024

	<i>Statistics Lab, Department of Statistics, Faculty of Agriculture, ITS</i> <i>Computer Program "Latent Finder" 2024</i> <i>2024</i> <i>Scientific Poster: Cox-Regularization for High-Dimensional Data in Lung Adenocarcinoma Case</i> <i>2024</i> <i>Scientific Poster: Cox-Regularization for High-Dimensional Data in Lung Adenocarcinoma Case 2024</i> <i>2025</i> <i>Infographic: Portraits of Violence Against Women in East Java</i> <i>2025</i> <i>Community Service Video: Ngawi Regency Government Nursing Academy</i>
Important publications over the last 5 years	<i>Tahun 2022 :</i> <i>MDPI : "COVID-19 Pandemic's Impact on Return on Asset and Financing of Islamic Commercial Banks: Evidence from Indonesia"</i> <i>"Forecast of Aviation Traffic in Indonesia Based on Google Trend and Macroeconomic Data using Long Short-Term Memory"</i> <i>"Parameter estimation and hypothesis testing on three parameters log normal regression"</i> <i>Institut Teknologi Sepuluh Nopember Surabaya : "Sustainable Empowerment of Halal-Aware MSMEs in Madiun to Support the Halal Certification Process"</i> <i>"Species Distribution Modeling with Spatial Point Process: Comparing Poisson and Zero Inflated Poisson-Based Algorithms"</i> <i>Tahun 2023 :</i> <i>Bernoulli Society for Mathematical Statistics and Probability : "Adaptive lasso and Dantzig selector for spatial point processes intensity estimation"</i> <i>Springer Nature : "COVID-19 transmission risk in Surabaya and Sidoarjo: an inhomogeneous marked Poisson point process approach"</i> <i>"Cox Point Process with Ridge Regularization: A Better Approach for Statistical Modeling of Earthquake Occurrences"</i> <i>Taylor and Francis : "kppmenet: combining the kppm and elastic net regularization for inhomogeneous Cox point process with correlated covariates"</i> <i>Universiti Kebangsaan Malaysia : "On the Earthquake Distribution Modeling in Sumatra by Cauchy Cluster Process: Comparing Log-Linear and Log-Additive Intensity Models"</i> <i>Copyright ©2023 by IEEE : "Parameter Estimation and the Goodness-of-fit Test for the Multivariate Generalized Gamma Distribution"</i>

	7. <i>DRPM ITS : “Pengelolaan Sampah sebagai Kompos di Wisata Gronjong Wariti Berbasis Pemberdayaan Masyarakat dengan Media Bata Terawang”</i> Tahun 2024 : 1. <i>IEEE : “A Prescriptive Analytics Framework for Banks' Loan Strategy Development: Indonesian Banks' Case Study”</i> 2. <i>IEEE : “A Regime Switching Analysis of Resilience and Sustainability in Indonesia's Islamic Banking”</i> 3. <i>Springer US : “Algorithms for Fitting the Space-Time ETAS Model to Earthquake Catalog Data: A Comparative Study”</i> 4. <i>IEEE : “Analysis of Traffic Accident Risk in Nganjuk Using Point Process on a Linear Network with Lasso Regularization”</i> 5. <i>IEEE : “Application of Dynamic Time Warping for Clustering Cellular Data Traffic Pattern”</i> 6. <i>IEEE : “Bayesian-Optimized LSTM, XGBoost, and Hybrid Models: A Comparative Study on Financial Time Series Forecasting”</i> 7. <i>IEEE : “Candidate Selection of Water Shut-Off in Oil and Gas Industry Using Random Forest”</i> 8. <i>“Classifying MRP Strategy of Aircraft Spare Parts Using Supervised Machine Learning”</i> 9. <i>“Convex and non-convex regularization methods for spatial point processes intensity estimation”</i> 10. <i>Springer Berlin Heidelberg : “Crime risk assessment through Cox and self-exciting spatio-temporal point processes”</i> 11. <i>IEEE : “Determining The Ideal Location For New Branches In Multifinance Companies Using Google Maps API With Clustering Method”</i> 12. <i>IEEE : “Development of Indonesian Islamic Banking Financial Inclusion Strategy: A Machine Learning Approach”</i> 13. <i>“Earthquake Hazard Modeling in Java Using Space Time Epidemic Type Aftershock Sequence”</i> 14. <i>IEEE : “Exploring Breast Cancer Risk Factor Through Machine Learning Algorithm: Random Forest Classification”</i> 15. <i>IEEE : “Forecasting Pipelines Operating Pressure: A Proactive Approach to Prevent Oil Congealing Using ARIMA, FFNN, and Hybrid Models”</i> 16. <i>IEEE : “Hazard Modeling of Sulawesi-Maluku Earthquakes Using Space-Time ETAS: Comparing Long Decay and Short Decay Densities”</i> 17. <i>IEEE : “High Resolution Analysis of Accident Risk in Nganjuk Using Spatio-Temporal Point Process on a Linear Network”</i> 18. <i>ACM International Conference Proceeding Series : “Hypothesis Testing of Spatial and Temporal Weighted Ordinal Logistic Regression”</i> 19. <i>“Indonesian Islamic Banks' Post-Pandemic Profitability Alignment with Sustainability Goals”</i> 20. <i>Springer : “Inhomogeneous log-Gaussian Cox processes with piecewise constant covariates: a case study in modeling of COVID-19 transmission risk in East Java”</i> 21. <i>IEEE : “Intelligent Spatial Count Modeling with Geographically Weighted Poisson-GIG Regression”</i> 22. <i>Springer Nature Singapore : “Modeling Earthquake Catalog in Sumatra by Space-Time Epidemic-Type Aftershock Sequences Model: Combining Davidon-Fletcher-Powell and Stochastic Declustering Algorithms”</i> 23. <i>IEEE : “Modified Marked Log-Gaussian Cox Process for High-Resolution Prediction of Per Capita Expenditure in Badung Regency”</i>
--	--

	24. IEEE : "Multivariate Spatial Modelling of Tree Species Distribution Using Adaptive Sparse Group Lasso: Case Study in Barro Colorado Island Plot" 25. Elsevier : "Optimizing Afforestation and Reforestation Strategies to Enhance Ecosystem Services in Critically Degraded Regions" 26. Elsevier : "Optimizing Claim Assessment Processes in Property Insurance: A Case Study" 27. "Optimizing Neural Network for Parameter Estimation of Highly Multivariate Log Gaussian Cox Process Using Dropout Training" 28. IEEE : "Optimizing XGBoost for Nonparametric Intensity Estimation of Spatial Point Processes: Algorithm Performance on the Sumatra Earthquake Dataset" 29. STIKES MAJAPAHIT : "Mentoring and Quality Enhancement of Data Analysis in Scientific Publications for the Academic Community of STIKES Majapahit Mojokerto" 30. Universitas Wiraraja Sumenep : "Improving the Quality of Data Analysis in Scientific Publications and Research among Faculty Members of the Faculty of Health Sciences" 31. Elsevier : "Predicting household per capita expenditure by using log-normal regression in Poso Regency Central Sulawesi" 32. IEEE : "Prediction of Earthquake Intensity and Location in Sumatra Using Deep Learning" 33. Springer Nature Singapore : "Probabilistic Seismic Hazard Analysis for Sulawesi-Maluku Region of Indonesia Using the Space-Time Epidemic-Type Aftershock Sequence Model" 34. IEEE : "Risk Analysis of Extreme Earthquake Events in Indonesia Using Sub-Sampling Block Maxima" 35. IEEE : "Spatial Analysis of HIV/AIDS Cases: Comparison of Five Spatial Models" 36. Elsevier : "Spatial clustering based on geographically weighted multivariate generalized gamma regression" 37. Springer : "Statistical Inferences for Multivariate Generalized Gamma Regression Model" Tahun 2025 : 1. IEEE : "Convolutional Neural Networks for Inhomogeneous Neyman Scott Cox Process With Application in Earthquake Risk Prediction" 2. "Environmental extreme risk modeling via sub-sampling block maxima" 3. "Evaluating the Impact of Critical Success Factors of Incident Prevention Programs on Construction Project Success" 4. Springer Nature Singapore : "Forecasting the Occurrence of Drop Pressure and Over Pressure of Natural Gas Pipeline Distribution Network Using Machine Learning" 5. Mathematics Department, Universitas Islam Negeri Maulana Malik Ibrahim Malang : "Generalized Poisson SAR for Under-Five Pneumonia in Tuban Regency" 6. Hungarian Central Statistical Office : "Geographically and temporally weighted multivariate generalised gammaregression for modelling three educational indicators in Central Java, Indonesia" 7. IEEE : "Intelligent Spatial Count Modeling with Geographically Weighted Poisson-GIG Regression" 8. IEEE : "Machine Learning-based Electricity Theft Detection Considering Customer Consumption Pattern and Geographical Condition"
--	--

	9. IEEE : “Model Fit and Determinants of Maternal Mortality Using Zero-Inflated Poisson Generalized Inverse Gaussian Regression” 10. SCIK Publishing Corporation : “MULTIVARIATE ADAPTIVE BIVARIATE REGRESSION SPLINES (MABRS) BINARY RESPONSE FOR MODELING STROKE AND HYPERTENSION IN RSKD DADI CITY MAKASSAR” 11. MDPI : “Parameter Estimation of Geographically and Temporally Weighted Elastic Net Ordinal Logistic Regression” 12. MDPI : “Parameter Estimation of Geographically and Temporally Weighted Elastic Net Ordinal Logistic Regression” 13. Springer Nature : “Patterns: A Case Study of Maluku” 14. IEEE : “Predictive Analysis of Electrical Load Forecasting and Classification of Feeder Efficiency with Random Forest Algorithm” 15. IEEE : “Probabilistic Deep Learning for Highly Multivariate Spatio-temporal log-Gaussian Cox processes” 16. Springer Nature Singapore : “Siamese Neural Network to Detecting Spatial Similarities in Earthquake Patterns: A Case Study of Maluku and Sulawesi” 17. Springer Nature Singapore : “Spatiotemporal Air Quality Forecasting in Jakarta Using Hybrid CNN-LSTM” 18. North-Holland : “Variable selection for spatio-temporal conditionally Poisson point processes”		
Activities in specialist bodies over the last 5 years	BigData with Hadoop and Spark (X)	Training	2023
	Deep Learning for Natural Language Processing (PT Inixindo)	Training	2025

Social Data Analytics and Official Statistics Laboratory

Name	<i>Prof. Dr. Vita Ratnasari, S.Si, M.Si.</i>		
Post	<i>Head of the Social Data Analytics and Official Statistics Laboratory</i>		
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] (subject) ITS</i> <i>Doctorate (subject) ITS</i>		
Employment	<i>Lecturer ITS 1997</i> <i>Professor ITS 2023</i>		
Research and development projects over the last 5 years	<i>2022 :</i> <i>1. Mixed Spline, Kernel, and Fourier Series Estimator in Multiresponse Nonparametric and Semiparametric Regression</i> <i>2. 2022 Basic Research Grant: Mixed Spline, Kernel, and Fourier Series Estimator in Multiresponse Nonparametric and Semiparametric Regression</i> <i>3. 2022 Doctoral Dissertation Research Grant: Geographically Weighted Nonparametric Regression (GWNr) Model Using a Mixed Truncated Spline and Fourier Series Estimator</i> <i>4. Modeling Stunting Risk Among Toddlers in Probolinggo Regency Using the Bivariate Polynomial Ordinal Logistic Regression Approach</i> <i>5. Geographically Weighted Nonparametric Regression (GWNr) Model Using a Mixed Truncated Spline and Fourier Series Estimator</i> <i>6. Area-Based Modeling of Specific and Sensitive Intervention Factors for Accelerating Stunting Reduction in East Java Province (An Analysis of the Fulfillment of One of the Targets of SDG 2: End All Forms of Malnutrition)</i> <i>7. 2022 ITS National Institutional Development Research Grant: Area-Based Modeling of Specific and Sensitive Intervention Factors for Accelerating Stunting Reduction in East Java Province (An Analysis of the Fulfillment of One of the Targets of SDG 2: End All Forms of Malnutrition)</i> <i>8. 2022 ITS Scientific Research Grant: Modeling Stunting Risk Among Toddlers in Probolinggo Regency Using the Bivariate Polynomial Ordinal Logistic Regression Approach</i> <i>2023 :</i> <i>1. 2023 Doctoral Dissertation Research Grant: Geographically Weighted Nonparametric Regression (GWNr) Model Using a Mixed Truncated Spline and Fourier Series Estimator</i> <i>2. 2023 Doctoral Dissertation Research Grant: Hypothesis Testing and Confidence Intervals for Parameters of a Mixed Fourier Series and Spline Model in Multivariable Nonparametric Regression</i> <i>3. 2023 ITS Department Research Grant (Batch 2): Modeling Poor Household Status in East Java Using Ordinal Probit and Zero-Inflated Ordered Probit</i>		

	4. <i>Modeling Poor Household Status in East Java Using Ordinal Probit and Zero-Inflated Ordered Probit</i> 5. <i>Mixed Truncated Spline and Local Linear Estimator Approach in Nonparametric Regression for Longitudinal Data to Model the Poverty Depth Index in Bengkulu Province</i> 6. <i>Bivariate Polynomial Logistic Regression Model Approach for Modeling Poverty Depth and Severity Levels on Java Island</i> 7. <i>Hypothesis Testing and Confidence Intervals for Parameters of a Mixed Fourier Series and Spline Model in Multivariable Nonparametric Regression</i> 8. <i>Geographically Weighted Nonparametric Regression (GWNRR) Model Using a Mixed Truncated Spline and Fourier Series Estimator</i> 9. <i>2023 ITS Scientific Research Grant: Mixed Truncated Spline and Local Linear Estimator Approach in Nonparametric Regression for Longitudinal Data to Model the Poverty Depth Index in Bengkulu Province</i> 10. <i>2023 ITS Scientific Research Grant (Batch 2): Bivariate Polynomial Logistic Regression Model Approach for Modeling Poverty Depth and Severity Levels on Java Island</i> 2024 : 1. <i>2024 Research Progress Report: Multivariable Fourier Series Nonparametric Regression Estimator for Categorical Data</i> 2. <i>2024 Research Progress Report: Confidence Intervals for Parameters of a Mixed Truncated Spline and Multivariable Fourier Series Semiparametric Regression Model</i> 3. <i>2024 Research Progress Report: Modeling Depression, Anxiety, and Stress Among Students Using a Multivariate Regression Approach</i> 4. <i>2024 Research Progress Report: Hypothesis Testing and Confidence Intervals in Multivariable Truncated Spline Nonparametric Regression for Categorical Data</i> 5. <i>2024 ITS Department Research Grant: Modeling Depression, Anxiety, and Stress Among Students Using a Multivariate Regression Approach</i> 6. <i>2024 Jatim Pro – PTNBH ITS Grant: Clustering, Mapping, and Modeling Area-Based Factors for Accelerating Stunting Reduction</i> 7. <i>2024 Master's to Doctorate for Superior Undergraduate Research Grant: Multivariable Fourier Series Nonparametric Regression Estimator for Categorical Data</i> 8. <i>2024 Master's to Doctorate for Superior Undergraduate Research Grant: Hypothesis Testing and Confidence Intervals in Multivariable Truncated Spline Nonparametric Regression for Categorical Data</i> 9. <i>2024 ITS Scientific Research Grant: Confidence Intervals for Parameters of a Mixed Truncated Spline and Multivariable Fourier Series Semiparametric Regression Model</i> 2025 : 1. <i>2025 Research Progress Report: Spatial Analysis of East Java's Agricultural Sector Support for Food Self-Sufficiency and SDG Achievement in the Post-Pandemic Period</i> 2. <i>2025 Research Progress Report: Modeling School Dropout Status in East Java Province Using the SMOTE-NC Ordinal Probit Approach</i>
--	---

	3. 2025 ITS Department Research Grant: Spatial Analysis of East Java's Agricultural Sector Support for Food Self-Sufficiency and SDG Achievement in the Post-Pandemic Period 4. 2025 ITS Department Research Grant: Modeling School Dropout Status in East Java Province Using the SMOTE-NC Ordinal Probit Approach 5. 2025 PFR Grant: Modeling National Food Security Using the Zero-Inflated Ordered Probit with Correlated Errors (ZIOPC) Approach 6. 2025 PMDSU Grant: Multivariable Fourier Series Nonparametric Regression Estimator for Categorical Data 7. 2025 PMDSU Grant: Hypothesis Testing and Confidence Intervals in Multivariable Truncated Spline Nonparametric Regression for Categorical Data 8. 2025 PTM Grant: Parameter Estimation and Hypothesis Testing in Zero-Inflated Ordered Probit with Correlated Errors Regression 9. 2025 ITS Inter-University Research Collaboration Grant: Ridge-Truncated Spline Estimator in Multivariable Semiparametric Regression 2026 : 1. 2026 Research Progress Report: Mixed Truncated Spline and Fourier Series Estimator in Multivariable Nonparametric Regression with Categorical Responses for Modeling Food Security Data of Regencies/Cities in Indonesia 2. 2026 Research Progress Report: Mixed Truncated Spline and Fourier Series Estimator in a Partial Linear Model with Categorical Responses for Food Security Data 3. 2026 Research Progress Report: Risk Factors for Child Stunting at the Regency/City Level: A Spatial Approach in East Nusa Tenggara Province 4. 2026 Research Progress Report: Achievement Status of Regional Poverty Percentage Targets in Indonesia Using a Semiparametric Probit Approach 5. 2026 Research Progress Report: Spatial Visibility and Surveillance Blind Spots in Elementary School Interiors: Space Syntax Analysis and Validation of Teachers' Perceptions in the Context of Bullying Risk 6. 2026 Research Progress Report: Navigation and Cognitive Load: A Comparative Analysis of Digital and Analog Wayfinding on the Formation of Space Memory in the Urban Heritage Area of Surabaya 7. 2026 Research Progress Report: Modeling the Gender Development Index in Kalimantan Island Using Truncated Spline Nonparametric Regression 8. 2026 Research Progress Report: Modeling Food-Secure Household Status in South Sulawesi Province Using Multilevel Binary Logistic Regression 9. 2026 Research Progress Report: Place Social Bonding at the Demak Mosque in Supporting the Sustainability of Historic Buildings 10. 2026 Research Progress Report: Resilience in Neuroarchitecture: The Relationship Between the Built Environment and the Adaptive Capacity of Communities Affected by Climate Change in Marginal Areas of Surabaya
Industry collaborations over the last 5 years	2022 : 1. Expert Consultant: "2021 Customer Satisfaction Survey"

	2. <i>2022 ITS Product-Based Community Service Grant: Development of Shopping and Educational Tourism Destinations in the Small Industry Sector in Prajurit Kulon, Mojokerto City</i> 3. <i>Research Roadmap Preparation Training for Lecturers at Universitas Darul Ulum Jombang</i> 4. <i>2022 ITS Community Service Grant: Study on the Provision and Distribution of Fuel in Relation to Fuel Operational Reserves, Joint Utilization of Storage Facilities, and Efforts to Prevent Fuel Shortages in Disadvantaged, Border, and Outermost Regions, Particularly Eastern Indonesia</i> 2023 : 1. <i>Expert Consultant: "2023 Customer Satisfaction Survey"</i> 2. <i>2023 ITS Thematic Community Service Grant (Department Fund): Training on the Integration of Statistical Methods in Classroom Action Research (CAR) for Teachers of SDI Bahrul-Ulum Surabaya</i> 2024 : 1. <i>"2024 ITS Community Service Grant: Applied Program in Information and Communication Technology (PRODISTIK)"</i> 2025 : 1. <i>2025 ITS Thematic Community Service Grant (Department Fund): Statistical Methods Training for Teachers of MAN 1 Pasuruan to Optimize Students' Data Analysis Skills in Madrasahs</i> 2. <i>2025 ITS Product-Based Community Service Grant: Capacity Building for Village Institutions in Developing Data for Evaluating the Achievement of Village SDGs in Mojokerto Regency, East Java</i> 3. <i>2025 ITS Thematic Community Service Grant (Department Fund): Training on Academic and Non-Academic Student Data Analysis Using Microsoft Excel-Based Statistical Methods for Teachers of SMA IPIEMS Surabaya</i> 2026 : 1. <i>2026 Community Service Progress Report: Strengthening the Capacity of Cantik Urban Villages in Presenting Statistical Data to Support Development Planning in Pohjentrek, Gadingrejo, and Mandaranrejo Urban Villages</i> 2. <i>2026 Community Service Progress Report: Strengthening Data Literacy in Cantik Urban Villages (Kencan) of Pasuruan City Through a Data Processing Training Program</i> Partners
Patents and proprietary rights	<i>"Data Analytics Training Video for Bank Syariah Indonesia (BSI) Region VIII Surabaya"</i> 2024 <i>"Integration of Statistical Methods in Classroom Action Research (CAR) Training for Teachers of SMA Dr. Soetomo"</i> 2024

	<i>Surabaya"</i> 2025 <i>"Infographic on the Free Nutritious Meals Program (MBG) in East Java"</i> 2025 <i>"Videographic on East Java Stunting Indicators: Who Needs More Attention?"</i> 2025 <i>"Infographic on the Free Nutritious Meals Program (MBG) in East Java"</i> 2025 <i>"Infographic on the 2024 Social Assistance Portrait of East Java Province"</i> 2025 <i>"Community Service Activity Video: Environmental Data Collection and Statistical Visualization as an Effort to Empower Independent Green Villages"</i> 2025 <i>"Video on Academic and Non-Academic Student Data Analysis Training Using Microsoft Excel-Based Statistical Methods for Teachers of SMA IPIEMS Surabaya"</i> 2025 <i>"Infographic on the Portrait of Violence Against Women in East Java"</i> 2026 <i>"Statistical Methods Training Video for Teachers of MAN 1 Pasuruan to Optimize Students' Data Analysis Skills in Madrasahs"</i>
Important publications over the last 5 years	2022 : 1. SCIK Publishing Corporation, <i>Communications in Mathematical Biology and Neuroscience (CMBN)</i>: "Parameter Estimation and Hypothesis Testing of the Second-Order Bivariate Binary Logistic Regression (S-BBLR) Model with Berndt Hall-Hall-Hausman (BHHH) Iterations" 2. MDPI: "A Truncated Spline and Local Linear Mixed Estimator in Nonparametric Regression for Longitudinal Data and Its Application" 3. "Bivariate Binary Logistic Regression with Fisher Scoring and BHHH Iteration"

	4. <i>"Parameter Estimation of the Bivariate Polynomial Ordinal Logistic Regression Model"</i> 2023 : - Elsevier: <i>"Statistical Modeling to Analyze Factors Affecting the Middle-Income Trap in Indonesia Using Panel Data Regression"</i> - ScienceDirect: <i>"A Method for Parameter Hypothesis Testing in Nonparametric Regression with Fourier Series Approach"</i> - MDPI: <i>"Estimation Curve of Mixed Spline Truncated and Fourier Series Estimator for Geographically Weighted Nonparametric Regression"</i> - MDPI: <i>"Parameter Estimation and Hypothesis Testing of the Bivariate Polynomial Ordinal Logistic Regression Model"</i> - INSIGHT: <i>"Mapping the Provincial Food Security Conditions in Indonesia Using Cluster Ensemble-Based Mixed Data Clustering-Robust Clustering with Links (CEBMDC-ROCK)"</i> <i>"Modeling and Simultaneous Hypothesis Testing in Nonparametric Regression with Mixture Model of Kernel and Fourier Series"</i> <i>"The Mixed Estimator of Truncated Spline and Local Linear in Multivariable Nonparametric Regression"</i> <i>"Properties of the Mixed Smoothing Spline and Fourier Series Estimators in Nonparametric Regression"</i> <i>"Parameter Estimation of Spline Truncated, Kernel, and Fourier Series Mixed Estimators in Semiparametric Regression"</i> <i>"Development of Educational Media Based on Cases of Diarrhea Causes Among Toddlers Treated at the Medical Center ITS in Keputih"</i> 2024 : - International Association of Engineers: <i>"Toward Sustainable Development Goals (SDGs) with Statistical Modeling: Recursive Bivariate Binary Probit"</i> - Creative Publishing House: <i>"The Effect of Buy Local Campaign and Consumer Ethnocentrism on Brand Love Among Indonesian Youth Consumers"</i> - Elsevier: <i>"Empowering Micro-Entrepreneurs Through Artificial Intelligence: A Conceptual Framework for AI-Based Marketing"</i> (30 April 2024) - Elsevier: <i>"Empowering Micro-Entrepreneurs Through Artificial Intelligence: A Conceptual Framework for AI-Based Marketing"</i> (1 January 2024) - Perkumpulan Rumah Cemerlang Indonesia: <i>"BTS Buku Tentang Statistika"</i> - Elsevier: <i>"Modelling of Poor Household in East Kalimantan Using Zero-Inflated Ordered Probit (ZIOP) Approach"</i> - AIP Conference Proceedings: <i>"Parameter Estimation and Hypothesis Testing of Bivariate Probit Models with BHHH Iteration"</i> <i>"Nonparametric Regression Estimator of Multivariable Fourier Series for Categorical Data"</i> <i>"Simultaneous Hypothesis Testing for Parameters of Spline Truncated Nonparametric Regression for Longitudinal Data"</i> <i>"Ridge-Spline Truncated Estimator in Multivariable Nonparametric Regression"</i>
--	--

	2025 : 1. <i>The Indonesian Mathematical Society: "Semiparametric Bivariate Probit Model of Early Breastfeeding Initiation and Exclusive Breastfeeding"</i> 2. <i>International Association of Engineers: "Semiparametric Regression Estimator of Fourier Series for Categorical Data"</i> 3. <i>AIP Publishing LLC: "Simultaneous Hypothesis Testing on Geographically Weighted Nonparametric Regression (A Case Study: Poverty Data in Sulawesi Island)"</i> 4. <i>LPPM Institut Bisnis dan Informatika Kesatuan: "Risk Assessment and Mitigation in Workplace Safety at Energy Distribution Company PT XYZ"</i> 5. <i>Institut Pendidikan Nusantara Global: "Application of Zero-Inflated Ordered Logit (ZIOL) (Case Study: The Employment Status of the Working-Age Population in Banten Province)"</i> 6. <i>Universitas Islam Indonesia: "A Zero-Inflated Ordered Probit Approach to Modeling Household Poverty Levels"</i> 7. <i>Department of Statistics, Faculty of Science and Mathematics, Universitas Diponegoro: "Estimator Campuran Spline Truncated dan Deret Fourier dalam Regresi Nonparametrik untuk Data Kategori"</i> 8. <i>Elsevier: "Explore Poverty with Statistical Modeling: The Bivariate Polynomial Binary Logit Regression (BPBLR)"</i> 9. <i>LPPM Institut Bisnis dan Informatika Kesatuan: "Key Factors Influencing Distributor Purchase Decisions for NPK Phonska Plus Fertilizer"</i> 10. <i>Institut Teknologi Sepuluh Nopember: "Integrasi Metode Statistika pada Penelitian Tindakan Kelas (PTK) bagi Guru SMA Dr. Soetomo Surabaya"</i> 11. <i>"The Curve Estimation Nonparametric Regression Multiresponse Mixed with Truncated Spline, Fourier Series, and Kernel"</i> 12. <i>"Estimasi Produksi Beras dengan Estimator Campuran Spline Truncated–Kernel di Jawa Timur"</i> 13. <i>"Fourier Series Nonparametric Regression Estimator for Modeling Status of Unmet Need in East Java Province in 2023"</i> 2026 : 1. <i>Pusat Studi Bahasa dan Publikasi Ilmiah: "Pelatihan Statistika bagi Guru MAN 1 Pasuruan untuk Meningkatkan Kemampuan Analisis Data Siswa"</i> 2. <i>Elsevier: "A Statistical Inference Framework for FSNBLR: Modeling Underdeveloped Regional Status in Eastern Indonesia"</i>
--	---

Activities in specialist bodies over the last 5 years	<i>"Big Data with Hadoop and Spark Training" (X)</i>	<i>Training</i>	<i>2023</i>
	<i>"New BNSP Competency Certification, LSP ITS" (LSP ITS with the National Professional Certification Agency [BNSP], Surabaya)</i>	<i>Competency Development Program</i>	<i>2024</i>
	<i>"Pelatihan Data Analyst Expert" (PT Humam Indonesia Manajemen Surabaya)</i>	<i>Training</i>	<i>2024</i>
	<i>"Data Analyst Expert Training" (PT Humam Indonesia Manajemen, Surabaya)</i>	<i>Competency Development Program</i>	<i>2024</i>
	<i>"Sertifikasi Microsoft Certified Azure Data Fundamentals" (PT Trust Surabaya)</i>	<i>Competency Development Program</i>	<i>2024</i>
	<i>"Microsoft Certified Azure Data Fundamentals Certification" (PT Trust, Surabaya)</i>	<i>Competency Development Program</i>	<i>2024</i>
	<i>"ITS Competency Assessor Training" (LSP ITS with the National Professional Certification Agency [BNSP], Surabaya)</i>	<i>Training</i>	<i>2024</i>
	<i>"Microsoft Azure Data Fundamentals Training" (PT Trust, Surabaya)</i>	<i>Training</i>	<i>2024</i>
	<i>"Webinar series – Powerful Counselling" (SDMO ITS Surabaya Surabaya)</i>	<i>Seminar</i>	<i>2024</i>
	<i>"Training of Trainer (ToT) on Sampling Techniques 2025" (Statistics Indonesia and FORSTAT, Center for Education and Training of Statistics Indonesia)</i>	<i>Training</i>	<i>2025</i>

	<i>"Awareness & Internal auditor of EOMS ISO 21001:2018 Training" (Total Quality Assured ITS)</i>	<i>Training</i>	<i>2025</i>
	<i>"Design and Development of E-Learning for myITS Classroom Training" (Directorate of Academic Development and Learning Innovation, ITS, Surabaya)</i>	<i>Training</i>	<i>2026</i>

Name	<i>Prof. Dr. Drs. I Nyoman Budiantara, M.Si.</i>		
Post	<i>Professor</i>		
Academic career	<i>Initial academic appointment</i> UGM <i>Habilitation [German post-doctoral qualification] (subject)</i> UGM <i>Doctorate (subject)</i> UGM		
Employment	<i>Lecturer</i> ITS 1989 <i>Professor</i> ITS 2008		
Research and development projects over the last 5 years	2022 : 1. <i>Mixed Truncated Spline and Fourier Series Estimator in Multiresponse Nonparametric Regression</i> 2. <i>Mixed Spline, Kernel, and Fourier Series Estimator in Multiresponse Nonparametric and Semiparametric Regression</i> 3. <i>2022 Basic Research Grant: Mixed Spline, Kernel, and Fourier Series Estimator in Multiresponse Nonparametric and Semiparametric Regression</i> 4. <i>Development of a Geoaddivitive Semiparametric Regression Machine Learning Model for Property Price Modeling in Surabaya Based on Marketplace Data</i> 5. <i>Geographically Weighted Nonparametric Regression (GWNr) Model Using a Mixed Truncated Spline and Fourier Series Estimator</i> 6. <i>2022 ITS Scientific Research Grant (Batch 2): Development of a Geoaddivitive Semiparametric Regression Machine Learning Model for Property Price Modeling in Surabaya Based on Marketplace Data</i> 7. <i>2022 Doctoral Dissertation Research Grant: Mixed Truncated Spline and Fourier Series Estimator in Multiresponse Nonparametric Regression</i> 8. <i>2022 Doctoral Dissertation Research Grant: Geographically Weighted Nonparametric Regression (GWNr) Model Using a Mixed Truncated Spline and Fourier Series Estimator</i> 2023 : 1. <i>Modeling Poor Household Status in East Java Using Ordinal Probit and Zero-Inflated Ordered Probit</i> 2. <i>Mixed Truncated Spline and Local Linear Estimator Approach in Nonparametric Regression for Longitudinal Data to Model the Poverty Depth Index in Bengkulu Province</i> 3. <i>Hypothesis Testing and Confidence Intervals for Parameters of a Mixed Fourier Series and Spline Model in Multivariable Nonparametric Regression</i> 4. <i>Geographically Weighted Nonparametric Regression (GWNr) Model Using a Mixed Truncated Spline and Fourier Series Estimator</i> 5. <i>2023 ITS Scientific Research Grant: Mixed Truncated Spline and Local Linear Estimator Approach in Nonparametric Regression for Longitudinal Data to Model the Poverty Depth Index in Bengkulu Province</i>		

	6. 2023 Doctoral Dissertation Research Grant: Geographically Weighted Nonparametric Regression (GWNr) Model Using a Mixed Truncated Spline and Fourier Series Estimator 7. 2023 Doctoral Dissertation Research Grant: Hypothesis Testing and Confidence Intervals for Parameters of a Mixed Fourier Series and Spline Model in Multivariable Nonparametric Regression 8. 2023 ITS Department Research Grant (Batch 2): Modeling Poor Household Status in East Java Using Ordinal Probit and Zero-Inflated Ordered Probit 2024 : 1. 2024 Research Progress Report: Multivariable Fourier Series Nonparametric Regression Estimator for Categorical Data 2. 2024 Research Progress Report: Confidence Intervals for Parameters of a Mixed Truncated Spline and Multivariable Fourier Series Semiparametric Regression Model 3. 2024 Research Progress Report: Modeling Depression, Anxiety, and Stress Among Students Using a Multivariate Regression Approach 4. 2024 Research Progress Report: Hypothesis Testing and Confidence Intervals in Multivariable Truncated Spline Nonparametric Regression for Categorical Data 5. 2024 Master's to Doctorate for Superior Undergraduate Research Grant: Multivariable Fourier Series Nonparametric Regression Estimator for Categorical Data 6. 2024 Master's to Doctorate for Superior Undergraduate Research Grant: Hypothesis Testing and Confidence Intervals in Multivariable Truncated Spline Nonparametric Regression for Categorical Data 7. 2024 ITS Scientific Research Grant: Confidence Intervals for Parameters of a Mixed Truncated Spline and Multivariable Fourier Series Semiparametric Regression Model 8. 2024 ITS Department Research Grant: Modeling Depression, Anxiety, and Stress Among Students Using a Multivariate Regression Approach 2025 : 1. 2025 Research Progress Report: Spatial Analysis of East Java's Agricultural Sector Support for Food Self-Sufficiency and SDG Achievement in the Post-Pandemic Period 2. 2025 PMDSU Grant: Hypothesis Testing and Confidence Intervals in Multivariable Truncated Spline Nonparametric Regression for Categorical Data 3. 2025 PFR Grant: Modeling National Food Security Using the Zero-Inflated Ordered Probit with Correlated Errors (ZIOPC) Approach 4. 2025 PMDSU Grant: Multivariable Fourier Series Nonparametric Regression Estimator for Categorical Data 5. 2025 ITS Inter-University Research Collaboration Grant: Ridge-Truncated Spline Estimator in Multivariable Semiparametric Regression 6. 2025 ITS Department Research Grant: Spatial Analysis of East Java's Agricultural Sector Support for Food Self-Sufficiency and SDG Achievement in the Post-Pandemic Period
--	---

	7. 2025 ITS Department Research Grant: Comparison of Categorical Data Truncated Spline Estimator and Binary Logistic Regression for Human Development Index Data in East Java 2026 : 1. 2026 Research Progress Report: Risk Factors for Child Stunting at the Regency/City Level: A Spatial Approach in East Nusa Tenggara Province 2. 2026 Research Progress Report: Modeling the Gender Development Index in Kalimantan Island Using Truncated Spline Nonparametric Regression 3. 2026 Research Progress Report: Modeling Food-Secure Household Status in South Sulawesi Province Using Multilevel Binary Logistic Regression 4. 2026 Research Progress Report: Achievement Status of Regional Poverty Percentage Targets in Indonesia Using a Semiparametric Probit Approach 5. 2026 Research Progress Report: Non-Communicable Disease Risk Analysis Using Statistical Modeling, Meta-Analysis, and Machine Learning Approaches as Promotive and Preventive Efforts in Indonesia 6. 2026 Research Progress Report: Mixed Truncated Spline and Fourier Series Estimator in Multivariable Nonparametric Regression with Categorical Responses for Modeling Food Security Data of Regencies/Cities in Indonesia 7. 2026 Research Progress Report: Mixed Truncated Spline and Fourier Series Estimator in a Partial Linear Model with Categorical Responses for Food Security Data
Industry collaborations over the last 5 years	2022 : 1. Research Roadmap Preparation Training for Lecturers at Universitas Darul Ulum Jombang 2023 : 1. 2023 ITS Thematic Community Service Grant (Department Fund): Training on the Integration of Statistical Methods in Classroom Action Research (CAR) for Teachers of SDI Bahrul-Ulum Surabaya 2025 : 1. 2025 ITS Product-Based Community Service Grant: Capacity Building for Village Institutions in Developing Data for Evaluating the Achievement of Village SDGs in Mojokerto Regency, East Java 2. 2025 ITS Thematic Community Service Grant (Department Fund): Training on Academic and Non-Academic Student Data Analysis Using Microsoft Excel-Based Statistical Methods for Teachers of SMA IPIEMS Surabaya 3. 2025 ITS Thematic Community Service Grant (Department Fund): Statistical Methods Training for Teachers of MAN 1 Pasuruan to Optimize Students' Data Analysis Skills in Madrasahs

	2026 : 1. <i>2026 Community Service Progress Report: Strengthening the Capacity of Cantik Urban Villages in Presenting Statistical Data to Support Development Planning in Pohjentrek, Gadingrejo, and Mandaranrejo Urban Villages</i> 2. <i>2026 Community Service Progress Report: Strengthening Data Literacy in Cantik Urban Villages (Kencan) of Pasuruan City Through a Data Processing Training Program</i> Partners
Patents and proprietary rights	<i>"A New Method for Regression Curve Estimation Using a Mixed Smoothing Spline and Kernel Model"</i> 2021 <i>"A Scientific Article Reviewing Methods and Algorithms for Solving Multiresponse Regression Problems Using Mixed Regression Curves Based on Spline and Fourier Series"</i> 2022 <i>"An Article Reviewing a Regression Curve Estimation Method Based on a Mixed Spline and Fourier Series Function for Regression Cases, Enabling the Analysis of Relationships Among Multiple Response Variables with Mixed Patterns, Along with the Corresponding Algorithms and Fourier Series for Multiresponse Regression"</i> 2022 <i>"Regression Curve Estimation Based on a Mixed Spline and Fourier Series for Multiresponse Regression"</i> 2022 <i>"Training on the Integration of Statistical Methods in Classroom Action Research (CAR) for Teachers of SMA Dr. Soetomo Surabaya"</i> 2024 <i>"Community Service Activity Video: Environmental Data Collection and Statistical Visualization as an Effort to Empower Independent Green"</i> 2025

	<i>Villages"</i> <i>"Video on Academic and Non-Academic Student Data Analysis Training Using Microsoft Excel-Based Statistical Methods for Teachers of SMA IPIEMS Surabaya"</i> 2025 <i>"East Java Natural Disaster Videographic 2024"</i> 2025 <i>"Statistical Methods Training Video for Teachers of MAN 1 Pasuruan to Optimize Students' Data Analysis Skills in Madrasahs"</i> 2026
Important publications over the last 5 years	2022 : 1. <i>Multidisciplinary Digital Publishing Institute (MDPI) : "Consistency and Asymptotic Normality of Estimator for Parameters in Multiresponse Multipredictor Semiparametric Regression Model"</i> 2. <i>MDPI : "A Truncated Spline and Local Linear Mixed Estimator in Nonparametric Regression for Longitudinal Data and Its Application."</i> 3. <i>"Curve Estimation and Estimator Properties of the Nonparametric Regression Truncated Spline with a Matrix Approach"</i> 4. <i>MDPI : "Modeling the Level of Drinking Water Clarity in Surabaya City Drinking Water Regional Company Using Combined Estimation of Multivariable Fourier Series and Kernel."</i> 5. <i>"Mixed estimators spline truncated, kernel, and Fourier series in nonparametric regression for longitudinal data"</i> 6. <i>"The Estimation of a Regression Curve by Using Mixed Truncated Spline and Fourier Series Models for Longitudinal Data."</i> 2023 : 1. <i>MDPI : "Estimation Curve of Mixed Spline Truncated and Fourier Series Estimator for Geographically Weighted Nonparametric Regression."</i> 2. <i>Science direct : "Determining Confidence Interval and Asymptotic Distribution for Parameters of Multiresponse Semiparametric Regression Model Using Smoothing Spline Estimator"</i> 3. <i>"Determining Confidence Interval and Asymptotic Distribution for Parameters of Multiresponse Semiparametric Regression Model Using Smoothing Spline Estimator"</i> 4. <i>"A method for parameter hypothesis testing in nonparametric regression with Fourier series approach"</i> 5. <i>"Modeling and Simultaneous Hypothesis Testing in Nonparametric Regression with Mixture Model of Kernel and Fourier Series"</i> 6. <i>"Mixed Estimators Spline Truncated, Kernel, and Fourier Series in Nonparametric Regression for Longitudinal Data"</i>

	7. <i>"Mixed Spline Truncated, Kernel, and Fourier Series Estimator in Biresponse Nonparametric Regression"</i> 8. <i>"Parameter Estimation of Spline Truncated, Kernel, and Fourier Series Mixed Estimators in Semiparametric Regression"</i> 9. <i>"Pembuatan Media Penyuluhan Berbasis Kasus Data Penyebab Diare pada Balita di Daerah Keputih yang Berobat di Medical Center ITS"</i> 10. <i>"Properties of the mixed smoothing spline and Fourier series estimators in nonparametric regression"</i> 11. <i>"Poverty gap index modeling in Bengkulu Province using truncated spline regression for longitudinal data"</i> 12. <i>"The New Estimation of Bi-response Nonparametric Regression Curve with Combined Estimators."</i> 13. <i>"The mixed estimator of truncated spline and local linear in multivariable nonparametric regression"</i> 14. <i>"The curve estimation of bi-response nonparametric regression using truncated spline on East Java SDGs achievement"</i> 15. <i>"The Estimation of Mixed Truncated Spline and Fourier Series Estimator in Bi-response Nonparametric Regression"</i> 16. <i>"The estimation of mixed truncated spline and Fourier series estimator in bi-response nonparametric regression"</i> 17. <i>Engineering Letters, 31:4, EL_31_4_34 : "Statistical Modeling: A New Regression Curve Approximation using Mixed Estimators Truncated Spline and Epanechnikov Kernel"</i> 18. <i>"Statistical Modeling: A New Regression Curve Approximation using Mixed Estimators Truncated Spline and Epanechnikov Kernel"</i> 19. <i>"Statistical Modeling: A New Regression Curve Approximation using Mixed Estimators Truncated Spline and Epanechnikov Kernel"</i> 20. <i>Engineering Letters, 31:4, EL_31_4_34 : "Statistical Modeling: A New Regression Curve Approximation using Mixed Estimators Truncated Spline and Epanechnikov Kernel"</i> 21. <i>"Teori Peluang"</i> 2024 : 1. <i>ScienceDirect: "A Method for Parameter Hypothesis Testing in Nonparametric Regression with Fourier Series Approach"</i> 2. <i>Perkumpulan Rumah Cemerlang Indonesia: "BTS: A Book About Statistics"</i> 3. <i>"Local Linear Estimator in the Generalized Poisson Regression Model"</i> 4. <i>"Estimation of Multiresponse Multipredictor Nonparametric Regression Model Using Mixed Estimator"</i> 5. <i>"Estimating the Number of Malaria Parasites on Blood Smears Microscopic Images Using Penalized Spline Nonparametric Poisson Regression"</i> 6. <i>"Estimation of Fourier Series Regression Curve on the Open Unemployment Rate Data in Indonesia in Multivariable Nonparametric Regression"</i> 7. <i>"Weight Estimation Using Generalized Moving Average and Its Visualization"</i> 8. <i>"Advanced Spatio-Temporal Modeling with Machine Learning for Strategic Food Price Prediction"</i> 9. <i>"Determination of the Best Geographic Weighted Function and Estimation of Spatio-Temporal Model – Geographically Weighted Panel Regression Using Weighted Least Squares"</i>
--	---

	10. <i>"Construction of a Geographically Weighted Nonparametric Regression Model Fit Test"</i> 11. <i>"Comparison of Optimal Knot Point Selection Method with Cross Validation and Generalized Cross Validation in Nonparametric Regression Truncated Spline Biresponse"</i> 12. <i>"Comparison of Selection of Optimal Knots Using Cross Validation and Generalized Cross Validation for Nonparametric Regression Truncated Spline Longitudinal Data"</i> 13. <i>"Andrea Tri Rian Dani"</i> 14. <i>"Analysis of Factors Affecting the Open Unemployment Rate (TPT) in Aceh Province Using Truncated Spline Nonparametric Regression"</i> 15. <i>"Semiparametric Regression Analysis in Cases of Missing Responses"</i> 16. Deepublish: <i>"Research Management with a Statistical Computing Approach"</i> 17. Deepublish: <i>"Research Management with a Statistical Computing Approach [Electronic Source]"</i> 18. <i>"Confidence Interval of Quadratic Spline Using the Pivotal Quantity Approach"</i> 19. <i>"Implementation of Data Mining and Spatial Mapping in Determining National Food Security Clusterization"</i> 20. <i>"Multivariable Semiparametric Regression with Combined Estimator of Truncated Spline and Fourier Series (Case Study: Mean Years of Schooling of Regencies in Java)"</i> 21. <i>"Modeling the Number of HIV Cases in Indonesia Using Negative Binomial Regression Based on Least Square Spline Estimator"</i> 22. <i>"Modeling the Number of Confirmed Cases of COVID-19 in East Java Using Negative Binomial Regression Based on Least Square Spline Estimator"</i> 23. <i>"Modeling the Percentage of Pneumonia Cases in Java Island Using Two Estimators of Nonparametric Regression for Longitudinal Data"</i> 24. <i>"Additive Nonparametric Regression Model with Link Function"</i> 25. <i>"Research in Spline Regression Toward the Realization of Independent and Character-Based Statistical Research"</i> 26. Directorate of Research and Community Service, Universitas Indonesia: <i>"Development of Technology Parameters for Shipbuilding Productivity Prediction Using a Cubic Spline Approach"</i> 27. <i>"Poverty Modeling with Spline Truncated, Fourier Series, and Mixed Estimator Geographically Weighted Nonparametric Regression"</i> 28. Surabaya: Institut Teknologi Sepuluh Nopember: <i>"Spline Nonparametric Regression Approach for Modeling Female Labor Force Participation Rate in East Java Province"</i> 29. Institute for Research and Community Service, Institut Teknologi Sepuluh Nopember: <i>"Estimation of Women's Fertility Model in Indonesia Using Spline Regression"</i> 30. <i>"Modeling the Gender Development Index in East Nusa Tenggara Province Using Truncated Spline Nonparametric Regression"</i> 31. <i>"Modeling the Number of Measles Cases in Indonesia Using Spline Nonparametric Regression"</i> 32. <i>"Modeling the Percentage of Pneumonia Case Detection Among Toddlers in Central Java Using Truncated Spline Nonparametric Regression"</i> 33. <i>"Modeling Fourier Series and Truncated Spline Regression in Multivariable Nonparametric Regression (Application: Poverty Data in Papua Province)"</i>
--	--

	34. Department of Statistics, ITS: "Modeling Factors Affecting the Number of Open Unemployed Using Spline Nonparametric Regression in Indonesia" 35. "Modeling Factors Affecting the Open Unemployment Rate in East Nusa Tenggara Province Using the Truncated Spline Nonparametric Regression Method" 36. "Selection of Optimal Knot Point and Best Geographic Weighted on Geographically Weighted Spline Nonparametric Regression Model Using Generalized Cross Validation and Kernel Function" 37. "Ridge-Spline Truncated Estimator in Multivariable Nonparametric Regression" 38. Springer: "Right-Censored Nonparametric Regression with Measurement Error" 39. "Selection of Optimal Knot Point and Best Geographic Weighted on Geographically Weighted Spline Nonparametric Regression Model" 40. Surabaya: ITS Press: "Truncated Spline Nonparametric Regression" 41. "Truncated Spline Nonparametric Regression for Modeling the Human Development Index in West Java" 42. Surabaya: "Spline Nonparametric Regression for Modeling the Open Unemployment Rate in West Java" 43. "Truncated Spline Regression in Linear Partial Model for Longitudinal Data" 44. "Variance-Covariance Matrix on Mixed Estimator of Spline Truncated, Kernel, and Fourier Series" 45. "The Performance of Mixed Truncated Spline-Local Linear Nonparametric Regression Model for Longitudinal Data" 46. Atlantis Press: "Theoretical Study of Fourier Series Estimator in Semiparametric Regression for Longitudinal Data Based on Weighted Least Square Optimization" 47. "Truncated Polynomial Spline Regression Multi-Response to Modeling Indicators of Poverty in East Java" 48. "The Form of Weighted Partial Spline Estimator in Semiparametric Model" 49. "Subanar, 1998. Weighted Spline Estimator" 50. "Spline Estimator in Nonparametric Ordinal Logistic Regression Model for Predicting Heart Attack Risk" 51. MethodsX: "Statistical Inference on Nonparametric Regression Model with Approximation of Fourier Series Function: Estimation and Hypothesis Testing" 52. "Simultaneous Hypothesis Testing for Parameters of Spline Truncated Nonparametric Regression for Longitudinal Data" 53. "Multiresponse Truncated Spline Nonparametric Regression Model for Longitudinal Data" 54. "Spline Model with Correlated Errors" 55. Bachelor's Final Project, Department of Statistics, Institut Teknologi Sepuluh Nopember: "Modeling Factors Affecting Infant Mortality Rate Using Spline Nonparametric Regression in North Sumatra" 56. "Modeling Factors Affecting the Gini Index in North Sumatra Province Using Truncated Spline Nonparametric Regression" 57. "On the Confidence Band of Local Likelihood Estimates in Generalized Poisson Regression Model" 58. "Non-Trend Fourier Series Estimator in Heteroscedastic Nonparametric Regression"
--	--

	59. <i>"Nonparametric Regression Estimator of Multivariable Fourier Series for Categorical Data"</i> 2025 : 1. AIP Publishing LLC: <i>"Confidence Interval for Mixed Parameters of Spline Truncated and Fourier Series in Nonparametric Regression Models"</i> 2. AIP Publishing LLC: <i>"Confidence Interval of Nonparametric Regression Parameters Fourier Series"</i> 3. AIP Publishing LLC: <i>"Estimation Confidence Interval for Mixed Models of Spline Truncated and Fourier Series in Semiparametric Regression"</i> 4. AG Editor (Argentina): <i>"Classification of Malaria Parasite Plasmodium Falciparum Based on Blood Smear Images Using Support Vector Machine Approach"</i> 5. Department of Statistics, Faculty of Science and Mathematics, Universitas Diponegoro: <i>"Estimator Campuran Spline Truncated dan Deret Fourier dalam Regresi Nonparametrik untuk Data Kategori"</i> 6. <i>"Factors Affecting the Percentage of Poor Population in East Java Using Truncated Spline Nonparametric Regression"</i> 7. <i>"Rice Production Estimation Using a Mixed Truncated Spline–Kernel Estimator in East Java"</i> 8. <i>"A Computational Analysis of Kernel-Based Nonparametric Regression Applied to Poverty Data"</i> 9. AIP Publishing LLC: <i>"Interval Estimation of Semiparametric Regression Parameters Fourier Series"</i> 10. Elsevier: <i>"Statistical Inference of Multivariable Fourier Series Nonparametric Regression Model for Categorical Data"</i> 11. Institut Teknologi Sepuluh Nopember: <i>"Integration of Statistical Methods in Classroom Action Research (CAR) for Teachers of SMA Dr. Soetomo Surabaya"</i> 12. <i>"I-Regs (Internet-Regression Analysis) as a Statistical Innovation in Nonparametric Regression Modeling"</i> 13. <i>"Fourier Series Nonparametric Regression Estimator for Modeling Status of Unmet Need in East Java Province in 2023"</i> 14. <i>"Multiresponse Nonparametric Regression Model with Mixed Estimator of Truncated Spline and Kernel for Poverty Indicators Analysis in Nusa Tenggara"</i> 15. <i>"Modeling Pulmonary Tuberculosis Cases Based on HIV and AIDS Cases in Indonesia Using Negative Binomial Regression Least Square Spline"</i> 16. <i>"Method for Modeling the Number of HIV and AIDS Cases Using Least Square Spline Biresponse Nonparametric Negative Binomial Regression"</i> 17. <i>"Nonparametric Regression Estimation Using Multivariable Truncated Splines for Binary Response Data"</i> 18. <i>"Nonparametric Regression Estimator of Multivariable Truncated Spline for Categorical Data"</i> 2026 : 1. Elsevier: <i>"A Statistical Inference Framework for FSNBLR: Modeling Underdeveloped Regional Status in Eastern Indonesia"</i> 2. MDPI (Basel, Switzerland): <i>"New Statistical Approach to Forecasting Earth's Skin Temperature from MERRA-2 Satellite Using Semiparametric Time Series Regression with Mixed Additive Spline Fourier (STSR-MASF)"</i> 3. Pusat Studi Bahasa dan Publikasi Ilmiah: <i>"Statistical Training for Teachers of MAN 1 Pasuruan to Improve Students' Data Analysis Skills"</i>
--	---

	4. <i>Growing Science: "Parameter Estimation in Mixed Estimator Nonparametric Regression-Spline Truncated and Fourier Series (MENR-SF) for Behavioral Factors of Prevalence of Heart Disease"</i> 5. <i>International Association of Engineers: "Semiparametric Regression Estimator of Fourier Series for Categorical Data"</i> 6. <i>Universidad de Santander: "Semiparametric Time Series Regression Using Exponential Complex Fourier Series for Temperature Prediction in the Tropical Rainforest of Samarinda"</i> 7. <i>"Selecting Optimal Knot Points and Oscillation Parameters Using Generalized Cross-Validation and Unbiased Risk Method in Nonparametric Regression of Combined Spline Truncated ..."</i> 8. <i>"Truncated Spline Regression for Binary Response: A Comparative Study of Nonparametric and Semiparametric Approaches"</i> 9. <i>"The Curve Estimation Nonparametric Regression Multiresponse Mixed with Truncated Spline, Fourier Series, and Kernel"</i> 10. <i>AIP Publishing LLC: "Simultaneous Hypothesis Testing on Geographically Weighted Nonparametric Regression (A Case Study: Poverty Data in Sulawesi Island)"</i>		
Activities in specialist bodies over the last 5 years	Lecturer Workload		2022
	Assessor		
	Training as a LAMSAMA Assessor (X)	Training	2023
	Study Program Accreditation Assessment Simulation Training, 003/LAMSAMA/IX/2025 (LAMSAMA Surabaya)	Training	2025
	Awareness & Internal Auditor (EOMS) ISO 21001:2018 Training (Intertek – Institut Teknologi Sepuluh Nopember)	Training	2025

Name	<i>Dr. Dra. Agnes Tuti Rumiati, M.Sc.</i>		
Post	<i>Non-Lecturer Educator</i>		
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] (subject) University of Sheffield</i> <i>Doctorate (subject) IPB</i>		
Employment	<i>Lecturer ITS 1985</i> <i>Senior Lecturer ITS 2023</i>		
Research and development projects over the last 5 years	<i>2022 :</i> <i>2022 Community Partnership Program: Integrated Utilization of Information Technology to Improve the Capacity of the Milk Product Start-Up in Pesanggrahan Village, Batu District, Batu City, East Java.</i> <i>2022 ITS National Institutional Development Research Grant: Area-Based Modeling of Specific and Sensitive Intervention Factors for Accelerating Stunting Reduction in East Java Province (An Analysis of the Fulfillment of One of the Targets of SDG 2: End All Forms of Malnutrition).</i> <i>Integrated Utilization of Information Technology to Improve the Capacity of the Milk Product Start-Up in Pesanggrahan Village, Batu District, Batu City, East Java.</i> <i>Area-Based Modeling of Specific and Sensitive Intervention Factors for Accelerating Stunting Reduction in East Java Province (An Analysis of the Fulfillment of One of the Targets of SDG 2: End All Forms of Malnutrition).</i> <i>2024 :</i> <i>2024 Jatim Pro – PTNBH ITS Grant: Clustering, Mapping, and Modeling Area-Based Factors for Accelerating Stunting Reduction.</i> <i>2025 :</i> <i>2025 ITS Department Research Grant: Modeling School Dropout Status in East Java Province Using the SMOTE-NC Ordinal Probit Approach.</i> <i>2025 Research Progress Report: Modeling School Dropout Status in East Java Province Using the SMOTE-NC Ordinal Probit Approach.</i> <i>2026 :</i> <i>2026 Research Progress Report: Sustainable Maritime Urban Development in Surabaya: ICZM, Maritime Culture, and Strategic Port Expansion for a National and International Hub.</i>		
Industry collaborations over the last 5 years	<i>2022 :</i> <i>2022 ITS Product-Based Community Service Grant: Partnership Model for Village Development, Case Study: Establishment of a Milk Processing Start-Up to Increase Youth Participation in Developing Pesanggrahan Village, Batu District, Batu City, East Java.</i>		

	2. <i>Research Roadmap Preparation Training for Lecturers at Universitas Darul Ulum Jombang.</i> 2023 : 1. <i>2023 ITS Thematic Community Service Grant (Department Fund): Training on the Integration of Statistical Methods in Classroom Action Research (CAR) for Teachers of SDI Bahrul-Ulum Surabaya.</i> 2. <i>2023 ITS Product-Based Community Service Grant: Development of a Smart Village Tourism Destination Based on Information Technology, Location: Batu Kumbung Village, Lingsar District, West Lombok Regency.</i> 2024 : 1. <i>2024 ITS Community Service Grant: Preparation of the Special Economic Zone Document for Tuban Regency.</i> 2. <i>Expert Consultant: Study on the Readiness of the Electric Vehicle and Charging Station Ecosystem in Indonesia.</i> 3. <i>2024 ITS Community Service Grant: Consultancy Services for the Preparation of SDG Evaluation Documents.</i> 4. <i>2024 ITS Community Service Grant: Study on the Potential Development of "Surabaya Waterfront Land" on the East Coast of Surabaya through 1,000-Hectare Reclamation.</i> 2025 : 1. <i>2025 ITS Thematic Community Service Grant (Department Fund): Statistical Methods Training for Teachers of MAN 1 Pasuruan to Optimize Students' Data Analysis Skills in Madrasahs.</i> 2. <i>2025 ITS Product-Based Community Service Grant: Capacity Building for Village Institutions in Developing Data for Evaluating the Achievement of Village SDGs in Mojokerto Regency, East Java.</i> 3. <i>2025 ITS Thematic Community Service Grant (Department Fund): Training on Academic and Non-Academic Student Data Analysis Using Microsoft Excel-Based Statistical Methods for Teachers of SMA IPIEMS Surabaya.</i> 2026 : 1. <i>2026 Community Service Progress Report: Strengthening the Capacity of Cantik Urban Villages in Presenting Statistical Data to Support Development Planning in Pohjentrek, Gadingrejo, and Mandaranrejo Urban Villages.</i> 2. <i>2026 Community Service Progress Report: Strengthening Data Literacy in Cantik Urban Villages (Kencan) of Pasuruan City Through a Data Processing Training Program.</i> Partners
Patents and proprietary rights	<i>ITS Alma Mater Jacket Design</i> 2018

<i>Video: Partnership Model for Village Development, Case Study: Establishment of a Milk Processing Start-Up to Increase Youth Participation in Developing Pesanggrahan Village, Batu District, Batu City, East Java / Video Recording Work</i>	2022
<i>Video Documentation of Product-Based Community Service: Hoax Clinic Video</i>	2022
<i>Public Service Advertisement Video, Musical Genre, with the Theme of the Hoax Clinic Campaign Owned by the East Java Ministry of Communication and Informatics</i>	2022
<i>Video Kabar Nyata Saja</i>	2022
<i>Data Analytics Training Video for Bank Syariah Indonesia (BSI) Region VIII Surabaya</i>	2024
<i>Poster Survey 911</i>	2024
<i>Poster MarketMinder</i>	2024
<i>Video MarketMinder</i>	2024
<i>Video Survey 911</i>	2024
<i>TanyaMata</i>	2024
<i>Training on the Integration of Statistical Methods in Classroom Action Research (CAR) for Teachers of SMA Dr. Soetomo Surabaya</i>	2024
<i>Training Video: 1,000 East Java MSME Products Ready for Export</i>	2025
<i>Training Video on Academic and Non-Academic Student Data Analysis Using Microsoft Excel-Based Statistical Methods for Teachers of SMA IPIEMS Surabaya</i>	2025
<i>Community Service Activity Video: Environmental Data</i>	2025

	<i>Collection and Statistical Visualization as an Effort to Empower Independent Green Villages</i> <i>Statistical Methods Training Video for Teachers of MAN 1 Pasuruan to Optimize Students' Data Analysis Skills in Madrasahs</i> 2026
Important publications over the last 5 years	2022 : 1. <i>Center for Strategic Studies in Business & Finance: "Mapping Model for Target Achievement of Village SDGs Using the Ensemble ROCK Method: A Case Study of Sidoarjo Regency, East Java."</i> 2023 : 1. <i>e187494452301030: "Imbalanced Data Analysis of Adolescent Unintended Pregnancy and Pre-Marital Sex Using Univariate and Bivariate Random Forest."</i> 2. <i>Journal Publishing Under License CC-BY 4.0: "Imbalanced Data Analysis of Adolescent Unintended Pregnancy and Pre-Marital Sex Using Univariate and Bivariate Random Forest."</i> 3. <i>INSIGHT – Indonesian Society for Knowledge and Human Development: "ANOVA Decomposition and Importance Variable Process in Multivariate Adaptive Regression Spline Model."</i> 4. <i>Directorate of Research and Community Service (DRPM) ITS: "Higher Education–Village Partnership Model to Improve the Capacity of the Milk Product Start-Up in Pesanggrahan Village, Batu District, Batu City, East Java."</i> 5. <i>"Benchmarking Hierarchical Bayesian Small Area Estimators in the Percentage of Poverty at Sub-Districts Level in Central Java."</i> 6. <i>"Development of Educational Media Based on Data Cases of the Causes of Diarrhea Among Toddlers Treated at the ITS Medical Center in Keputih."</i> 2024 : 1. <i>Universitas Cokroaminoto: "Service and Marketing Strategies through Data Analytics Training at Bank X."</i> 2. <i>Springer, Singapore: "Small Area Estimation of Mean Years of Schooling Under Time Series and Cross-Sectional Models."</i> 3. <i>AIP Publishing (AIP Conference Proceedings): "Small Area Estimation of Poverty Severity Index for Kecamatan (Sub-District) in Surabaya City in 2020 Using Empirical Best Linear Unbiased Prediction Method."</i> 4. <i>IEEE: "Modified Marked Log-Gaussian Cox Process for High-Resolution Prediction of Per Capita Expenditure in Badung Regency."</i> 5. <i>AIP Publishing: "Empirical Best Linear Unbiased Predictions of Small Area Estimation with Panel Data for Estimating Household Consumption Per Capita Expenditure."</i> 2025 : 1. <i>Elsevier: "Small Area Estimation of Consumption Per Capita Expenditure Under Simultaneous Equation Rao-Yu Model."</i>

	2. <i>Institut Teknologi Sepuluh Nopember: "Integration of Statistical Methods in Classroom Action Research (CAR) for Teachers of SMA Dr. Soetomo Surabaya."</i> 3. <i>"Assistance in Improving the Capacity of Human Resources for Planning Personnel at BAPPEDA LITBANG of Tuban Regency."</i> 2026 : 1. <i>Center for Language Studies and Scientific Publication: "Statistics Training for Teachers of MAN 1 Pasuruan to Improve Students' Data Analysis Skills."</i> 2. <i>AIP Publishing LLC: "Marked Log-Gaussian Cox Process (LGCP) to Predict Household Per Capita Expenditure in Badung Regency."</i> 3. <i>Sewagati: "East Java MSME Product Export Training Movement."</i>		
Activities in specialist bodies over the last 5 years	<i>Organisation</i>	<i>Role</i>	<i>Period</i>

Name	<i>Dr. Dra. Ismaini Zain, M.Si.</i>		
Post	<i>Non-Teaching Lecturer</i>		
Academic career	<i>Initial academic appointment</i>	<i>ITS</i>	
	<i>Habilitation [German post-doctoral qualification] (subject)</i>	<i>UGM</i>	
	<i>Doctorate (subject)</i>	<i>UGM</i>	
Employment	<i>Lecturer</i>	<i>ITS</i>	<i>1988</i>
	<i>Senior Lecturer</i>	<i>ITS</i>	<i>2023</i>
Research and development projects over the last 5 years	<i>2022 :</i> <i>2022 ITS National Institutional Development Research Grant: Area-Based Modeling of Specific and Sensitive Intervention Factors for Accelerating Stunting Reduction in East Java Province (An Analysis of the Fulfillment of One of the Targets of SDG 2: End All Forms of Malnutrition).</i> <i>2022 ITS National Institutional Development Research Grant: Clustering of Regencies/Cities in East Java Province Based on the Variables Constituting the Public Health Development Index (IPKM) as a Basis for Evaluating the Achievement of SDGs.</i> <i>2022 Doctoral Dissertation Research Grant: Mixed Truncated Spline and Fourier Series Estimator in Multivariable Nonparametric Regression.</i> <i>Area-Based Modeling of Specific and Sensitive Intervention Factors for Accelerating Stunting Reduction in East Java Province (An Analysis of the Fulfillment of One of the Targets of SDG 2: End All Forms of Malnutrition).</i> <i>Clustering of Regencies/Cities in East Java Province Based on the Variables Constituting the Public Health Development Index (IPKM) as a Basis for Evaluating the Achievement of SDGs.</i> <i>Mixed Truncated Spline and Fourier Series Estimator in Multivariable Nonparametric Regression.</i> <i>2023 :</i> <i>2023 ITS National Institutional Development Research Grant: Analysis of the Clustering of Regencies/Cities in East Nusa Tenggara Province Based on Livable Housing Indicators as a Basis for Evaluating the Achievement of SDG Targets.</i> <i>2023 ITS National Institutional Development Research Grant: Determination of the Weights of Components Determining Area-Based Stunting Prevalence as a Proposal for Developing an Area-Based Stunting Management Index (IPS) as an Early Warning System for Stunting Problems.</i> <i>Determination of the Weights of Components Determining Area-Based Stunting Prevalence as a Proposal for Developing an Area-Based Stunting Management Index (IPS) as an Early Warning System for Stunting Problems.</i>		

	4. <i>Analysis of the Clustering of Regencies/Cities in East Nusa Tenggara Province Based on Livable Housing Indicators as a Basis for Evaluating the Achievement of SDG Targets.</i> 2024 : 1. <i>2024 ITS Institutional Development Research Grant: Further Analysis of the Formation of Weights for Components Determining Area-Based Stunting Prevalence at the Regency/City Level in Indonesia for the Development of an Area-Based Stunting Management Index (IPS) as an Early Warning System for Stunting Problems.</i> 2. <i>2024 ITS Department Research Grant: Clustering and Mapping of Regencies/Cities in Papua Province Based on Health Development Indicators as an Effort to Achieve the Third SDG.</i> 3. <i>2024 ITS Independent Research Grant: Formulation of Community Resilience as Capital for the Development of Life-Cycle Heritage Tourism in Peneleh Village, Surabaya.</i> 4. <i>2024 ITS Independent Research Grant: The Relationship Between the Jamasan Ritual of Heirlooms and the Beliefs of the Aeng Tong-Tong Village Community as Input for the Development of Spiritual Tourism in Indonesia.</i> 5. <i>2024 ITS Independent Research Grant: Exploring the Gender Equality Values of the Osing Ethnic Group to Achieve Sustainable Village Development.</i> 6. <i>2024 ITS Independent Research Grant: Development of Residential Areas Around the ITS Campus Affected by Studentification Using the Defensible Space Approach.</i> 7. <i>2024 ITS Independent Research Grant: Assessment of the Quality of Vastenburg Fortress Site as an Effort to Preserve Historic Public Spaces in Surakarta City Based on User Perceptions.</i> 8. <i>2024 ITS Independent Research Grant: Exploring the Potential of Puncu Village Using a Participatory Mapping Approach to Support Disaster Mitigation-Based Ecotourism.</i> 9. <i>2024 Jatim PRO – PTNBH ITS Grant: Clustering, Mapping, and Modeling Area-Based Factors for Accelerating Stunting Reduction.</i> 10. <i>2024 ITS Independent Research Grant: The Existence of Kampung Kendang Sentul Tanggung, an Icon of Blitar City, in Preserving Mataraman Kendang Reog from a Sociocultural and Economic Perspective.</i> 11. <i>2024 Research Progress Report: Further Analysis of the Formation of Weights for Components Determining Area-Based Stunting Prevalence at the Regency/City Level in Indonesia for the Development of an Area-Based Stunting Management Index (IPS) as an Early Warning System for Stunting Problems.</i> 2025 : 1. <i>2025 PFR Grant: Modeling National Food Security Using the Zero-Inflated Ordered Probit with Correlated Errors (ZIOPC) Approach.</i> 2. <i>2025 Research Progress Report: Statistical Mapping and Modeling of Determinants of Access to and Use of Modern Contraception: A Study of the Achievement of SDG Indicator 3.7 in East Java.</i>
--	--

Industry collaborations over the last 5 years	2022 : 1. 2022 ITS Product-Based Community Service Grant: Development of Shopping and Educational Tourism Destinations in the Small Industry Sector in Prajurit Kulon, Mojokerto City. 2. Research Roadmap Preparation Training for Lecturers at Universitas Darul Ulum Jombang. 2023 : 1. 2023 ITS Thematic Community Service Grant (Department Fund): Training on the Integration of Statistical Methods in Classroom Action Research (CAR) for Teachers of SDI Bahrul-Ulum Surabaya. 2024 : 1. 2024 ITS Community Service Grant: Applied Program in Information and Communication Technology (PRODISTIK). 2025 : 1. 2025 ITS Thematic Community Service Grant (Department Fund): Training on Academic and Non-Academic Student Data Analysis Using Microsoft Excel-Based Statistical Methods for Teachers of SMA IPIEMS Surabaya. 2. 2025 ITS Thematic Community Service Grant (Department Fund): Statistical Methods Training for Teachers of MAN 1 Pasuruan to Optimize Students' Data Analysis Skills in Madrasahs. 3. 2025 ITS Product-Based Community Service Grant: Capacity Building for Village Institutions in Developing Data for Evaluating the Achievement of Village SDGs in Mojokerto Regency, East Java. 2026 : 1. 2026 Community Service Progress Report: Strengthening the Capacity of Cantik Urban Villages in Presenting Statistical Data to Support Development Planning in Pohjentrek, Gadingrejo, and Mandaranrejo Urban Villages. 2. 2026 Community Service Progress Report: Strengthening Data Literacy in Cantik Urban Villages (KENCAN) of Pasuruan City Through a Data Processing Training Program. Partners
Patents and proprietary rights	"Smart Edu Community: Development and Implementation of a Web-Sharing Platform to Provide Digital Literacy Skills for Teenagers of Karang Taruna, Putat Jaya Urban Village, Surabaya" 2020 "The Difference Between Rapid Tests and Swab Tests" 2021 "Video Work: "Basic Two-Wheeled Vehicle Maintenance Training – RW 06 Kupang Gunung Timur, Putat Jaya, Surabaya," documenting Community Service and Community Service Program" 2021

	<i>(KKN) activities conducted as an effort to fulfill the Tri Dharma obligations inherent in the main duties and functions (TUPOKSI) of lecturers. The video has a duration of 5 minutes and is an output of the KKN Community Service activity entitled "Smart Edu Community: Job Readiness Training Through Blended Training for School Dropout Teenagers"</i>	
	<i>"An Academic Article Discussing Methods and Algorithms for Solving Multiresponse Regression Problems Using or Based on a Combined Regression Curve of Spline and Fourier Series"</i>	2022
	<i>"Regression Curve Estimation Based on a Combined Spline and Fourier Series for Multiresponse Regression"</i>	2022
	<i>"Data Analytics Training Video for Bank Syariah Indonesia (BSI) Region VIII Surabaya"</i>	2024
	<i>"Training on the Integration of Statistical Methods in Classroom Action Research (CAR) for Teachers of SMA Dr. Soetomo Surabaya"</i>	2024
	<i>"Effectiveness of Assistance Through the Utilization of the Electronic Ready for Marriage and Ready for Pregnancy Application (ELSIMIL) in Efforts to Accelerate Stunting Reduction"</i>	2024
	<i>"Training Video on Academic and Non-Academic Student Data Analysis Using Microsoft Excel-Based Statistical Methods for Teachers of SMA IPIEMS Surabaya"</i>	2025
	<i>"Community Service Activity Video: Environmental Data Collection and Statistical Visualization as an Effort to Empower Independent Green Villages"</i>	2025
	<i>"Three-Dimensional Distortion Visualization Dashboard"</i>	2025
	<i>"Statistical Methods Training Video for Teachers of MAN 1 Pasuruan to Optimize Students' Data Analysis Skills in Madrasahs"</i>	2026

Important publications over the last 5 years	2022 : 1. MDPI: "Modeling the Level of Drinking Water Clarity in Surabaya City Drinking Water Regional Company Using Combined Estimation of Multivariable Fourier Series and Kernel." 2. Faculty of Public Health, Universitas Airlangga: "Analysis of the Relationship Between Characteristics of Teenagers and Family Functions on Teenagers' Behavior for Consuming Drugs in East Java." 2023 : 1. "The Curve Estimation of Bi-Response Nonparametric Regression Using Truncated Spline on East Java SDGs Achievement." 2. "The New Estimation of Bi-Response Nonparametric Regression Curve with Combined Estimators." 3. Journal Publishing Under License CC-BY 4.0: "Imbalanced Data Analysis of Adolescent Unintended Pregnancy and Pre-Marital Sex Using Univariate and Bivariate Random Forest." 4. "Analysis of Unintended Pregnancy Factors on Women of Reproductive Age in East Java Using Logistic Regression with SMOTE-N." 5. Growing Science: "A Modified Generalized Estimating Equation Approach for Simultaneous Spatial Durbin Panel Model: Case Study of Economic Growth in ASEAN Countries." 6. "Development of Educational Media Based on Data Cases of the Causes of Diarrhea Among Toddlers Treated at the ITS Medical Center in Keputih." 2024 : 1. Elsevier : "Predicting household per capita expenditure by using log-normal regression in Poso Regency Central Sulawesi" 2. "Multivariable Semiparametric Regression with Combined Estimator of Truncated Spline and Fourier Series (Case Study: Mean Years Schooling of Regency in Java)" 3. "An Evaluation of a MOOC Program on English for Non-Academic University Staff" Tahun 2025 : 1. The Indonesian Mathematical Society: "Semiparametric Bivariate Probit Model Early Breastfeeding Initiation and Exclusive Breastfeeding." 2. Institut Teknologi Sepuluh Nopember: "Integration of Statistical Methods in Classroom Action Research (CAR) for Teachers of SMA Dr. Soetomo Surabaya." 3. AIP Publishing LLC: "Interval Estimation of Semiparametric Regression Parameters Fourier Series." 4. AIP Publishing LLC: "Confidence Interval of Nonparametric Regression Parameters Fourier Series." 5. "Multiresponse Nonparametric Regression Model with Mixed Estimator of Truncated Spline and Kernel for Poverty Indicators Analysis in Nusa Tenggara." Tahun 2026 : 1. Center for Language Studies and Scientific Publication: "Statistics Training for Teachers of MAN 1 Pasuruan to Improve Students' Data Analysis Skills."
---	---

Activities in specialist bodies over the last 5 years	<i>Lecturer Workload Assessor</i>		2022
	<i>Open edX Platform Usage Training (M)</i>	<i>Training</i>	2022
	<i>Book Writing Workshop (I)</i>	<i>Training</i>	2023
	<i>Microsoft Power BI Data Analyst (X)</i>	<i>Training</i>	2023
	<i>Azure Data Fundamentals (Trust Surabaya)</i>	<i>Training</i>	2024
	<i>Benchmarking and Training Programme with ACER (ACER Australia)</i>	<i>Competency Development Program</i>	2024

Name	<i>Erma Oktania Permatasari, S.Si, M.Si.</i>
Post	<i>Lecturer</i>
Academic career	<i>Initial academic appointment ITS</i> <i>Habilitation [German post-doctoral qualification] (subject) ITS</i>
Employment	<i>Lecturer ITS 2014</i>
Research and development projects over the last 5 years	<i>2022 :</i> <i>2022 ITS National Institutional Development Research Grant: Clustering of Regencies/Cities in East Java Province Based on the Variables Constituting the Public Health Development Index (IPKM) as a Basis for Evaluating the Achievement of SDGs.</i> <i>2022 ITS National Institutional Development Research Grant: Area-Based Modeling of Specific and Sensitive Intervention Factors for Accelerating Stunting Reduction in East Java Province (An Analysis of the Fulfillment of One of the Targets of SDG 2: End All Forms of Malnutrition).</i> <i>Area-Based Modeling of Specific and Sensitive Intervention Factors for Accelerating Stunting Reduction in East Java Province (An Analysis of the Fulfillment of One of the Targets of SDG 2: End All Forms of Malnutrition).</i> <i>Clustering of Regencies/Cities in East Java Province Based on the Variables Constituting the Public Health Development Index (IPKM) as a Basis for Evaluating the Achievement of SDGs.</i> <i>2023 :</i> <i>2023 ITS National Institutional Development Research Grant: Determination of the Weights of Components Determining Area-Based Stunting Prevalence as a Proposal for Developing an Area-Based Stunting Management Index (IPS) as an Early Warning System for Stunting Problems.</i> <i>2023 ITS National Institutional Development Research Grant: Analysis of the Clustering of Regencies/Cities in East Nusa Tenggara Province Based on Livable Housing Indicators as a Basis for Evaluating the Achievement of SDG Targets.</i> <i>Determination of the Weights of Components Determining Area-Based Stunting Prevalence as a Proposal for Developing an Area-Based Stunting Management Index (IPS) as an Early Warning System for Stunting Problems.</i> <i>Analysis of the Clustering of Regencies/Cities in East Nusa Tenggara Province Based on Livable Housing Indicators as a Basis for Evaluating the Achievement of SDG Targets.</i> <i>2024 :</i> <i>2024 ITS Institutional Development Research Grant: Further Analysis of the Formation of Weights for Components Determining Area-Based Stunting Prevalence at the Regency/City Level in Indonesia for the Development of an Area-Based Stunting Management Index (IPS) as an Early Warning System for Stunting Problems.</i>

	2024 ITS Department Research Grant: Clustering and Mapping of Regencies/Cities in Papua Province Based on Health Development Indicators as an Effort to Achieve the Third SDG. 2024 Jatim PRO – PTNBH ITS Grant: Clustering, Mapping, and Modeling Area-Based Factors for Accelerating Stunting Reduction. 2024 Research Progress Report: Further Analysis of the Formation of Weights for Components Determining Area-Based Stunting Prevalence at the Regency/City Level in Indonesia for the Development of an Area-Based Stunting Management Index (IPS) as an Early Warning System for Stunting Problems. 2025 : 2025 Research Progress Report: Statistical Mapping and Modeling of Determinants of Access to and Use of Modern Contraception: A Study of the Achievement of SDG Indicator 3.7 in East Java.
Industry collaborations over the last 5 years	2022 : - Research Roadmap Preparation Training for Lecturers at Universitas Darul Ulum Jombang. 2022 ITS Product-Based Community Service Grant: Master Plan for the Development of Nature and Educational Tourism Destinations in Petak Village, Pacet District, Mojokerto Regency, East Java. 2023 : 2023 ITS Product-Based Community Service Grant: Development of a Smart Village Tourism Destination Based on Information Technology, Location: Batu Kumbung Village, Lingsar District, West Lombok Regency. 2023 ITS Thematic Community Service Grant (Department Fund): Training on the Integration of Statistical Methods in Classroom Action Research (CAR) for Teachers of SDI Bahrul-Ulum Surabaya. Partners
Patents and proprietary rights	Data Analytics Training Video for Bank Syariah Indonesia (BSI) Region VIII Surabaya 2024 Training on the Integration of Statistical Methods in Classroom Action Research (CAR) for Teachers of SMA Dr. Soetomo Surabaya 2024
Important publications over the last 5 years	2022 : "Analysis of Factors Affecting Poverty Depth Index in Papua Province Using Panel Data Regression." - Faculty of Public Health, Universitas Airlangga: "Analysis of the Relationship Between Characteristics of Teenagers and Family Functions on Teenagers' Behavior for Consuming Drugs in East Java." "Panel Data Regression Modeling of Net Enrollment Rate at Senior High School/Equivalent Levels in NTT Province 2015–2019."

	2023 : 1. <i>"Development of Educational Media Based on Data Cases of the Causes of Diarrhea Among Toddlers Treated at the ITS Medical Center in Keputih."</i> 2. <i>"Imbalanced Data Analysis of Adolescent Unintended Pregnancy and Pre-Marital Sex Using Univariate and Bivariate Random Forest."</i> 3. <i>"Imbalanced Data Analysis of Adolescent Unintended Pregnancy and Pre-Marital Sex Using Univariate and Bivariate Random Forest."</i> 4. <i>"Analysis of Unintended Pregnancy Factors on Women of Reproductive Age in East Java Using Logistic Regression with SMOTE-N."</i> 2024 : 1. <i>"Panel Data Regression Approach for Analysis of the Open Unemployment Rate in Indonesia."</i> 2025 : 1. <i>Institut Teknologi Sepuluh Nopember: "Integration of Statistical Methods in Classroom Action Research (CAR) for Teachers of SMA Dr. Soetomo Surabaya."</i>		
Activities in specialist bodies over the last 5 years	Database Administrator		2023
	Kompetensi Skema Database Administrator		2023
	Introduction to Microsoft SQL Server Database	Pelatihan	2023

Name	<i>Husna Mir'atin Nuroini, S.Stat., M.Stat.</i>
Post	<i>Assistant Expert</i>
Academic career	<i>Initial academic appointment UB</i> <i>Habilitation [German post-doctoral qualification] (subject) ITS</i>
Employment	<i>Lecturer ITS 2023</i>
Research and development projects over the last 5 years	<i>2024 :</i> <i>2024 Research Progress Report: Modeling Student Depression, Anxiety, and Stress Using a Multivariate Regression Approach.</i> <i>2024 JATIM PRO – PTNBH ITS Grant: Clustering, Mapping, and Modeling Area-Based Factors for Accelerating Stunting Reduction.</i> <i>2024 ITS Self-Funded Research Grant: Spatial Extreme Value Analysis Using the Extremal-t Process Approach for Extreme Rainfall.</i> <i>2024 ITS Self-Funded Research Grant: Comparison of Max-Stable Processes Methods in Spatial Extreme Value Analysis.</i> <i>2024 ITS Department Research Grant: Modeling Student Depression, Anxiety, and Stress Using a Multivariate Regression Approach.</i> <i>2025 :</i> <i>2025 Research Progress Report: Spatial Analysis of the Agricultural Sector's Support for Food Self-Sufficiency and SDG Achievement in East Java in the Post-Pandemic Period.</i> <i>2025 Research Progress Report: Statistical Mapping and Modeling of Determinants of Access to and Use of Modern Contraception: A Study of the Achievement of SDG Indicator 3.7 in East Java.</i> <i>2026 :</i> <i>2026 Research Progress Report: Risk Factors for Child Stunting at the Regency/City Level: A Spatial Approach in East Nusa Tenggara Province.</i> <i>2026 Research Progress Report: Modeling the Gender Development Index in Kalimantan Island Using Truncated Spline Nonparametric Regression.</i> <i>2026 Research Progress Report: Modeling Household Food Security Status in South Sulawesi Province Using Multilevel Binary Logistic Regression.</i>
Industry collaborations over the last 5 years	<i>2025 :</i> <i>2025 ITS Product-Based Community Service Grant: Capacity Building for Village Institutions in Developing Data for Evaluating the Achievement of Village SDGs in Mojokerto Regency, East Java.</i> <i>2025 ITS Thematic Community Service Grant (Department Funding): Training on Academic and Non-Academic Student Data Analysis Using Microsoft Excel-Based Statistical Methods for Teachers of SMA IPIEMS Surabaya.</i> <i>2025 ITS Thematic Community Service Grant (Department Funding): Statistical Methods Training for Teachers of MAN 1 Pasuruan to Optimize Student Data Analysis Skills in Madrasahs.</i>

	2026 : 1. 2026 Community Service Progress Report: Strengthening the Capacity of Cantik Urban Villages in Presenting Statistical Data to Support Development Planning in Pohjentrek, Gadingrejo, and Mandaranrejo Urban Villages. 2. 2026 Community Service Progress Report: Strengthening Data Literacy in Cantik (Kencan) Urban Villages of Pasuruan City Through a Data Processing Training Program. Partners
Patents and proprietary rights	<i>Data Analytics Training Video for Bank Syariah Indonesia (BSI) Region VIII Surabaya</i> 2024 <i>"Training on the Integration of Statistical Methods in Classroom Action Research (CAR) for Teachers of SMA Dr. Soetomo Surabaya"</i> 2024 <i>"East Java Natural Disaster Videographic Documentation"</i> 2025 <i>"Community Service Activity Video: Environmental Data Collection and Statistical Visualization as an Effort to Empower Kampung Hijau Mandiri"</i> 2025 <i>"Training Video on Academic and Non-Academic Student Data Analysis Using Microsoft Excel-Based Statistical Methods for Teachers of SMA IPIEMS Surabaya"</i> 2025 <i>"Statistical Methods Training Video for Teachers of MAN 1 Pasuruan to Optimize Student Data Analysis Skills in Madrasahs"</i> 2026
Important publications over the last 5 years	2024 : 1. Universitas Cokroaminoto: "Service and Marketing Strategies Through Data Analytics Training at Bank X." 2025 : 1. Department of Statistics ITS: "Deep Learning and Statistical Approaches for Forecasting the Indonesian Rupiah Exchange Rate."

	2. <i>Institut Teknologi Sepuluh Nopember: "Integration of Statistical Methods in Classroom Action Research (CAR) for Teachers of SMA Dr. Soetomo Surabaya."</i> 3. <i>Inferensi: "Spatial Extreme Value Analysis of Extreme Rainfall Using the Extremal-t Process."</i> 2026 : 1. <i>Center for Language Studies and Scientific Publications: "Statistics Training for Teachers of MAN 1 Pasuruan to Improve Students' Data Analysis Skills."</i>
--	---

Activities in specialist bodies over the last 5 years	<i>Pelatihan Penyelia Halal</i>		2023
	<i>Series of Capacity Building for ITS Young Lecturer – Workshop on Case Study Writing (Direktorat SDMO, Direktorat Kemitraan Global)</i>	<i>Pelatihan</i>	2024
	<i>English as the Medium of Instruction (EMI) Training (ITS Global Engagement)</i>	<i>Pelatihan</i>	2024
	<i>Bimbingan Teknis Pendataan Lengkap KUMKM Kabupaten Sidoarjo Tahun 2024 Bagi Koordinator Enumerator (Dinas Koperasi dan Usaha Mikro Pemerintah Kabupaten Sidoarjo)</i>	<i>Pelatihan</i>	2024
	<i>Pelatihan Dasar Calon Pegawai Tetap Non PNS di Puslatpasrat Kolatmar (Puslatpasrat Kolatmar)</i>	<i>Pelatihan</i>	2024
	<i>Microsoft Certificate of Achievement: Microsoft Azure Data Fundamentals</i>		2024
	<i>Microsoft Certified Azure Data Fundamentals</i>		2024
	<i>Pelatihan PEKERTI (Peningkatan Keterampilan Dasar Teknik Instruksional) (Direktorat Pengembangan Akademik dan Inovasi Pembelajaran ITS)</i>	<i>Pekerti</i>	2025
	<i>Workshop Peningkatan Kapasitas Dosen Muda FSAD ITS : Strategi Sukses Studi Lanjut dan Riset Unggul (Fakultas Sains dan Analitika Data ITS)</i>	<i>Pelatihan</i>	2025

	<i>Pre Doctoral Bridging Program tahun 2025– 2026 (Direktorat Sumber Daya Manusia dan Organisasi (SDMO) Institut Teknologi Sepuluh Nopember)</i>	<i>Program Peningkatan Kompetensi</i>	<i>2025</i>
	<i>Pre Doctoral Bridging Program tahun 2025– 2026 (Direktorat Sumber Daya Manusia dan Organisasi (SDMO) Institut Teknologi Sepuluh Nopember)</i>	<i>Program Peningkatan Kompetensi</i>	<i>2026</i>
	<i>Pre Doctoral Bridging Program tahun 2025– 2026 (Direktorat Sumber Daya Manusia dan Organisasi (SDMO) Institut Teknologi Sepuluh Nopember)</i>	<i>Program Peningkatan Kompetensi</i>	<i>2026</i>
	<i>Workshop Biosensor untuk Deteksi Makanan Halal (Fakultas Sains dan Analitika Data ITS)</i>	<i>Pelatihan</i>	<i>2026</i>

Name	<i>Dea Saraswati Pramaningrum, S.Stat., M.Stat.</i>
Post	<i>Assistant Expert</i>
Academic career	<i>Initial academic appointment UB</i> <i>Habilitation [German post-doctoral qualification] (subject) UB</i>
Employment	<i>Lecturer ITS 2025</i>
Research and development projects over the last 5 years	<i>2025 :</i> <i>2025 Research Progress Report: Modeling the Status of School Dropout Children in East Java Province Using the SMOTE-NC Ordinal Probit Approach.</i> <i>2025 ITS Department Research Grant: Comparison of Truncated Spline Estimators for Categorical Data and Binary Logistic Regression on Human Development Index Data in East Java.</i> <i>2025 ITS Self-Funded Research Grant: Path Analysis of Factors Influencing the Development of a Cashless Society Using Bootstrap Resampling.</i> <i>2025 ITS Self-Funded Research Grant: Semiparametric Truncated Spline Path Analysis Using Generalized Cross-Validation for Optimal Knot Selection.</i> <i>2025 ITS Self-Funded Research Grant: Semiparametric Truncated Spline Path Analysis of Factors Influencing the Development of a Cashless Society.</i> <i>2025 ITS Self-Funded Research Grant: Simulation of Semiparametric Truncated Spline Path Modeling in the Case of Cashless Society Development.</i> <i>2025 ITS Department Research Grant: Modeling the Status of School Dropout Children in East Java Province Using the SMOTE-NC Ordinal Probit Approach.</i> <i>2026 :</i> <i>2026 Research Progress Report: Risk Factors for Child Stunting at the Regency/City Level: A Spatial Approach in East Nusa Tenggara Province.</i> <i>2026 Research Progress Report: Modeling the Gender Development Index in Kalimantan Island Using Truncated Spline Nonparametric Regression.</i> <i>2026 Research Progress Report: Modeling Household Food Security Status in South Sulawesi Province Using Multilevel Binary Logistic Regression.</i> <i>2026 Research Progress Report: Status of Achievement of Regional Poverty Percentage Targets in Indonesia Using a Semiparametric Probit Approach.</i>
Industry collaborations over the last 5 years	<i>2025 :</i> <i>2025 ITS Product-Based Community Service Grant: Capacity Building for Village Institutions in Developing Data for Evaluating the Achievement of Village SDGs in Mojokerto Regency, East Java.</i> <i>2025 ITS Thematic Community Service Grant (Department Funding): Training on Academic and Non-Academic Student Data Analysis Using Microsoft Excel-Based Statistical Methods for Teachers of SMA IPIEMS Surabaya.</i>

	3. 2025 ITS Thematic Community Service Grant (Department Funding): Statistical Methods Training for Teachers of MAN 1 Pasuruan to Optimize Student Data Analysis Skills in Madrasahs. 2026 : 1. 2026 Community Service Progress Report: Strengthening the Capacity of Cantik Urban Villages in Presenting Statistical Data to Support Development Planning in Pohjentrek, Gadingrejo, and Mandaranrejo Urban Villages. 2. 2026 Community Service Progress Report: Strengthening Data Literacy in Cantik (KENCAN) Urban Villages of Pasuruan City Through a Data Processing Training Program. Partners
Patents and proprietary rights	"East Java Stunting Indicators Videographic: Who Needs More Attention?" 2025 "Community Service Activity Video: Environmental Data Collection and Statistical Visualization as an Effort to Empower Kampung Hijau Mandiri" 2025 "Training Video on Academic and Non-Academic Student Data Analysis Using Microsoft Excel-Based Statistical Methods for Teachers of SMA IPIEMS Surabaya" 2026 "Statistical Methods Training Video for Teachers of MAN 1 Pasuruan to Optimize Student Data Analysis Skills in Madrasahs"
Important publications over the last 5 years	2025 : 1. Purpose-led Publishing: "A Comparative Study on Tourist Motivations to LUSI Island and LUSI Pond in the Context of Post-Disaster Tourism." 2026 : 1. "Path Analysis: Direct and Indirect Effect Hypothesis Testing Using Jackknife Resampling on the Development of a Cashless Society." 2. Center for Language Studies and Scientific Publications: "Statistics Training for Teachers of MAN 1 Pasuruan to Improve Students' Data Analysis Skills." 3. "Strengthening Statistical Literacy and Data Science among Students of SMP Negeri 30 Surabaya through Educational Activities."

Activities in specialist bodies over the last 5 years	<i>Induction Training Calon Dosen Non PNS ITS (Direktorat Sumber Daya Manusia dan Organisasi ITS)</i>	<i>Training</i>	<i>2025</i>
	<i>Program Peningkatan Ketrampilan Dasar Teknik Instruksional (PEKERTI) (ITS)</i>	<i>Training</i>	<i>2025</i>
	<i>English as Medium of Instruction (EMI) Training (Unit Pusat Bahasa Global ITS)</i>	<i>Training</i>	<i>2025</i>
	<i>Biosensor untuk Deteksi Makanan Halal (Institut Teknologi Sepuluh Nopember)</i>	<i>Training</i>	<i>2026</i>