STAFF HANDBOOK

BACHELOR OF INFORMATICS (BIP) PROGRAM
DEPARTMENT OF INFORMATICS

FACULTY OF INTELLIGENT ELECTRICAL AND INFORMATICS TECHNOLOGY
INSTITUT TEKNOLOGI SEPULUH NOPEMBER

Contents

Area of Expertise: Applied Modeling and Computing

Name	**Prof. Dr. Ir. Joko Lianto Buliali, M.Sc.**
Position	Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 1991. - Master's degree (Computer Science), UMIST and the Victoria University of Manchester, Indonesia, 1995. - Doctor's degree (Computer Science), UMIST and the Victoria University of Manchester, 1998.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Prediction of Biochemical Oxygen Demand using Radial Basis Function Network, 2020 2. Determining the Number of Optimum Clusters in Flight Route Segments using Automatic Dependent Surveillance-Broadcast Data, 2020 3. Analysis of Relationship Characteristics of Late Payments Based on Billing Payments in 2019 4. Anomaly Detection on Flight Routes using a Similarity and Clustering Approach based on Automatic Dependent Surveillance Broadcasts, 2019 5. Weighting of Friend Relationships for Predicting Academic Achievement of University Delegates in the Following Competition, 2019 6. Optimal Partitioning in Flight Route Anomaly Detection, 2019 7. Cluster Phenomenon to Determine Flight Route Anomaly Detection, 2019 8. System Dynamics Testing Methods: Reliability Model, Average Reliability, and Service Demand, 2019 9. Real-time Detection of Data Completeness Levels for Traffic Simulation using Text Similarity and Time Relevance of Data from Social Media, 2018 10. Particle Swarm Optimization Implementation on K-Means for Automatic Dependent Surveillance-Broadcast Data Clustering, 2018 11. Model of Reliability, Average Reliability, Availability, Maintainability and Carrying Capacity for Services with a System Dynamics Approach, 2018 12. Flight Route Anomaly Detection via Optimal Waypoints, 2017 13. Feasibility Study of Sales Force Automation Application at PT. Semesta Nustra Distrindo, 2017 14. Predictive Modeling of First Year Evaluation Based on Demographic Data: Case Study of Telkom University Students, Indonesia, 2016 15. General Regression Neural Network for Predicting Traffic Flow, 2016 16. Intelligent Computing Algorithm for Predicting the Number of Vehicle Users as an Indicator of Traffic Congestion, 2016 17. FCM and PSO-SVR Hybrid Method for Traffic Flow Data Prediction, 2015 18. Identification of Gaussian Mixture Model Optimal Parameters for Speaker Identification in Noise Environments using Endpoint Detection Residues, 2015 19. Strategic Planning of Information Systems/Information Technology at Nusa Cendana University, 2015

	20. Service Desk evaluation using Six Sigma and ITIL V3 approaches at PT XYZ, 2015
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. Ina-BWR: Indonesian bigram word rule for multi-label student complaints, 2019 2. Enhancing the Performance of Smote Algorithm by Using Attribute Weighting Scheme and New Selective Sampling Method for Imbalanced Data Set, 2019 3. Text Based Approach for Similar Traffic Incident Detection from Twitter, 2018 4. Vehicle Detection on Images from Satellite using Oriented Fast and Rotated Brief, 2017 5. A Hybrid Fuzzy Morphology and Connected Components Labeling Methods for Vehicle Detection and Counting System., 2016 6. RANDSHUFF: An Algorithm to Handle Imbalance Class for Qualitative Data, 2016
Activities in specialist bodies over the last 5 years	2015 - Odd Semester: Information Systems and Technology, Topics in Optimization Engineering, Seminar 1, Dissertation - Research 2, Dissertation - Research 1, Modeling and Simulation, Probability and Statistics 2016 - Odd Semester: Information Systems and Technology, Modeling and Simulation, Probability and Statistics, Topics in Data Mining - Even Semester: Information Systems and Technology, Topics in Modeling and Simulation, Research Methodology, Mathematics Informatics, Multivariate Data Analysis 2017 - Odd Semester: Probability and Statistics, Modeling and Simulation, Seminar 1, Information Systems and Technology, Thesis - Even Semester: Information Systems and Technology, Seminar 2, Research Methodology, Topics in Modeling and Simulation, Mathematics Informatics, E-Business 2018 - Odd Semester: Numerical Computing, Topics in Modeling and Simulation, Information Systems and Technology, Thesis – Methodology - Even Semester: Information Systems and Technology, Topics in Time Series Data Analysis, Research Methodology, Probability and Statistics 2019 - Odd Semester: E-Business, Information Systems and Technology, Numerical Computing, Research Methodology and Philosophy of Science, Topics in Modeling and Simulation - Even Semester: Research Methodology, Topics in Time Series Data Analysis, Information Systems and Technology, Simulation Modeling, Probability and Statistics, Multivariate Data Analysis

	2020 - Odd Semester: Linear Algebra, Numerical Computing, Information Systems and Technology, Probability and Statistics, Research Methodology and Philosophy of Science

Name	**Dr. Ahmad Saikhu, S,Si., M.T.**
Position	Associate Professor
Academic career	- Bachelor's degree (Statistics), Institut Teknologi Sepuluh Nopember, Indonesia, 1994. - Master's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2000. - Doctor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2019.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical an Informatics Technology
Research and development projects over the last 5 years	1. Correlation and Symmetrical Uncertainty-Based Feature Selection for Multivariate Time Series Classification, 2019 2. Spatio-Temporal Recurrent Neural Networks Modeling for Number of Users Prediction on Wireless Traffic Networks, 2020 3. Non-Linear Spatio-Temporal Input Selection for Rainfall Forecasting Using Recurrent Neural Networks, 2018 4. Rainfall Forecasting by using Autoregressive Integrated Moving Average, Single Input and Multi Input Transfer Function, 2017 5. Mobile Application for Scheduling of Medical Staff in Emergency Condition using Integer Programming, 2015 6. Improving ARIMA Forecasting Accuracy using Decomposed Signal on PH and Turbidity at SCADA Based Water Treatment, 2020 7. Generalized Regression Neural Network for Predicting Traffic Flow, 2016 8. Intelligent Method for Dipstick Urinalysis using Smartphone Camera, 2015 9. Effectiveness Analysis of Service System Based on Visit Patterns to Improve the Efficiency of Customer Service Queuing System, 2021 10. Predicting COVID-19 Confirmed Case in Surabaya using Autoregressive Integrated Moving Average, Bivariate and Multivariate Transfer Function, 2020 11. Prediction of Multivariate Time Series Data Using Echo State Network and Harmony Search, 2019 12. A Fast Dynamic Assignment Algorithm for Solving Resource Allocation Problems, 2021
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. Correlation and Symmetrical Uncertainty-Based Feature Selection for Multivariate Time Series Classification, 2019 2. Spatio-temporal Recurrent Neural Networks Modeling for Number of Users Prediction on Wireless Traffic Networks, 2020
Activities in specialist bodies over the last 5 years	2019 - Odd Semester: Probability and Statistics, Time Series Data Analysis - Even Semester: Multivariate Data Analysis, Predictive Analytics and Machine Learning, Simulation

	2020 - Odd Semester: Numerical Computation, Discrete Mathematics

Name	**Dr. Bilqis Amaliah, S.Kom., M.Kom.**
Position	Associate Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 1999. - Master's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2007. - Doctoral degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2020.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Early Warning System Anomaly Ph Sensor Readings and Turbidity in Water Treatment Plants, 2020. 2. Development of Initial Basic Feasible Solution Method using Heuristic Approach to Achieve Optimal Solution of Transportation Problem, 2020 3. Halal Food Product Study: Halal Assurance Assessment Model, Traceability, and Logistics, 2018 4. Development of Neural Networks Method in Multivariate Time Series Data Classification, 2018 5. Preparation of Operational Control Planning Application for PDAM Surya Sembada Surabaya City, 2017
Industry collaborations over the last 5 years	None
Patents and proprietary rights	BCE Application for Finding Initial Basic Feasible Solution in Transportation Problem, EC00202056261, 4 December 2020
Important publications over the last 5 years	1. A New Heuristic Method of Finding the Initial Basic Feasible Solution to Solve the Transportation Problem, 2020 2. Total Opportunity Cost Matrix–Minimal Total: A New Approach to Determine Initial Basic Feasible Solution of a Transportation Problem, 2019 3. Finding the Shortest Paths among Cities in Java Island using Node Combination based on Dijkstra Algorithm, 2016 4. Blood Traceability System for Indonesian Blood Supply Chain, 2015
Activities in specialist bodies over the last 5 years	2015 - Odd Semester: Numerical Computing, Computational Intelligence, Topics in Optimization Engineering, Discrete mathematics 2016 - Odd Semester: Numerical Computing, Probability and Statistics, Computational Intelligence - Even Semester: Linear Algebra, Artificial intelligence 2017 - Odd Semester: Discrete mathematics, Numerical Computing 2020 - Odd Semester: Linear Algebra, Operations Research

Name	**Victor Hariadi, S.Si., M.Kom.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 1993. - Master's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 1993.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Early Warning System of Ph Sensor Reading and Turbidity Anomalies in Water Treatment Installation, 2020 2. Modification of Minimum Cost Method for Searching for Initial Basic Feasible Solution on Transportation Problems, 2019 3. Synthetic Data Generation for Academic Failed Students with Oversampling and Undersampling Hybrids, 2019 4. Traffic Event Search from Twitter based on Textual Reliability and Time Relevance, 2018
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. Development of Hybrid Recurrent Neural Networks Model for Multivariate Time Series Data Prediction, 2019 2. Development of Neural Networks Methods in Multivariate Time Series Data Classification, 2018 3. Development Of Optimization Models for Doctor Scheduling in Emergency based on Mobile Applications, 2015
Activities in specialist bodies over the last 5 years	2015 - Odd Semester: Numerical Computing, Graph Theory 2016 - Odd Semester: Mathematics Informatics, Graph Theory, Numerical Computing - Even Semester: Automata, Mathematics Informatics 2017 - Odd Semester: Numerical Computing, Graph Theory - Even Semester: Automata, Mathematics Informatics 2018 - Odd Semester: Numerical Computing, Graph Theory and Automata - Even Semester: Numerical Computing 2019 - Odd Semester: Discrete Mathematics, Numerical Computing - Even Semester: Graph Theory and Automata 2020 - Odd Semester: Numerical Computing

Name	**Arya Yudhi Wijaya, S.Kom., M.Kom.**
Position	Assistant Professor

Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2008. - Master's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2010.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Reliability In Ensemble Learning and Learning from Crowds, 2019 2. Spatio-Temporal Recurrent Neural Networks Modeling for Number of Users Prediction on Wireless Traffic Networks, 2020 3. Pemilihan Korpus Statis Bersesuaian dengan Cosine Similarity dan Penggunaan IDF Global Pada Penambahan Dokumen Baru, 2020 4. Multivariate Time Series Forecasting Using Recurrent Neural Networks for Meteorological Data, 2019 5. Sensor Energy Preservation for Leak Quantification using Distance-Based Feature Selection Method, 2019 6. Trabecular Bone Segmentation based on Segment Profile Characteristics using Extreme Learning Machine on Dental Panoramic Radiographs, 2017 7. Feature Extraction using Gray-Level Co-occurrence Matrix of Wavelet Coefficients and Texture Matching for Batik Motif Recognition, 2017
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. Converting Image into Bas Reliefs using Image Processing Techniques, 2019 2. Extracted Pixels Similarity Features (EPSF) using Interactive Image Segmentation Techniques, 2016 3. A Novel Strategy of Differential Evolution Algorithm's Crossover Operator Based on Graylevel Clusters Similarity for Automatic Multilevel Image Thresholding, 2015 4. Fractal-based Texture and HSV Color Features for Fabric Image Retrieval, 2015 5. Image Thresholding based on Index of Fuzziness and Fuzzy Similarity Measure, 2015 6. Tuna Fish Classification using Decision Tree Algorithm and Image Processing Method, 2015
Activities in specialist bodies over the last 5 years	2015 - Odd Semester: Probability and Statistics, Discrete Mathematics 2016 - Odd Semester: Probability and Statistics, Discrete Mathematics, Linear Algebra - Even semester: Mathematics Informatics, Graph Theory and Automata 2017 - Odd Semester: Discrete Mathematics, Linear Algebra - Even Semester: Mathematics Informatic, Linear Algebra 2018 - Odd Semester: Numerical Computing, Graph Theory and Automata - Even Semester: Probability and Statistics

	2019
	  - Odd Semester: Discrete Mathematics, Linear Algebra
	  - Even Semester: Mathematics Informatics, Graph Theory and Automata
	
	2020
	  - Odd Semester: Discrete Mathematics

Area of Expertise: Architecture and Computer Networking

Name	**Prof. Ir. Supeno Djanali, M.Sc., Ph.D.**
Position	Professor
Academic career	- Bachelor's degree (Computer Engineering), Institut Teknologi Sepuluh Nopember, Indonesia, 1974. - Master's degree (Computer Science), University of Wisconsin - Madison, United States,1978. - Doctoral degree (Computer Science), University of Wisconsin - Madison, United States,1984.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Real Time Train Monitoring using Google Maps, 2015 2. Adaptive Gateway Discovery Hybrid on AODV Internet Network Using Fuzzy Algorithm, 2015 3. Route Efficiency in Dynamic Source Routing Protocols Using Path Aware-Short, 2015 4. Increasing the capacity of the secret data using DEpixels blocks and adjusted RDE-based on grayscale images, 2015 5. A conceptual information of technology framework to support rice farming in Timor Leste, 2015 6. Development of Human Mental State Recognition System Software Based on EEG Brain Activity Waves, 2016 7. Smart System for Emergency Vehicle Using Android, 2016 8. Electronic Voting: Means for Security and Validity of General Elections in Indonesia, 2016 9. Classification of EEG Signals Using Single Channel Independent Component Analysis, Power Spectrum, and Linear Discriminant Analysis, 2016 10. Design and development of voting data security for electronic voting (E-Voting), 2016 11. Feature extraction using combination of intrinsic mode functions and power spectrum for EEG signal classification, 2016 12. Improved Information Retrieval Performance in SQL Databases Using Data Adapters with Bigdata Case Study, 2017 13. Performance Analysis and Study of Encryption Methods on Web-Based Electronic Mail Applications, 2017 14. Blackhole Attack Detection Analysis on Mobile Ad-Hoc Network Using Genetic Algorithm Methods, 2017 15. Classification of P300 in EEG Signals for Disabled Subjects using Singular Spectrum Analysis, 2017 16. AODV-PNT Performance Study with Added Factor Number of Neighbor Nodes on VANET, 2018 17. Improved Information Retrieval Performance on SQL Database using Data Adapter, 2018 18. Audio Data Hiding using Octal Modulus Function Based Unsigned Integer Sample Values, 2018 19. An Improved Secret Message Capacity Using Modulus Function Based Color Image Data Hiding, 2018 20. Design and Build a Sharia Crowdfunding System to Minimize Riba, 2019 21. Increasing accuracy and completeness of intrusion detection model

	using fusion of normalization, feature selection method and support vector machine, 2019
	22. Developing audio data hiding scheme using random sample bits with logical operators, 2019
	23. Assessing Centroid-Based Classification Models for Intrusion Detection System Using Composite Indicators, 2019
	24. An Optimum Clustered Grid-Based Particle Swarm Optimization to Enhance Efficiency Energy in Wireless Sensor Networks, 2019
	25. Improving the Capability of Reduced Difference Expansion based Digital Image Data Hiding., 2019
	26. Using Internet of Things Technology to Help the Learning Process in Schools, 2019
	27. Design and Build a Secure Virtual Class System to Support Online Learning, 2020
	28. Design and Build a Virtual Class System to Support the Online Learning Process, 2020
	29. Analyzing the performance of intrusion detection model using weighted one-against-one support vector machine and feature selection for imbalanced classes, 2020
	30. Development of Greedy Perimeter Stateless Routing (GPSR) with Overlay Network Concept on VANETs, 2020
	31. GCRFP-PAGE Replacement for Solid State Drive using Ghost-Cache, 2020
Industry collaborations over the last 5 years	
Patents and proprietary rights	None.
Important publications over the last 5 years	1. Routing Optimization on Aodv_Ext Protocol using Link Expiration Time (LET), 2015
	2. Routing Protocol Performance in Wireless Mesh Network Environment with Combined Scalable Video Coding, 2015
	3. CORO: Graph-Based Automatic Intrusion Detection System Signature Generator for E-Voting Protection, 2015
	4. Graph-based forensic analysis of web honeypot, 2016
	5. Reliable Fault-Tolerant on Clustering-Based Wireless Sensor Network, 2016
	6. Server Workload Model Identification: Monitoring and Control Tools for Linux, 2016
	7. Audio Data Hiding Based on Sample Value Modification using Modulus Function, 2016
	8. Implementation of NFC Technology on Smartphones as Authentication Agents in the E-Vote System, 2017
	9. Implementation of the Overlay Network Concept on Greedy Perimeter Stateless Routing (GPSR) at VANETs, 2017
	10. Modification Of the Aodv-Br Protocol using Link Expiration Time (Let) To Improve Link Stability in The Mobile Ad-Hoc Network (Manet) Environment, 2017
	11. Study of Greedy Perimeter Stateless Routing Performance Based on Overlay Network on VANET, 2018
	12. Vote Identification and Integrity of Ballot in Paper-Based E-Voting System, 2018
	13. Modify Route Discovery on Ad-hoc on-Demand Distance Vector (AODV) Based on One-Hop Node Connectivity Level in VANETs, 2018
	14. Classification of P300 Event-related Potentials using Wavelet

	Transform, MLP, and Soft Margin SVM, 2018
	15. Text Mining for Pest and Disease Identification on Rice Farming with Interactive Text Messaging, 2018
Activities in specialist bodies over the last 5 years	**2015** - Odd Semester: Digital Systems, Seminar 1, Research Methodology and Philosophy of Science, Dissertation - Research 2, Network-Based Computing. **2016** - Odd Semester: Network-Based Computing, Seminar 2, Research Methodology and Philosophy of Science, Digital Systems. - Even Semester: Computer Organization, Topics in Wireless Networks, Research Methodology. **2017** - Odd Semester: Digital Systems, Network-Based Computing, Research Methodology and Philosophy of Science. - Even Semester: Topics in Wireless Networks, Research Methodology. **2018** - Odd Semester: Research Methodology and Philosophy of Science, Network-Based Computing, Digital Systems, Computer Networks. - Even Semester: Digital Systems, Research Methodology, Topics in Wireless Networks. **2019** - Odd Semester: Network-Based Computing, Research Methodology and Philosophy of Science, Computer Organization. - Even Semester: Digital Systems, Research Methodology, Topics in Wireless Networks. **2020** - Odd Semester: Network-Based Computing, Research Methodology and Philosophy of Science, Computer Organization.

Name	**Royyana Muslim I, S.Kom, M.Kom, Ph.D.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, 2000. - Master's degree (Computer Science), Institut Teknologi Sepuluh Nopember, 2005. - Doctoral degree (Engineering), Kumamoto University, 2013.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Indoor Position Detection Using Arduino Microcontroller and Multi Sensor, 2015 2. Portable Vehicle Exhaust Test Equipment with Arduino and Smoke Sensor, 2015 3. Interactive Whiteboard and Instant Quiz for Multimedia Classroom Activity, 2015 4. Survey on Handling Broadcast Storm Problems on AODV Routing Protocol at MANET, 2015 5. Countermeasures against Attack Avoidance Techniques on Intrusion Prevention Systems, 2015

6. Intrusion Detection System using N-Gram and Cosine Similarity, 2016
7. Survey of Clustering Routing Techniques Based on Mobility on Wireless Ad-hoc Networks, 2016
8. Rsync and Rdiff implementation on Moodle's backup and restore feature for course synchronization over the network, 2016
9. Optimization of Replacement Strategy for Progressive Cache Method in Content Centric Networking (CCN), 2016
10. Development of Authentication and Authorization Mechanisms for Config Management in the Case of Linux Container Based Shared Web Hosting, 2016
11. Hiding Secret Data by using Modulo Function in Quad Difference Expansion, 2016
12. Design a Transformation Mechanism for Data Security, 2016
13. Utilization of Four-Wheel Vehicle Traffic Density to Support Communication Reliability on In-City Ad-Hoc Networks, 2016
14. Proposed Information Technology Policy as an Umbrella to Realize ITS in one-hand in a Smart Campus Environment, 2016
15. Data Center Cloud Computing Power Optimization on High Performance Computing (HPC) Workloads with Realtime Predictive Scheduling, 2017
16. Edit Distance Weighting Modification using Phonetic and Typographic Letter Grouping over Homomorphic Encrypted Data, 2017
17. Multi Criteria Decision System for Distribution Provisioning and Resource Optimization using Analytical Hierarchy Process, 2017
18. A Mobile Crowdsensing Framework for Integrating Smartphone and Iot Devices to Cloud Computing Services, 2017
19. Implementation of Work Instruction as a Solution for Handling Critical IT Incidents in Units at ITS, 2017
20. Performance Study of Wireless Access in Vehicle Environment 802.11 p in Ad-Hoc on-Demand Distance Vector Routing (AODV) with Nakagami Propagation Model and Two Ray Ground, 2018
21. Oversight of Congestion Control Mechanisms on Transmission Control Protocols in Software Defined Networks, 2018
22. Data Replication using the Detection Controller Module to Prevent Bottlenecks in The Data Center, 2018
23. Development of Uploading Media Components to Support E-Learning in Dynamic Network Conditions, 2018
24. Query Dominates Continuous Top-k of Incomplete Data over Data Streams, 2018
25. Docker-Based Network Function Virtualization as a Learning Tool in Computer Networking Course, 2019
26. Analyzing the Effect of Block Size on Stego Audio Quality, 2019
27. Energy Aware Computing Offloading Framework for Mobile Crowdsensing Clusters Using the DMIPS Approach, 2019
28. Using Internet of Things Technology to Help the Learning Process in Schools, 2019
29. Data Security Method Development, 2019
30. Protection Methods to Improve Data Security on Computer Networks, 2019
31. Development of Adaptive Routing Mechanisms and Routing Hole Handling for Congestion Reduction and Improvement of Wireless Sensor Network Performance, 2019
32. Node Density-Based Approach to Energy Efficient Data Collection

	Protocol in Wireless Sensor Network Environment, 2020 33. Hiding Data in Audio Files: An Alignment-based Approach to Improving Audio Quality Stego, 2020 34. Security audit on cloud-based servers using AES-256 and SHA-256, 2020 encrypted data 35. Development of the Load Balance Mechanism at SDN Data Plane Fat Tree using Modified Dijkstra Algorithm, 2020 36. Development of Blackhole Attacks on AODV Routing Protocol, 2020 37. Internet of Things User Oriented Wi-Fi Quality Analyzer, 2020 38. Evaluating the Performance of Fibbing Architectures in Hybrid Software Defined Networks, 2020 39. Preparation of Activity Recommendations for Improving Information Security for Ten November Institute of Technology Students Based on NIST SP 800-50, 2020 40. Development of Data Hiding Methods and Optimization of Intrusion Detection Systems on Computer Networks for Data Protection, 2020
Industry collaborations over the last 5 years	
Patents and proprietary rights	None
Important publications over the last 5 years	1. Developing Electronic Mango Traceability in Indonesia, 2016 2. Detecting Malicious Activities in a Computer Cluster for Developing Dynamic Honeypot, 2018 3. Design Virtual Machine Allocation Management in a Heterogeneous Hypervisor Environment, 2019
Activities in specialist bodies over the last 5 years	2015 - Odd Semester: Operating Systems, Computer Organization, Network Programming, Topics in Cloud Computing. 2016 - Odd Semester: Operating Systems, Cloud Computing, Topics in Cloud Computing, Network Programming. - Even Semester: Distributed Systems, Information and Network Security, Cloud Computing. 2017 - Odd Semester: Operating Systems, Network Programming, Topics in Cloud Computing. - Even Semester: Topics in Network Design and Auditing, Cloud Computing, Distributed Systems, Information Security and Networks. 2018 - Odd Semester: Cloud Computing, Distributed Systems, Topics in Network Design and Auditing, Topics in Distributed Systems. - Even Semester: Topics in Cloud Computing, Network Programming. 2019 - Odd Semester: Seminar 1, Cloud Computing, Distributed Systems, Topics in Distributed Systems. - Even Semester: Topics in Cloud Computing, Seminar 2, Network Programming. 2020 - Odd Semester: Technology between Networks, Distributed

Systems, Cloud Computing, Topics in Distributed Systems.

Name	**Dr. Eng. Radityo Anggoro, S.Kom., M.Eng.Sc.**
Position	Assistant Professor & Secretary of Financial Affairs
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2006. - Master's degree (Engineering Science), National Taiwan University of Science and Technology, Taiwan, 2008. - Doctorate's degree (Engineering), Kumamoto University, Japan, 2014.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. 2021, as a member of research group, Development of Systems and Architectures Supporting Online Learning Technology 2. 2021, as a leader of research group, Development of a Reactive Routing Protocol with Energy Efficiency in Mind 3. 2021, as a leader of research group, Implementing the Reverse-AODV Protocol by Considering the Energy Consumption Factor at the Routing Stage at VANET 4. 2021, as a member of research group, Development of Application of Physical Vulnerability Map of Building in Surabaya Due to Potential Recent Earthquake: A Multi-Scale Study 5. 2021, as a member of research group, Antenna Configuration System Development to Increase AIS Receiver Range 6. 2020, as a member of research group, Design and Build Miniature Intelligent Autonomous Vehicles 7. 2020, as a member of research group, Development of Data Hiding Methods and Optimization of Intrusion Detection Systems on Computer Networks for Data Protection 8. 2020, as a leader of research group, Development of On Demand Vector Ad-hoc Routing Protocol with Clustering and Ant Colony Methods on Vehicular Ad-hoc Networks 9. 2020, as a member of research group, Design a Secure Virtual Class System to Support Online Learning 10. 2020, as a member of research group, Optimization of Current Sensor Placement for Corrosion Detection in Water Pipelines 11. 2019, as a member of research group, Informatic Open Library Systems: Design and Build Integrated Library Information Systems at the Informatics Department Library 12. 2019, as a member of research group, Design and Build Cloud Computing Security Audit Software with Encrypted Data 13. 2019, as a member of research group, Development of Online Attendance System with Face Matching and Digital Signature 14. 2018, as a member of research group, Development of Data Aggregation and Delivery Protocols to Save Energy and Guarantee the Reliability of Data Delivery in Wireless Sensor Network Environments 15. 2018, as a member of research group, Securing Messages on Sundanese Language Documents Using Steganography Format Based Method 16. 2018, as a member of research group, Development of Online Attendance System with Face-Matching Fingerprint Substitute
Industry collaborations over the last 5 years	
Patents and proprietary rights	None

Important publications over the last 5 years	1. The development of a routing protocol based on Reverse-AODV by considering an energy threshold in VANET, NG Razafindrobelina, R Anggoro, AM Shiddiqi, 2021 IEEE International IOT, Electronics and Mechatronics Conference 2. Security audit in cloud-based server by using encrypted data AES-256 and SHA-256, M Husni, HT Ciptaningtyas, W Suadi, RM Ijtihadie, R Anggoro, MF Salam, IOP Conference Series: Materials Science and Engineering 830 (3), 032015 3. A grid-based clustering with dynamic forwarding path for energy-efficient data gathering in wireless sensor network environments, W Wibisono, T Ahmad, R Anggoro, ICIC express letters. Part B, Applications 4. An android based course attendance system using face recognition, D Sunaryono, J Siswantoro, R Anggoro, Journal of King Saud University-Computer and Information Sciences 5. Improvement Performance of Clustered Shortest Geopath Routing Protocol Using Data Aggregation in Wireless Sensor Network Environments, W Wibisono, R Anggoro, Journal of Physics: Conference Series 1108 (1), 012121 6. Text Steganography on Sundanese Script using Improved Line Shift Coding, HT Ciptaningtyas, R Anggoro, MBA Fadhillah, 2018 International Electronics Symposium on Knowledge Creation 7. Position-based scheme for multi-hop routing protocol in cluster-based wireless sensor networks, W Wibisono, T Ahmad, R Anggoro, 2018 4th International Conference on Wireless and Telematics (ICWT), 1-6 8. Improvement Performance of Clustered Shortest Geopath Routing Protocol Using Adaptive Path and Data Aggregation in Wireless Sensor Network Environments, R Rozita, W Wibisono, R Anggoro, MISEIC 2018

Activities in specialist bodies over the last 5 years	**TAUGHT COURSES:**
	
	2015
	  - Odd Semester: Net Centric Computing, Operating Systems
	
	2016
	  - Odd Semester: Operating Systems.
	  - Even Semester: Design and Audit Network, Computer Networks
	
	2017
	  - Odd Semester: Operating Systems, Wireless Networks
	  - Even Semester: Design and Audit Network, Computer Networks
	
	2018
	  - Odd Semester: Operating Systems, Mobile Computing
	  - Even Semester: Design and Audit Network, Computer Networks
	2019
	  - Odd Semester: Operating Systems, Mobile Computing
	  - Even Semester: Design and Audit Network, Computer Networks
	
	2020
	  - Odd Semester: Computer Networks

Name	**Wahyu Suadi, S.Kom., M.Kom.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Computer Science), University of Indonesia, Indonesia, 1995.

	- Master's degree (Computer Science), University of Indonesia, Indonesia,1998.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Clustering of Research Topics Based on Unsupervised Learning for Recommendations for Library Collections in Its Library, 2019 2. Cloud Computing Security Audit Software Design with Encrypted Data, 2019 3. Security Audit in Cloud-Based Server by using Encrypted Data AES-256 and SHA-256, 2020 4. Performance Comparison Analysis of Enhanced Ant AODV and Enhanced Ant DSR Based on Quality-of-Service Parameters, 2020 5. GCRFP-PAGE Replacement for Solid State Drive Using GHOST-CACHE, 2020 6. Information System for Admission of New Students for East Java Province Office section (back end), 2020 7. The Development of Blackhole Attack in AODV Routing Protocol, 2020
Industry collaborations over the last 5 years	
Patents and proprietary rights	None.
Important publications over the last 5 years	None.
Activities in specialist bodies over the last 5 years	2018 - Even Semester: Operating System, Network Programming. 2019 - Odd Semester: Computer Organization, Information Security and Networks. - Even Semester: Network Programming, Operating System. 2020 - Odd Semester: Information and Network Security, Computer Organization.

Area of Expertise: Intelligent Information Management

Name	**Prof. Drs.Ec.Ir. Riyanarto Sarno,M.Sc,Ph.D.**			
Position	Professor			
Academic career	- Bachelor's degree (Electrical Engineering), Institut Teknologi Bandung, Indonesia, 1983. - Master's degree (Science), The University of New Brunswick, Canada, 1988. - Doctor's degree (Computer Science), University of New Brunswick, Canada, 1892.			
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology			
Research and development projects over the last 5 years	No	Title of Research Projects	Years	Position
	1	Operasional Pengambilan Data Skrining Covid-19 menggunakan INOSEC19 (*Operational Data Collection for Covid-19 Screening using INOSEC19*)	2021	Principal Investigator
	2	Adopsi Prototipe Electronic Nose INOSEC19 untuk uji skrining COVID-19 secara terbatas di lingkungan ITS (*Adoption of INOSEC19, an Electronic Nose Prototype for a limited COVID-19 screening test in the ITS environment*)	2021	Principal Investigator
	3	Pengembangan Prototipe Uji Kalibrasi Electronic Nose INOSEC19 untuk Skrining Cepat Covid-19 (*Development of INOSEC19, an Electronic Nose Prototype of Covid-19 Rapid Detection, for Calibration Test*)	2021	Principal Investigator
	4	Pengembangan Electronic Nose Berbasis Integrasi IOT Dan Komputasi Cloud untuk Deteksi Covid-19 Menggunakan Keringat Ketiak Pasien (*Development of Artificial Intelligence System for Brain Surgery Planning based on Patient Medical Images*)	2021-2023	Principal Investigator
	5	Pengembangan Sistem *Artificial Intelligence* untuk Perencanaan Bedah Otak Berdasarkan Citra Medis Pasien (*Development of Artificial Intelligence System for Brain Surgery Planning based on Patient Medical Images*)	2021-2023	Principal Investigator
	6	Rapid Detection of COVID-19 through Sweat Analysis by using an Electronic Nose	2020-2021	Principal Investigator
	7	Pengembangan 3 Dimensi Akurat Berdasarkan Citra Medis Anatomi dan Morfologi Otak untuk Perencanaan Bedah Saraf Otak (*Developing 3D Brain Anatomical Morphological Accurate Generator*	2019-2022	Principal Investigator

	No		Year	Position
	8	Pengembangan 3 Dimensi Generator Manufaktur Aditif Akurat Berdasarkan Citra Medis Untuk Perencanaan Bedah Tengkorak Kepala Dan Rekonstruksi Tulang Wajah (*Developing Accurate 3D Additive Manufacturing Generator based on Medical Images for Planning Cranioplasty Surgery and Craniofacial Reconstruction Surgery*)	2019-2021	Principal Investigator
	9	Pengembangan Workflow Visual untuk Operasi Otak dan Kepala (*Developing Visual Workflow for Brain and Cranio Surgery*)	2020	Principal Investigator
	10	Pengembangan Electronic-Nose Untuk Deteksi Kemurnian Daging Sapi (*Development of Electronic-Nose for Detecting Pork Adulteration in Beef*)	2018-2020	Principal Investigator
	11	Pengembangan Mixed Reality Simulator untuk Operasi Otak (*Developing A Mixed Reality Simulator for Brain Surgery*)	2019	Principal Investigator
	12	Sistem Enterprise Tanggap Proses Bisnis (*Business Process Aware Enterprise System*)	2017-2019	Principal Investigator

Note: "(BAMAG) Based on Medical Images for Planning Brain Surgery)"

	No	Name of Collaboration	Hospital / Industry	Position	Year
Industry collaborations over the last 5 years	1	**Research Collaboration:** Perbedaan Hasil Analisis Bau Keringat Ketiak Menggunakan Alat i-Nose C-19 dan RT-PCR Pasien COVID-19 dan Non-Covid-19 (*Differences in the Results of the Analysis of Armpit Odor Sweat Using the i-Nose C-19 and RT-PCR Equipment for COVID-19 and Non-Covid-19 Patients*)	Dr. Soetomo Academic General Hospital	Partner	2021
	2		Indrapura Hospital	Partner	2021
	3	**Research Collaboration:** Perbandingan Antara Hasil Skrining Cepat Covid-19 Melalui Bau Keringat Ketiak Menggunakan Alat	A. Yani Islamic Hospital	Partner	2021
	4		Jemursari Islamic Hospital	Partner	2021
	5		Navy Central Hospital Dr. Ramelan	Partner	2021

		Electronic Nose dengan Hasil Swab PCR (*Comparison between the Results of Covid-19 Rapid Screening Through Armpit Odor Sweat Using an Electronic Nose with PCR Swab Results*)			
	6	**Research Collaboration:** Pengembangan Prototipe Uji Kalibrasi Electronic Nose INOSEC19 untuk Skrining Cepat Covid-19 (*Development of INOSEC19, an Electronic Nose Prototype of Covid-19 Rapid Detection, for Calibration Test*)	PT. Dempo Metalindo	Industry Partner	2021
	7	**Research Collaboration:** Rapid Detection of Covid-19 through Sweat Analysis by using an Electronic Nose	Dr. Soetomo Academic General Hospital	Partner	2021
	8	**Research Collaboration:** Pengembangan 3 Dimensi Akurat Berdasarkan Citra Medis Anatomi dan Morfologi Otak untuk Perencanaan Bedah Saraf Otak (*Developing 3D Brain Anatomical Morphological Accurate Generator (BAMAG) Based on Medical Images for Planning Brain Surgery*)	Dr. Soetomo Academic General Hospital	Partner	2019-2023
	9		PT. Bumandhala Caja Indonesia	Marketing Partner	2019-2023
	10		National Hospital	Partner	2019-2023
	11	**Research Collaboration :** Pengembangan 3 Dimensi Generator Manufaktur Aditif Akurat Berdasarkan Citra Medis Untuk Perencanaan Bedah Tengkorak Kepala	CV. Bumandhala Caja Indonesia	Marketing Partner	2019-2021
	12		Plastic Surgery Division – Airlangga University Hospital	Partner	2019-2021
	13		iDiG RCMed	Partner	2019-2021

		Dan Rekonstruksi Tulang Wajah (*Developing Accurate 3D Additive Manufacturing Generator based on Medical Images for Planning Cranioplasty Surgery and Craniofacial Reconstruction Surgery*)			
Patents and proprietary rights	No	Title	Patents and Proprietary Rights	Status	Year
	1	MODUL PEMOTONG 3 DIMENSI MODEL MENGGUNAKAN RAYCASTING	Computer Copyright	*Granted*	2021
	2	MODUL APLIKASI ELECTRONIC NOSE SIGNAL REPOSITORY UNTUK MENYIMPAN SINYAL BAU KERINGAT KETIAK BERBASIS CLOUD	Computer Copyright	*Granted*	2021
	3	INOSEC19	Brand	*Registered*	2021
	4	PENENTUAN POSITIF DAN NEGATIF PENYAKIT COVID-19 PDA PASIEN MENGGUNAKAN SISTEM ELECTRONIC NOSE MELALUI BAU KERINGAT KETIAK	Paten	*Registered*	2021
	5	SISTEM ELECTRONIC NOSE UNTUK DETEKSI KEMURNIAN DAGING SAPI TERHADAP DAGING BABI	Paten	*Registered*	2021
	6	ELECTRONIC NOSE UNTUK SKRINING CEPAT PENDERITA (POSITIF) ATAU SEHAT (NEGATIF) DARI PENYAKIT COVID-19 MENGGUNAKAN BAU KERINGAT KETIAK	Paten	*Registered*	2021
	7	BOX SISTEM ELECTRONIC NOSE	Industrial Design	*Registered*	2020
	8	VIDEO VISUAL WORKFLOW DALAM BENTUK ANIMASI 3 DIMENSI UNTUK KASUS CRANIOSYNOSTOSIS	Video Copyright	*Granted*	2020
	9	MODUL VISUAL WORKFLOW BERDASARKAN MODEL PROSES BISNIS UNTUK	Video Copyright	*Granted*	2020

		KASUS CRANIOSYNOSTOSIS			
	10	BASIS DATA TEKSTUAL IMAGE DIGITAL IMAGING AND COMMUNICATION IN MEDICINE (DICOM) 3 DIMENSI OTAK	Database Copyright	*Granted*	2020
	11	BASIS DATA TEKSTUAL IMAGE 2 DIMENSI OTAK	Database Copyright	*Granted*	2020
	12	MODUL VIRTUAL REALITY 3 DIMENSI UNTUK WORKFLOW KASUS CRANIOSYNOSTOSIS MENGGUNAKAN FILE DICOM DARI CT-SCAN	Computer Copyright	*Granted*	2020
	13	MODUL VIRTUAL REALITY 3 DIMENSI UNTUK WORKFLOW KASUS CRANIOPLASTY MENGGUNAKAN FILE DICOM DARI CT-SCAN	Computer Copyright	*Granted*	2020
	14	MODUL VIRTUAL REALITY TEKSTUAL IMAGE DIGITAL IMAGING AND COMMUNICATION IN MEDICINE (DICOM) 3 DIMENSI OTAK	Computer Copyright	*Granted*	2020
	15	MODUL APLIKASI SIGNAL REPOSITORY UNTUK MENYIMPAN DATA SINYAL YANG DIPROSES DALAM ELECTRONIC NOSE	Computer Copyright	*Granted*	2020
	16	MODUL APLIKASI PEMBUATAN OBJEK 3D DARI PERSIMPANGAN OBJEK 3D UNTUK PEMODELAN IMPLAN	Computer Copyright	*Granted*	2020
	17	MODUL APLIKASI ACCURATE 3D GENERATOR UNTUK MENGHASILKAN 3D MODEL YANG AKURAT BERDASARKAN DIGITAL IMAGING AND COMMUNICATIONS IN MEDICINE (DICOM)	Computer Copyright	*Granted*	2020
	18	MODUL APLIKASI PENGHALUSAN PERMUKAAN DARI OBJEK 3D IMPLAN	Computer Copyright	*Granted*	2020
	19	MODUL APLIKASI PEMBENTUKAN MODEL IMPLAN MENGGUNAKAN RAY CASTING	Computer Copyright	*Granted*	2020

	20	MODUL APLIKASI SIGNAL REPOSITORY UNTUK MENYIMPAN DATA SINYAL YANG DIPROSES DALAM ELECTRONIC NOSE	Computer Copyright	*Granted*	2020
	21	APLIKASI DICOM 3D REPOSITORY UNTUK MENYIMPAN DIGITALIMAGING AND COMMUNICATION IN MEDICINE (DICOM) DALAMBENTUK 3 DIMENSI	Computer Copyright	*Granted*	2020
	22	APLIKASI MULTIPLANAR 3D VIEWER UNTUK MENAMPILKANSAGITAL, KORONAL, DAN AKSIAL SECARA SINKRON	Computer Copyright	*Granted*	2020
	23	APLIKASI 3D AUTOMATIC CO-REGISTERATION UNTUKMENYATUKAN GAMBAR DARI BERBAGAI MODALITAS	Computer Copyright	*Granted*	2020
	24	MODUL APLIKASI HEAD ALIGNMENT BERDASARKANANTERIOR COMMISSURE (AC), POSTERIOR COMMISSURE (PC),DAN MIDLINE	Computer Copyright	*Granted*	2020
	25	MODUL APLIKASI PENENTUAN LOKASI VENTRALINTERMEDIATE NUCLEUS (VIM) SECARA OTOMATISBERDASARKAN METODE COORDINATE-BASED	Computer Copyright	*Granted*	2020
	26	MODUL APLIKASI PENENTUAN LOKASI VENTRALINTERMEDIATE NUCLEUS (VIM) SECARA OTOMATIS BERDASARKAN METODE GUIOT	Computer Copyright	*Granted*	2020
	27	MODUL APLIKASI DICOM EXPORTER UNTUK MENGEKSPOR DIGITAL IMAGING AND COMMUNICATION IN MEDECINE (DICOM)KE APLIKASI LAIN	Computer Copyright	*Granted*	2020
	28	MODUL APLIKASI PENGELOLAAN FILE DICOM MENJADI FILE DICOM STANDARD	Computer Copyright	*Granted*	2020
	29	MODUL FUSI MEDICAL IMAGE UNTUK MENAMPILKAN	Computer Copyright	*Granted*	2020

		GABUNGAN GAMBAR DARI BERBAGAI MODALITAS			
	30	MODUL APLIKASI ACCURATE 3D GENERATOR UNTUK MENGHASILKAN 3D MODEL YANG AKURAT BERDASARKAN DIGITAL IMAGING AND COMMUNICATIONS IN MEDICINE (DICOM)	Computer Copyright	*Granted*	2020
	31	APLIKASI "MOLEN" – MOBILE ELECTRONIC NOSE UNTUK DETEKSI KUALITAS DAGING SAPI	Computer Copyright	*Granted*	2019

Important publications over the last 5 years	No	Year	Title and Authors	Vol/No	Journal
	1	2021	**Riyanarto Sarno**, Kelly Rossa Sungkono, Muhammad Taufiqulsa'di, Hendra Darmawan, Achmad Fahmi, Kuwat Triyana. *Improving Efficiency for Discovering Business Processes Containing Invisible tasks in Non-free Choice*	*Accepted*	Journal of Big Data **(Scopus Q1)**
	2	2021	Dewi Rahmawati, **Riyanarto Sarno**. *Anomaly Detection using Control Flow Pattern and Fuzzy Regression in Port Container Handling*	Vol. 33, Issue 1	Journal of King Saud University-Computer and Information Sciences **(Scopus Q1)**
	3	2021	Aziz Fajar, **Riyanarto Sarno**, Chastine Fatichah, Achmad Fahmi. *Reconstructing and resizing 3D images from DICOM files*	In Press	Journal of King Saud University-Computer and Information Sciences **(Scopus Q1)**
	4	2021	Dedy Rahman Wijaya, **Riyanarto Sarno**, Enny Zulaika. *DWTLSTM for Electronic Nose Signal Processing in Beef Quality Monitoring*	Vol. 326	Sensors and Actuators B: Chemical **(Scopus Q1)**
	5	2021	**Riyanarto Sarno**, Kuwat Triyana, Shoffi Izza Sabilla, Dedy Rahman Wijaya, Dwi Sunaryono, dan Chastine Fatichah. *Detecting Pork Adulteration in Beef for Halal Authentication Using an Optimized Electronic Nose System*	Vol. 8	IEEE Access **(Scopus Q1)**

	6	2021	Irene RHT Tangkawarow, **Riyanarto Sarno**, Daniel Siahaan. *Modeling Business Rule Parallelism by Introducing Inclusive and Complex Gateways in Semantics of Business Vocabulary and Rules.*	Vol. 14, Issue 1	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	7	2021	Nabil Haidarrahman Pribadi, **Riyanarto Sarno**, Adhatus Solichah Ahmadiyah, Kelly Rossa Sungkono. *Semantic Recommender System Based on Semantic Similarity Using FastText and Word Mover's Distance*	Vol. 14, Issue 2	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	8	2021	Kelly R. Sungkono, **Riyanarto Sarno**, Fransisca D. Amadea, Ariqoh F. Irbah. *Graph-Based Process Model Discovery for Mining Invisible Non-Prime Tasks in Hybrid Choice-Parallel Relationships*	Vol. 14, Issue 3	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	9	2021	Malikhah, **Riyanarto Sarno**, Shoffi Izza Sabilla. *Ensemble Learning for Optimizing Classification of Pork Adulteration in Beef Based on Electronic Nose Dataset*	Vol. 14, Issue 4	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	10	2021	Achmad Fahmi, Heri Subianto, Priya Nugraha, Muhammad Hamdan, Asra Al Fauzi, Anggraini Dwi Sensusiati, Budi Utomo, **Riyanarto Sarno**, Agus Turchan, Mohammad Hasan Machfoed, Takaomi Taira, Abdul Hafid Bajamal. *VIM Line Technique for Determining the Ventral Intermediate Location*	31(4)	Turkish Neurosurgery (Scopus Q3)
	11	2020	Shoffi Izza Sabilla, **Riyanarto Sarno**, Kuwat Triyana, Kenshi Hayashi. *Deep Learning in a Sensor Array System based on the Distribution of Volatile Compounds from Meat Cuts using GC-MS Analysis*	Vol. 29, 2020	Sensing and Bio-Sensing Research **(Scopus Q1)**
	12	2020	Dedy Rahman Wijaya, **Riyanarto Sarno**, Enny Zulaika. *Noise Filtering Framework for Electronic Nose Signals: An application for beef quality monitoring*	Vol. 157, February 2019	Computers and Electronics in Agriculture **(Scopus Q1)**
	13	2020	Mhd Arief Hasan, **Riyanarto Sarno**, Shoffi Izza Sabilla.	Vol. 13, No.5	International Journal of

			Optimizing Machine Learning Parameters for Classifying the Sweetness of Pineapple Aroma Using Electronic Nose		Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	14	2020	Muhammad Ainul Yaqin, **Riyanarto Sarno**, Siti Rochimah. *Measuring Scalable Business Process Model Complexity Based on Basic Control Structure*	Vol. 13, No.6	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	15	2020	**Riyanarto Sarno**, Fernandes Sinaga, Kelly Rossa Sungkono. *Anomaly Detection in Business Processes using Process Mining and Fuzzy Association Rule Learning*	Vol. 7, No. 5	Journal of Big Data **(Scopus Q1)**
	16	2020	**Riyanarto Sarno**, Shoffi Izza Sabilla, Dedy Rahman Wijaya, Dwi Sunaryono, Chastine Fatichah. *Electronic nose dataset for pork adulteration in beef*	Vol. 32	Data in Brief (Scopus Q2)
	17	2020	**Riyanarto Sarno**, Shoffi Izza Sabilla, Dedy Rahman Wijaya, Hariyanto. *Electronic Nose for Detecting Multilevel Diabetes using Optimized Deep Neural Networr*	Vol. 28, No. 1, 2020	Engineering Letters (Scopus Q2)
	18	2020	Achmad Fahmi, Heri Subianto, Priya Nugraha, Muhammad Hamdan, Asra Al Fauzi, Anggraini Dwi Sensusiati , Budi Utomo, **Riyanarto Sarno**, Agus Turchan, Mohammad Hasan Macfoed, Takaomi Taira, Abdul Hafid Bajamal. *Vim line technique thalamotomy for Parkinson tremor: Case series*	Vol. 77	International Journal of Surgery Case Report (Scopus Q3)
	19	2020	Yohanes Setiawan, Chastine Fatichah, **Riyanarto Sarno**. *A New Local Gaussian Variational Level Set for Globus Pallidus Segmentation*	Vol. 13, No. 5	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	20	2020	Khairiyyah Nur Aisyah, Chastine Fatichah, **Riyanarto Sarno**. *Multilevel Thresholding and Morphological Relationship Approach for Automatic Detection of Anterior and Posterior Commissure in Mid-*	Vol. 13, No. 5	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)

				sagittal Brain MRI		
	21	2020	Yohanes Setiawan, Kelly Rossa Sungkono, **Riyanarto Sarno**. *A New Similarity Method based on Weighted Graph Models for Matching Parallel Business Process Models*	Vol. 13, No. 5	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	22	2020	Khairiyyah Nur Aisyah, Kelly Rossa Sungkono, **Riyanarto Sarno**. *A New Similarity Method based on Weighted-Linear Temporal Logic Tree and Weighted Directed Acyclic Graph for Graph-based Business Process Models*	Vol. 13, No. 5	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	23	2020	Adiba Sabilla Ajrina, **Riyanarto Sarno**, Hari Ginardi, Aziz Fajar. *Mining Zone Determination of Natural Sandy Gravel using Fuzzy AHP and SAW, MOORA and COPRAS Methods.*	Vol. 13, No. 5	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	24	2020	Sulaiman Wakhid, **Riyanarto Sarno**, Shoffi Izza Sabilla, Dike Bayu Maghfira. *Detection and Classification of Indonesian Civet and Non-Civet Coffee Based on Statistical Analysis Comparison Using E-Nose.*	Vol. 13, No. 4	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	25	2020	Sinarring Azi Laga, **Riyanarto Sarno**. *Temperature effect of electronic nose sampling for classifying mixture of beef and pork*	Vol. 19, No. 3	Indonesian Journal of Electrical Engineering and Computer Science (Scopus Q3)
	26	2020	Ryco Puji Setyono, **Riyanarto Sarno**. *Comparative method of moora, copras and topsis based on weighting of best worst method in supplier selection at ABC mining companies in Indonesia*	Vol. 19, No. 2	Indonesian Journal of Electrical Engineering and Computer Science (Scopus Q3)
	27	2020	Indra Waspada, **Riyanarto Sarno**, Kelly Rossa Sungkono. *An Improved Method of Parallel Model Detection for Graph-Based Process Model Discovery*	Vol. 13, No. 2	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	28	2020	Budi Harjo, **Riyanarto Sarno**, Siti Rochimah. *Automatic Web Service Composition for SaaS*	Vol. 13, No. 2	International Journal of Intelligent

			Business Intelligence		Engineering & Systems (IJIES) (Scopus Q2)
	29	2020	Bagus Setya Rintyarna, **Riyanarto Sarno**, Chastine Fatichah. *Enhancing the performance of sentiment analysis task on product reviews by handling both local and global context*	Vol. 12, No. 1	International Journal of Information and Decision Sciences (Scopus Q3)
	30	2020	Suhariyanto, **Riyanarto Sarno**, Chastine Fatichah, Edi Faisal. *Aspect Based Sentiment Analysis: A Systematic Literature Review*	Vol. 5, No. 1	Journal of Applied Intelligent System
	31	2019	Cahyaningtyas Sekar Wahyuni, Kelly Rossa Sungkono, **Riyanarto Sarno**. *Novel Parallel Business Process Similarity Methods based on Weighted-Tree Declarative Pattern Models*	Vol. 13, No. 1, pp. 65-77	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	32	2019	Ahmad Yusuf Ardiansyah and **Riyanarto Sarno**. *Performance Analysis of Wireless Sensor Network with Load Balancing for Data Transmission using XBEE ZB Module*	vol. 14, no. 2, pp. 1-13	Indonesian Journal of Electrical Engineering and Computer Science (IJEECS) (Scopus Q3)
	33	2019	Afrianda Cahyapratama, Kelly Rossa Sungkono, **Riyanarto Sarno**. *Gap Analysis Business Process Model by Using Structural Similarity*	vol. 14, no. 2, pp. 1-12	Indonesian Journal of Electrical Engineering and Computer Science (IJEECS) (Scopus Q3)
	34	2019	M. Jupri and **Riyanarto Sarno**. *Data Mining, Fuzzy AHP And TOPSIS For Optimizing Taxpayer Supervision*		Indonesian Journal of Electrical Engineering and Computer Science (IJEECS) (Scopus Q3)
	35	2019	Maryamah, Agus Zainal Arifin, **Riyanarto Sarno**, Yasuhiko Morimoto. *Query Expansion Based on Wikipedia Word Embedding and BabelNet Method for Searching Arabic Documents*	vol. 12, no. 5, pp. 202-213	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	36	2019	Bagus Setya Rintyarna, **Riyanarto Sarno,** Chastine	vol. 6, no. 84, pp. 1-	Journal of Big Data (**Scopus**

				19	**Q1)**
			Fatichah. *Evaluating the Performance of Sentence Level Features and Domain Sensitive Features of Product Reviews on Supervised Sentiment Analysis Tasks*		
	37	2019	Dedy Rahman Wijaya, **Riyanarto Sarno**, Enny Zulaika. *Noise filtering framework for electronic nose signals: An application for beef quality monitoring*	Volume 157, Pages 305-321.	Elsevier, Computers and Electronics in Agriculture **(Scopus Q1)**
	38	2019	Farza Nurifan, **Riyanarto Sarno**, Kelly Rossa Sungkono. *Aspect based Sentiment Analysis for Restaurant Reviews using Hybrid ELMo-Wikipedia and Hybrid Expanded Opinion Lexicon-SentiCircle*	vol. 12, no. 6, pp. 47-58	International Journal of Intelligent Engineering and Systems (IJIES) (Scopus Q2)
	39	2019	Ari Firmanto, **Riyanarto Sarno**. *Aspect-Based Sentiment Analysis Using Grammatical Rules, Word Similarity, and SentiCircle*	Vol. 12, No. 5	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	40	2019	Umi Salamah, **Riyanarto Sarno**, Agus Zainal Arifin, Anto Satriyo Nugroho, Ismail Ekoprayitno Rozi, Puji Budi Setia Asih. *Enhancement of low quality blood smear image using contrast and edge corrections.*	*In Press*	Int. J. Biomedical Engineering and Technology (Scopus Q3)
	41	2019	**Riyanarto Sarno**, Kelly Rossa Sungkono. *A Survey of graph-based algorithms for discovering business processes*	Vol. 5, No. 2	International Journal of Advances in Intelligent Informatics (IJAIN) (Scopus Q3)
	42	2019	Bagus Setya Rintyarna, **Riyanarto Sarno**, Chastine Fatichah. *Semantic Features for Optimizing Supervised Approach of Sentiment Analysis on Product Reviews*	Vol. 8, No. 3	Computers (Scopus Q2)
	43	2019	Bambang Jokonowo, **Riyanarto Sarno**, Siti Rochimah, Bagus Priambodo. *Process Mining : Measuring Key Performance Indicator Container Dwell Time*	Vol.16, No. 1,	Indonesian Journal of Electrical Engineering and Computer Science (IJEECS) (Scopus Q3)

	44	2019	Reza Amalia Priyantina, **Riyanarto Sarno**. *Sentiment Analysis of Hotel Aspect for Optimization Management Hotel Review Analysis Using Latent Dirichlet Allocation (LDA) Similarity and Sentiwordnet.*	Vol. 12, Issue 4	International Journal of Intelligent Engineering and Systems (IJIES) (Scopus Q2)
	45	2019	Dewi Ayu Khusnul Khotimah, **Riyanarto Sarno**. *Sentiment Analysis of Hotel Aspect Using PLSA (Probability Latent Semantic Analysis).*	Vol. 12, Issue 4	International Journal of Intelligent Engineering and Systems (IJIES) (Scopus Q2)
	46	2019	Kelly Rossa Sungkono, Ulva Erida Nur Rochmah, **Riyanarto Sarno**. *Heuristic Linear Temporal Logic Pattern Algorithm in Business Process Model.*	Vol. 12, Issue 4	International Journal of Intelligent Engineering and Systems (IJIES) (Scopus Q2)
	47	2019	Aziz Fajar, **Riyanarto Sarno**. *Agent Based Simulation and Optimization of Parallel Task to Reduce Asynchronous Waiting Time on Business Process.*	Vol 17, No 4	TELKOMNIKA (Scopus Q3)
	48	2019	Irwan Alnarus Kautsar, **Riyanarto sarno**. *A Supportive Tool for Project Based Learning and Laboratory Based Education*	Vol.9, No. 2 , pp.630-639.	International Journal on Advanced Science Engineering and Information Technology
	49	2019	Lukman Hakim, **Riyanarto Sarno**, Kelly Rossa Sungkono. *Modified Alpha++ Algorithm for Discovering the Hybrid of Non-Free Choice and Invisible Task of Business Processes.*	Vol. 12, Issue 3, pp. 31-40	International Journal of Intelligent Engineering and Systems (IJIES) (Scopus Q2)
	50	2019	Dedy Rahman Wijaya, **Riyanarto Sarno**, Enny Zulaika. *Noise Filtering Framework for Electronic Nose Signals: An application for beef quality monitoring.*	Vol. 157	Elsevier, Computers and Electronics in Agriculture (Scopus Q1)
	51	2019	Mohammad Fikri, **Riyanarto Sarno**. *A Comparative Study of Sentiment Analysis using SVM and SentiWordNet*	Vol. 13, No. 3, pp. 902-909	Indonesian Journal of Electrical Engineering and Computer Science (IJEECS)

				(Scopus Q3)
52	2019	**Riyanarto Sarno**, Kelly Rossa Sungkono, Reynaldo Johanes, Dwi Sunaryono. *Graph-Based Algorithms for Discovering A Process Model Containing Invisible Tasks.*	Vol. 12, Issue 2, pp.85-94	International Journal of Intelligent Engineering and Systems (IJIES) (Scopus Q2)
53	2019	**Riyanarto Sarno**, Dedy Rahman Wijaya. *Recent Development in Electronic Nose Data Processing for Beef Quality Assessment.*	Vol. 17, No. 1, pp.337-348	TELKOMNIKA (Scopus Q3)
54	2019	Gita Intani Budiawati, **Riyanarto Sarno**. *Time and Cost Optimization of Business Process RMA using PERT and Goal Programming.*	Vol. 17, No. 2	TELKOMNIKA (Scopus Q3)

Activities in specialist bodies over the last 5 years	**Taught Courses:**
	 2016
	 – **Odd Semester:**
	   Bachelor: Systems Audit
	   Master: Advance topics in System Audit, Advance topics in Software Project Management
	 – **Even Semester:**
	   Bachelor: Knowledge Engineering, Enterprise System, Specific Topics in Intelligent Information Management
	   Master: Advance topics in Knowledge Based Engineering
	
	 2017
	 – **Odd Semester:**
	   Bachelor: Systems Audit, Knowledge Engineering
	   Master: Software Engineering, Advance topics in System Audit
	 – **Even Semester:**
	   Bachelor: Software Project Management, Enterprise System
	   Master: Advance topics in Knowledge Based Engineering
	
	 2018
	 – **Odd Semester:**
	   Master: Software Engineering, Advance topics in System Audit, Advance topics in Software Evolution
	 – **Even Semester:**
	   Bachelor: Software Project Management, Enterprise System, Introduction to Process Mining
	   Master: Advance topics in Software Project Management, Advance topics in Knowledge Based Engineering
	
	 2019
	 – **Odd Semester:**
	   Bachelor: Software Project Management
	   Master: Software Engineering
	 – **Even Semester:**
	   Bachelor: System Audit, Introduction to Process Mining,

	2020
	   – **Odd Semester:**
	       Bachelor: Software Project Management
	       Master: Software Engineering, Advance topics in System Audit
	   – **Even Semester:**
	       Master: Advance topics in Software Project Management
	
	International Journal Editor:
	1. International Journal of Intelligent Engineering and Systems
	2. International Journal of Advances in Intelligent Informatics
	
	International Journal Reviewer:
	1. Journal of King Saud (2020)
	2. IEEE Access (2020)

Name	**Ratih Nur Esti Anggraini, S.Kom., M.Sc., Ph.D.**
Position	Lecturer
Academic career	- Bachelor's degree (Computer Science), Sepuluh Nopember Institute of Technology, Indonesia, 2008. - Master's degree (Science), National Taiwan University of Science and Technology, Taiwan, 2012. - Doctoral degree (Mathematic Engineering), University of Bristol, 2021.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. The Development of Research Ethics Review System (STEPDAL) based on Rule Engine and Text Understanding for Ethical Review Result Recommendation, 2021 2. The Development of Automatic Reviewer Scheduling Module in Research Ethics Review System, 2021 3. Flexible Requirement Verification for Adaptive Systems, 2020 4. Mobile Application for Guidance and Provision of Toddler's Nutrition to Support e-PKK, 2016 5. PKK-man: A System to Manage PKK Activities in Indonesia, 2016 6. Tools for Detecting Punctuation Errors in Scientific Papers, 2016 7. Infant and Pregnancy Encyclopedia Application, 2015 8. Decomposition using Refined Process Structure Tree (RPST) and Control Flow Complexity Metrics, 2015 9. KMS-CS: A Client Server Application for Storing Toddler Health Information in Posyandu, 2015
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. A Graded Approach to Requirement Satisfaction for Evolving Systems, 2019 2. Capturing Requirement Correlation in Adaptive Systems, 2018 3. Fuzzy Representation for Flexible Requirement Satisfaction, 2017

Activities in specialist bodies over the last 5 years	2015
	   – Odd Semester: Software Design, Analysis and Design of Information Systems, Database Systems
	   – Even Semester: Software Design Process, Database Management
	
	2021
	   – Even Semester: Database Management, Analysis and Design of

	Information Systems, Computer Programming, Knowledge-based Engineering

Name	**Nurul Fajrin Ariyani, S.Kom., M.Sc.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Computer Science), Sepuluh Nopember Institute of Technology, Indonesia, 2008. - Master's degree (Science), National Taiwan University of Science and Technology, Taiwan, 2012.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. The Rule Engine Development of the Ethical Protocol Review Process for the Recommendation of the Ethical Review Results, Institution Funding (Institut Teknologi Sepuluh Nopember), 2021. 2. The Development of Research Ethics Review System (STEPDAL) Based on Rule Engine and Text Understanding for the Recommendation of Ethical Review Results, Institution Funding (Institut Teknologi Sepuluh Nopember), 2021. 3. Offline Storage Implementation for Mobile Application of Livestock Management SITERNAK, Department Funding (Institut Teknologi Sepuluh Nopember), 2021. 4. An Automatic Review Scheduling Module in The Digital Research Ethics System (STEPAL) Application, Department Funding (Institut Teknologi Sepuluh Nopemeber), 2021. 5. Improvement of Preprocessing Method using Pre-trained Model for Detecting Semantic Similarities in Documents Using Deep Learning, Department Funding (Institut Teknologi Sepuluh Nopember), 2021. 6. Automatic Process Model Formation for Waste Management of Health Facilities using Graph Database, Department Funding (Institut Teknologi Sepuluh Nopember), 2020. 7. Fraud Detection in Procurement of Residential Building Construction Materials, Department Funding (Institut Teknologi Sepuluh Nopember), 2020. 8. Digitalization of Scientific Reports Metadata on Interlibrary Loan System using Semantic Annotation, Department Funding (Institut Teknologi Sepuluh Nopember), 2019. 9. Requirement Engineering in the Interlibrary Loan System to Improve Collection Loan Services (Case Study of Departmental Reading Room at ITS), Department Funding (Institut Teknologi Sepuluh Nopember), 2018. 10. Implementation of Graph Database in Generating Applications for the Genealogy of the Royal Family in Indonesia Utilizing Metadata in Wikipedia Articles, Department Funding (Institut Teknologi Sepuluh Nopember), 2018. 11. Implementation of Scalable Inference and Query Engine to Find and Complete Kinship Relationships Between Characters on the Indonesian History Portal Website, Institution Funding (Institut Teknologi Sepuluh Nopember), 2017. 12. Implementation of Ontology Matching Method for Data Integration and Searching Relationships Between Indonesian Historical Figures, Institution Funding (Institut Teknologi Sepuluh Nopember), 2016.

Industry collaborations over the last 5 years	1. Database Architect, The Higher Education Database Center of Indonesia (PDDIKTI), 2021. 2. Database Consultant, Reporting and Assessment System of the Surabaya Regional Work Unit Performance E-Data, 2018. 3. Database Specialist, Online Selection Entrance Systems for Public High School in East Java, 2017 – 2018.
Patents and proprietary rights	MyITS Security Management: An Application for user controlling and administration within Institut Teknologi Sepuluh Nopember (ITS). Copyright No: EC00202047053, 2020.
Important publications over the last 5 years	1. **NF. Ariyani**, N. Meutia, AS. Ahmadiyah, KR Sungkono, R. Sarno, A. Munif, 2020, Design and Implementation of Barcode Technology in Livestock Data Information Systems in LAZ Al-Azhar. Sewagati 4 (3), 197-203. 2. **Ariyani, N.F**., Munif, A., Ayunin, P.Q., 2019, August. An Automatic Annotation Mehod on MOOC's Learning Content. In International Conference on Information & Communication Technology and Systems (ICTS). 3. **Ariyani, N.F**., Saralita, M., Sarwosri, Sarno, R., 2018, March. Refining the Relationships among Historical Figures by Implementing Inference Rules in SWRL. In International Conference on Information Technology and Digital Applications (ICITDA). 4. HARTANTO, H.A., SARNO, R. and **ARIYANI, N.F**., 2017. Warning Criterion Ontology for Measuring of Compliance in Standard Operating Procedure Implementation. Journal of Theoretical & Applied Information Technology, 95(24). 5. Sungkono, K.R., Sarno, R., **Ariyani, N.F.,** 2017, October. Refining Business Process Ontology Model with Invisible Prime Tasks using SWRL Rules. In International Conference on Information & Communication Technology and Systems (ICTS). 6. Fauzan, A.C., Sarno, R., **Ariyani, N.F**., 2017, October. Structure-based Ontology Matching of Business Process Model for Fraud Detection. In International Conference on Information & Communication Technology and Systems (ICTS). 7. **Ariyani, N.F.,** Hanafi, M.B., Ginardi, H. and Saralita, M., 2016, October. Linking spatial information of cultural heritage metadata with geo linked open data. In Information Technology Systems and Innovation (ICITSI), 2016 International Conference on (pp. 1-5). IEEE. 8. Wiguna, K.A., Sarno, R. and **Ariyani, N.F**., 2016, October. Optimization Solar Farm site selection using Multi-Criteria Decision Making Fuzzy AHP and PROMETHEE: case study in Bali. In Information & Communication Technology and Systems (ICTS), 2016 International Conference on (pp. 237-243). IEEE. 9. Hartanto, H.A., Sarno, R. and **Ariyani, N.F**., 2016, August. Linked warning criterion on ontology-based key performance indicators. In Technology of Information and Communication (ISemantic), International Seminar on Application for (pp. 211-216). IEEE.
Activities in specialist bodies over the last 5 years	2016 − Odd Semester: Database System, Software Design − Even Semester: Database System, Special Topics in Knowledge Based Systems, Requirement Engineering, Knowledge Engineering, Undergraduate Pre-Thesis, Software Engineering Economics

	2017
	  − Odd Semester: Software Design, Database System
	  − Even Semester: Algorithm and Computer Programming, Requirement Engineering, Knowledge Engineering
	
	2018
	  − Odd Semester: Analysis and Design of Information Systems, Knowledge Engineering, Software Design
	  − Even Semester: Requirement Engineering, Database Management, Analysis and Design of Information Systems
	
	2019
	  − Odd Semester: Software Design, Database System, Knowledge Engineering
	  − Even Semester: Database Management, Requirement Engineering
	
	2020
	  − Odd Semester: Database System, Software Design, Discrete Mathematics, Knowledge Engineering
	  − Even Semester: Database Management, Requirement Engineering

Name	**Adhatus Solichah A., S.Kom., M.Sc.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Computer Science), Sepuluh Nopember Institute of Technology, Indonesia, 2009. - Master's degree (Computer Science), National Taiwan University of Science and Technology, Taiwan, 2013.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. 2021: Principal Investigator, Project: Halal Critical Control Points Identification using Graph Approach (*Identifikasi Halal Critical Control Points dengan Pendekatan Graf*) 2. 2021: Team leader, Community Service: Assistance in Managing Micro and Small Business Products Circulation Permits at the ITS Campus Canteen (*Pendampingan Pengurusan Ijin Edar Produk UMKM di Kantin Kampus ITS*) 3. 2021: Principal Investigator, Project: Fraud Detection in the Procurement of Residential Building Construction Materials (*Deteksi Kecurangan (Fraud) Pada Pengadaan Material Konstruksi Bangunan Rumah Tinggal*) 4. 2020: Team leader, Community Service: Counseling and Assistance for Halal Food and Beverage Products at the Informatics Cafeteria and ITS Library Canteen (*Sosialisasi dan Pendampingan Produk Makanan dan Minuman Halal di Kafetaria Informatika dan Kantin Perpustakaan ITS*) 5. 2019: Principal Investigator, Project: Digitizing Metadata of Scientific Reports Collection on Interlibrary Loans with Semantic Annotations (Digitizing Metadata Collection of Scientific Reports on Interlibrary Loans with Semantic Annotations) 6. 2019: Principal Investigator, Project: Requirement Engineering in the Interlibrary Loan System to Improve Collection Loan Services (Case Study of Departmental Reading Room at ITS) (*Rekayasa Kebutuhan Pada Sistem Interlibrary Loan untuk Meningkatkan Layanan Peminjaman Koleksi (Studi Kasus Ruang Baca Departemen di ITS)*)

	7. 2018: Principal Investigator, Project: Design and Modeling of Multi Agent Systems Business Process Interlibrary Loan Case Study ITS Library and Reading Room (*Desain dan Pemodelan Sistem Multi-Agen Proses Bisnis Interlibrary Loan Studi Kasus Perpustakaan dan Ruang Baca ITS*) 8. 2017: Principal Investigator, Project: Study of the Maturity Level of ITS Library Information Technology in User Services (Preparing ITS Libraries Towards World Class University Libraries in Asia) (*Kajian Tingkat Kematangan Teknologi Informasi Perpustakaan ITS Pada Pelayanan Pengguna (Mempersiapkan Perpustakaan ITS Menuju World Class University Library di Asia)*) 9. 2016: Principal Investigator, Project: Design and Implementation of Flood and Drought Potential Response Applications (*Rancang Bangun Aplikasi Tanggap Potensi Banjir dan Kekeringan*)
Industry collaborations over the last 5 years	1. 2021: *PT. PLN (Persero) Unit Pelaksana Pengatur Distribusi Jawa Timur* (East Java Maintenance Department, State Electricity Company (PLN)) in Developing Web and Mobile Apps for Work Order and Assignment Letters 2. 2021: *Pengadilan Agama Kabupaten Kediri* (Religious Court of Kediri District) in Developing a web-based user satisfaction survey 3. 2020: CV. Bangun Karya Sejahtera in Developing Construction Project Monitoring Information System 4. 2018: *Dinas Pendidikan Provinsi Jawa Timur* (East Java Provincial Education Office) in Developing Teacher Promotion Assessment Information System
Patents and proprietary rights	None
Important publications over the last 5 years	1. Nabil Haidarrahman Pribadi, Riyanarto Sarno, **Adhatus Solichah Ahmadiyah**, Kelly Rossa Sungkono. "Semantic Recommender System Based on Semantic Similarity Using FastText and Word Mover's Distance." International Journal of Intelligent Engineering and Systems, vol. 14, Issue 2, 2021, pp.377-385. DOI: 10.22266/ijies2021.0430.34 2. **Adhatus Solichah Ahmadiyah**, Riyanarto Sarno, Fony Revindasari. "Adopted Topic Modeling for Business Process and Software Component Conformity Checking." TELKOMNIKA, Vol. 18, No. 6, December 2020 pp. 2939-2947. 3. **Adhatus Solichah Ahmadiyah**, Faridatul Aidah, Navinda Meutia, Denise Rahmadina, Daniel Lumbantobing, Ratih Anggraini. "Remarketing Media Alternatives Based on Customer Preferences." JUTI: Jurnal Ilmiah Teknologi Informasi Vol. 18, No. 2, July 2020 pp. 188-196. 4. Davi Wahyuni, Yeni Anita Gonti, Eva Mursidah, **Adhatus Solichah**. "Pengukuran Tingkat Kematangan Layanan Pengguna Perpustakaan ITS Berbasis Teknologi Informasi (Perpustakaan ITS Menuju WCUL)." Jurnal Perpustakaan Universitas Airlangga Vol 9, No 1, 2019 pp. 11 – 18. 5. Hendra Darmawan, Riyanarto Sarno, **Adhatus Solichah Ahmadiyah**, Kelly Rossa Sungkono, Cahyaningtyas Sekar Wahyuni. "Anomaly Detection Based on Control-flow Pattern of Parallel Business Processes." TELKOMNIKA, Vol. 16, No. 6, December 2018 pp. 2809-2816. 6. **Adhatus Solichah Ahmadiyah**, Indira Nursyamsina Hazimi, Dicky Maulana Rozi, Rizky Andre Wibisono, Donny Fitrado, M. Ardika Rifqi, Riyanarto Sarno, Kelly Rossa Sungkono. "Business Processes Discovery in Halal Restaurant Kitchen Using Graph Based Algorithm". 2021 IEEE

	Asia Pacific Conference on Wireless and Mobile (APWiMob).
	7. Kelly Rossa Sungkono, **Adhatus Solichah Ahmadiyah**, Riyanarto Sarno, Muhammad Farhan Haykal, Muhammad Rayhan Hakim, Bagas Juwono Priambodo, Muhammad Amir Fauzan, Muhammad Kiantaqwa Farhan. "Graph-Based Process Discovery Containing Invisible Non-Prime Task in Procurement of Animal-Based Ingredient of Halal Restaurants". 2021 IEEE Asia Pacific Conference on Wireless and Mobile (APWiMob).
	8. **Adhatus S Ahmadiyah**, Tubagus I I Apriwibowo, Adnan E Raharja, Salsha A Amosea, and Hayu A. Radriyantami. "Investment Recommendation System on Agriculture Peer-to-Peer Lending Websites" in The Joint Conference of 2nd International Conference on Industrial and System Engineering (IConISE) and 7th Annual Conference on Industrial and System Engineering (ACISE). Surabaya, Indonesia July 22-23, 2020.
	9. **Adhatus S Ahmadiyah**, Yuki Y Ratna, Nitama N Yotifa, and Izzah Dinillah. "Supplementary Quality Control Features for The Production Department in Odoo ERP" in The Joint Conference of 2nd International Conference on Industrial and System Engineering (IConISE) and 7th Annual Conference on Industrial and System Engineering (ACISE). Surabaya, Indonesia July 22-23, 2020.
	10. Moh Khozain and **Adhatus S Ahmadiyah**. "IoT based kWh Meter Recorder System for Electrical Substation" in The Joint Conference of 2nd International Conference on Industrial and System Engineering (IConISE) and 7th Annual Conference on Industrial and System Engineering (ACISE). Surabaya, Indonesia July 22-23, 2020.
	11. Andreyan Rizky Baskara, Riyanarto Sarno, **Adhatus Solichah**. "Discovering Traceability between Business Process and Software Component using Latent Dirichlet Allocation" in International Conference on Informatics and Computing (ICIC). Pages: 251 – 256, 2016. DOI: 10.1109/IAC.2016.7905724.
	12. Fony Revindasari, Riyanarto Sarno, **Adhatus Solichah**. "Traceability Between Business Process and Software Component using Probabilistic Latent Semantic Analysis" in International Conference on Informatics and Computing (ICIC). Pages: 245 – 250, 2016. DOI: 10.1109/IAC.2016.7905723.
	13. Rahmi Rizkiana Putri, Riyanarto Sarno, Daniel Oranova Siahaan, **Adhatus Solichah**. "Accuracy Improvement of The Estimations Effort in COCOMO II based on Logic Model of Fuzzy" in International Conference on Energy, Environment and Information System (ICENIS), 2016, pp. 2478-2480. DOI: https://doi.org/10.1166/asl.2017.8767.
	14. Fachrul Pralienka Bani Muhamad, Riyanarto Sarno, **Adhatus Solichah Ahmadiyah**, Siti Rochimah. "Visual GUI Testing in Continuous Integration Environment" in International Conference on Information & Communication Technology and Systems (ICTS), Pages: 214 – 219, 2016. DOI: 10.1109/ICTS.2016.7910301.

Activities in specialist bodies over the last 5 years	2020
	  – Odd Semester: Software Design, Enterprise Systems, Discrete Mathematics, Database Systems
	  – Even Semester: Information System Analysis and Design, Database Management, Information Technology Governance
	
	2019
	  – Odd Semester: Software Design, Enterprise Systems, Database

	Systems, Database Management
	– Even Semester: Information System Analysis and Design, Database Management, Information Technology Governance
	2018
	– Software Design, Analysis and Design of Information Systems, Database Systems
	– Even Semester: Database Management
	2017
	– Odd Semester: Database Systems, Analysis and Design of Information Systems, Information Technology Governance, Analysis and Design of Information Systems
	– Even Semester: Requirements Engineering, Computer Algorithm and Programming, Database Management
	2016
	– Odd Semester: Information Systems Analysis and Design, Information Technology Governance, Database Systems
	– Even Semester: Requirements Engineering, Software Project Management, Information Management Special Topics, Algorithms and Computer Programming

Name	**Abdul Munif, S.Kom., M.Sc.**
Position	Assistant Professor, Studentship Consultation Officer
Academic career	- Bachelor's degree (Computer Science), Sepuluh Nopember Institute of Technology, Indonesia, 2008. - Master's degree (Science), National Taiwan University of Science and Technology, Taiwan, 2011.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. Preprocessing Improvement using Pretrained Model for Detecting Semantic Similarities in Documents using Deep Learning, Department Funding (Institut Teknologi Sepuluh Nopember), 2021 2. Fraud Detection in Procurement of Residential Building Construction Materials, Department Funding (Institut Teknologi Sepuluh Nopember), 2020. 3. Automatic Process Model Formation for Waste Management of Health Facilities using Graph Database, Department Funding (Institut Teknologi Sepuluh Nopember), 2020. 4. Digitalization of Scientific Reports Metadata on Interlibrary Loan System using Semantic Annotation, Department Funding (Institut Teknologi Sepuluh Nopember), 2019. 5. Crowdsourcing Incident Detection with Spatial and Temporal Information using Deep Learning, National Strategic Research Scheme (Directorate of Higher Education), 2018-2020. 6. Online Services for Spatial Information Based on Detailed Spatial Planning (Case Study: Surabaya), Department Funding (Institut Teknologi Sepuluh Nopember), 2016. 7. Mobile Apps for Poverty Mapping, Department Funding (Institut Teknologi Sepuluh Nopember), 2016.
Industry collaborations over the last 5 years	1. 2021 - Telin Malaysia: Developing Dashboard Visualization for Customer Transactions

	2. 2019-2020 - Bank Jatim: Penetration Testing for Various Banking APPs
	3. 2016 - PT Badak LNG: Developing E-Contract APPs for PT Badak LNG
Patents and proprietary rights	1. 2020, MyITS Single Sign-On (SSO): Identity Access Management (IAM) Application for User Authentication and Authorization at Institut Teknologi Sepuluh Nopember (ITS), Copyright No: EC00202047150
	2. 2019, Incident Report: Important Event Detection in Urban Area Based on Social Media Data Crowdsourcing, Copyright No: EC00201991701
Important publications over the last 5 years	1. Chastine Fatichah, Wildan F. Lazuardi, Dini A. Navastara, Nanik Suciati, and **Abdul Munif**, "*A Content Filtering from Spam Posts on Social Media using Weighted Multimodal Approach*," JCS, vol. 17, no. 1, Jan. 2021, doi: 10.3844/jcssp.2021.55.66.
	2. Ariyani, N.F., Fadhila, Ivan, **Munif, Abdul**, *Vacation Route Recommendation using Ontology and A**, Briliant : Jurnal Riset dan Konseptual, 2020, Volume 5, Issue 2, pp. 417-430.
	3. C. Fatichah, P. D. Sammy Wiyadi, D. Adni Navastara, N. Suciati, and **A. Munif**, "*Incident Detection based on Multimodal data from Social Media using Deep Learning Methods*," in 2020 International Conference on ICT for Smart Society (ICISS), Nov. 2020, vol. CFP2013V-ART, pp. 1–6. doi: 10.1109/ICISS50791.2020.9307555.
	4. Sari, O.L., Adi, T. J.W., **Munif, A.**, *Selection Model of Building Demolition Method Based on Expert System*, Third International Conference on Sustainable Innovation 2019 – Technology and Engineering (IcoSITE 2019), pp. 58-61.
	5. Ariyani, N.F., **Munif, A.**, Ayunin, P.Q., *An automatic annotation method on MOOC's learning content*, Proceedings of 2019 International Conference on Information and Communication Technology and Systems, ICTS 2019, 2019, pp. 332–337
	6. Fatichah, C., Lazuardi, W.F., Navastara, D.A., Suciati, N., **Munif, A.**, *Image spam detection on instagram using convolutional neural network*, Lecture Notes in Networks and Systems, 2019, 67, pp. 295–303
	7. Dharmawan, T., Ginardi, H., **Munif, A.**, *Dropout Detection Using Non-Academic Data*, Proceedings - 2018 4th International Conference on Science and Technology, ICST 2018
	8. **Abdul Munif**, Rizky Januar Akbar, Ruchi Intan Tantra, Rachmania Ilavi, *The Development of Code Plagiarism Detection and Student Feedback Systems in E-Learning Systems*, JUTI (Jurnal Ilmiah Teknologi Informasi), 2017, Vol. 15, Issue 1, pp. 104-118.
	9. I Made Mustika, R.V.H. Ginardi, **Abdul Munif**, *The Development of Mobile Apps for Trans Sarbagita Bali Province*, Jurnal Teknik ITS, 2017, Vol. 6, No. 1, pp. A51-A55
	10. Ginardi, R.V.H., **Munif, A.**, Nurul, K.W., Khoiruddin, A., Perdana, R., *System design to use weather forecast & current condition information on travel route with KNN and graphical data on Android application*, Proceedings of the 11th International Conference on Information and Communication Technology and System, ICTS 2017, 2018, 2018-January, pp. 287–291
	11. Gervais, H., **Munif, A.**, Ahmad, T., *Using Quality Threshold distance to detect intrusion in TCP/IP network*, 2016 IEEE International Conference on Communication, Network, and Satellite, COMNETSAT 2016 - Proceedings, 2017, pp. 80–84
	12. Pamungkas, E.W., Sarno, R., **Munif, A.**, *B-BabelNet: Business-specific lexical database for improving semantic analysis of business process models*, Telkomnika (Telecommunication Computing Electronics and Control), 2017, 15(1), pp. 407–414
	13. Sarno, R., Wibowo, W.A., Sunaryono, D., **Munif, A.**, *Developing

	workflow patterns based on functional subnets and control - Flow patterns, Proceedings - 2015 International Conference on Science in Information Technology: Big Data Spectrum for Future Information Economy, ICSITech 2015, 2016, pp. 24–29. 14. Sarno, R., Haryadita, F., Sunaryono, D., **Munif, A.**, *Model discovery of parallel business processes using modified Heuristic Miner*, Proceedings - 2015 International Conference on Science in Information Technology: Big Data Spectrum for Future Information Economy, ICSITech 2015, 2016, pp. 30–35
Activities in specialist bodies over the last 5 years	2015 - Odd Semester: Design and Analysis of Algorithm I, Object Oriented Programming - Even Semester: Web Programming, Design and Analysis of Algorithm II, Distributed Database, Big Data 2016 - Odd Semester: Design and Analysis of Algorithm I, Object Oriented Programming, Information System and Technology - Even Semester: Design and Analysis of Algorithm II, Distributed Database, Algorithm and Computer Programming, Big Data 2017 - Odd Semester: Design and Analysis of Algorithm I, Fundamental Programming, Database Systems, Object Oriented Programming - Even Semester: Big Data, Design and Analysis of Algorithm II, Distributed Database 2018 - Odd Semester: Distributed Database, Web Programming, Object Oriented Programming - Even Semester: Distributed Database, Big Data, Framework-based Programming 2019 - Odd Semester: Distributed Database, Fundamental Programming, Object Oriented Programming, Distributed Database - Even Semester: Data Structures, Framework-based Programming, Big Data, Integrative Programming 2020 - Odd Semester: Object Oriented Programming, Distributed Database, Fundamental Programming - Even Semester: Data Structure, Database Management, Framework-based Programming, Big Data, Introduction to Database Technology

Name	**Kelly Rossa Sungkono, S.Kom., M.Kom.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2016. - Master's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2018.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. 2020: Principal Investigator, Project: Pembentukan Model Proses secara Otomatis Pengelolaan Limbah Fasilitas Kesehatan dengan menggunakan Graph-Database (*Formation of Process Model Automatically for Health Facility Waste Management using Graph-Database*)

	2. 2019: Principal Investigator, Project: Pembentukan dan Penerapan Enterprise Resource Planning untuk Usaha Kecil Menengah (UKM) Retail (*Establishment and Implementation of Enterprise Resource Planning for Small and Medium Enterprises (SMEs) Retail*)
Industry collaborations over the last 5 years	None
Patents and proprietary rights	1. Video Copyright: Video Visual Workflow dalam Bentuk Animasi 3 Dimensi untuk Kasus Craniosynostosis (*Visual Workflow Video in 3-Dimensional Animation for Craniosynostosis Case)*. Granted, 2020. 2. Computer Copyright: Modul Visual Workflow berdasarkan Model Proses Bisnis untuk Kasus Craniosynostosis (*Visual Workflow Module based on Business Process Model for Craniosynostosis Case*). Granted. 2020 3. Computer Copyright: Modul Virtual Reality 3 Dimensi untuk Workflow Kasus Cranioplasty menggunakan File Dicom dari Ct-Scan (*3-Dimensional Virtual Reality Module for Cranioplasty Case Workflow Using Dicom File from Ct-Scan*). Granted. 2020 4. Computer Copyright: Modul Virtual Reality Tekstual Image Digital Imaging and Communication in Medicine (Dicom) 3 Dimensi Otak (*Module Virtual Reality Textual Image Digital Imaging and Communication in Medicine (Dicom) 3 Dimensions of the Brain*). Granted. 2020. 5. Database Copyright: Basis Data Tekstual Image Digital Imaging and Communication in Medicine (Dicom) 3 Dimensi Otak (*Textual Image Database Digital Imaging and Communication in Medicine (Dicom) 3 Dimensions of the Brain*). Granted. 2020 6. Database Copyright: Basis Data Tekstual Image 2 Dimensi Otak Modul Virtual Reality 3 Dimensi untuk Workflow Kasus Craniosynostosis menggunakan File Dicom dari CT-Scan (*Textual Database Image 2 Dimensions of the Brain 3 Dimension Virtual Reality Module for Craniosynostosis Case Workflow using Dicom File from CT-Scan*). Granted. 2020
Important publications over the last 5 years	1. Riyanarto Sarno, **Kelly Rossa Sungkono**, Muhammad Taufiqulsa'di, Hendra Darmawan, Achmad Fahmi, Kuwat Triyana. Improving Efficiency for Discovering Business Processes Containing Invisible Tasks in Non-free Choice. Journal of Big Data (Scopus Q1). *Accepted.* 2. **Kelly Rossa Sungkono,** Riyanarto Sarno, Fransisca D. Amadea, Ariqoh F. Irbah. Graph-Based Process Model Discovery for Mining Invisible Non-Prime Tasks in Hybrid Choice-Parallel Relationships, International Journal of Intelligent Engineering and Systems (Scopus Q2), vol. 14, Issue 3, 2021, pp.425-434. DOI: 10.22266/ijies2021.0430.34 3. Nabil Haidarrahman Pribadi, Riyanarto Sarno, Adhatus Solichah Ahmadiyah, **Kelly Rossa Sungkono**. Semantic Recommender System Based on Semantic Similarity Using FastText and Word Mover's Distance. International Journal of Intelligent Engineering and Systems (Scopus Q2), vol. 14, Issue 2, 2021, pp.377-385. DOI: 10.22266/ijies2021.0430.34 4. Yohanes Setiawan, **Kelly Rossa Sungkono**, Riyanarto Sarno. A New Similarity Method based on Weighted Graph Models for Matching Parallel Business Process Models. International Journal of Intelligent Engineering and Systems (Scopus Q2). Vol. 13, No. 5, 2020, pp. 267-276 5. Khairiyyah Nur Aisyah, **Kelly Rossa Sungkono**, Riyanarto Sarno. A New Similarity Method based on Weighted-Linear Temporal Logic Tree and Weighted Directed Acyclic Graph for Graph-based Business Process Models. International Journal of Intelligent Engineering and Systems

(Scopus Q2). Vol. 13, No. 5, 2020, pp. 356-367

6. Indra Waspada, Riyanarto Sarno, **Kelly Rossa Sungkono**. An Improved Method of Parallel Model Detection for Graph-Based Process Model Discovery. International Journal of Intelligent Engineering and Systems (Scopus Q2), Vol.13, No.2, 2020. DOI: 10.22266/ijies2020.0430.13

7. Riyanarto Sarno, Fernandes Sinaga, **Kelly Rossa Sungkono**. Anomaly Detection in Business Processes using Process Mining and Fuzzy Association Rule Learning. Journal of Big Data (Scopus Q1), vol. 7, no. 5, pp. 1-19, 2020.

8. Cahyaningtyas Sekar Wahyuni, **Kelly Rossa Sungkono**, Riyanarto Sarno. Novel Parallel Business Process Similarity Methods based on Weighted-Tree Declarative Pattern Models. International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2), vol. 12, no. 6, pp. 236-248, 2019. DOI: 10.22266/ijies2019.1231.23

9. Afrianda Cahyapratama, **Kelly Rossa Sungkono**, Riyanarto Sarno. Gap Analysis Business Process Model by Using Structural Similarity. Indonesian Journal of Electrical Engineering and Computer Science (IJEECS), vol. 14, no. 2, pp. 1-12, 2020. DOI: 10.11591/ijeecs.v14.i2.ppab-cd

10. Farza Nurifan, Riyanarto Sarno, **Kelly Rossa Sungkono**. Aspect based Sentiment Analysis for Restaurant Reviews using Hybrid ELMo-Wikipedia and Hybrid Expanded Opinion Lexicon-SentiCircle. International Journal of Intelligent Engineering and Systems (IJIES) (Scopus Q2), vol. 12, no. 6, pp. 47-58, 2019. DOI: 10.22266/ijies2019.1231.05

11. Riyanarto Sarno, **Kelly Rossa Sungkono**. A Survey of graph-based algorithms for discovering business processes. International Journal of Advances in Intelligent Informatics (IJAIN), Vol. 5, No. 2, 2019. https://doi.org/10.26555/ijain.v5i2.296

12. **Kelly Rossa Sungkono**, Ulva Erida Nur Rochmah, Riyanarto Sarno. Heuristic Linear Temporal Logic Pattern Algorithm in Business Process Model. International Journal of Intelligent Engineering and Systems (IJIES) (Scopus Q2), Vol. 12, Issue 4, August 2019

13. Lukman Hakim, Riyanarto Sarno, **Kelly Rossa Sungkono**. Modified Alpha++ Algorithm for Discovering the Hybrid of Non-Free Choice and Invisible Task of Business Processes. International Journal of Intelligent Engineering and Systems (IJIES) (Scopus Q2), Vol. 12, Issue 3, pp. 31-40, June 2019

14. Hendra Darmawan, Riyanarto Sarno, Adhatus Solichah Ahmadiyah, **Kelly Rossa Sungkono**, Cahyaningtyas Sekar Wahyuni. Anomaly Detection Based on Control-flow Pattern of Parallel Business Processes.TELKOMNIKA, Vol 16, No 6, December 2018, pp.2808-2815

15. Riyanarto Sarno, **Kelly Rossa Sungkono**. Recovering Truncated Streaming Event Log Using Coupled Hidden Markov Model. International Journal of Pattern Recognition and Artificial Intelligence, Volume 33, Issue 08 (15 July 2019)

16. **Kelly Rossa Sungkono**, Riyanarto Sarno, Constructing Control-Flow Patterns Containing Invisible Task and Non-Free Choice Based on Declarative Model. International Journal of Innovative Computing, Information and Control (IJICIC), ISSN 1349-4198. Volume 14, Number 4, August 2018, pp. 1285–1299. DOI: 10.24507/ijicic.14.04.1285

17. Riyanarto Sarno, **Kelly Rossa Sungkono** and Rizal Septiarakhman. Graph-Based Approach for Modeling and Matching Parallel Business Processes. International Information Institute. vol. 21, no. 5, pp. 1603-1614. 2018

	18. Riyanarto Sarno, **Kelly Rossa Sungkono**, Coupled Hidden Markov Model for Process Mining of Invisible Prime Tasks, International Review on Computers and Software (IRECOS), vol. 11 no. 6, pp. 539-547, 2017. https://doi.org/10.15866/irecos.v11i6.9555 19. Riyanarto Sarno and **Kelly Rossa Sungkono**, Hidden Markov Model for Process Mining of Parallel Business Processes, International Review on Computers and Software (IRECOS), vol. 11, no. 4, pp. 290-300, 2016. DOI: https://doi.org/10.15866/irecos.v11i4.8700 20. Riyanarto Sarno, Widyasari Ayu Wibowo, Kartini, Fitrianing Haryadita, Yutika Amelia Effendi, **Kelly Rossa Sungkono**, Determining Process Model Using Time-Based Process Mining and Control-Flow Pattern, Telecommunication Computing Electronics and Control (TELKOMNIKA), vol. 14, no. 1, pp. 349-359, 2016. DOI: http://dx.doi.org/10.12928/telkomnika.v14i1.3257
Activities in specialist bodies over the last 5 years	2019 – Odd Semester: Database System, Database Management (Vocational Program,Department of Business Statistics) – Even Semester: Database Management, Algorithm and Computer Programming (Bachelor Program, Department of Industrial Engineering) 2020 – Odd Semester: Database System, Database Management (Vocational Program, Department of Business Statistics) – Even Semester: Systems Audit, Introduction to Process Mining, Algorithm and Computer Programming (Bachelor Program, Department of Industrial Engineering) **REVIEWER OF JOURNALS OR CONFERENCES:** – Reviewer of International Journal: Data in Brief (2020) – Reviewer of Ilkomnika Journal of Computer Science and Applied Informatics (2020) – Reviewer of Journal of Development Research (2021) – Reviewer of Information Systems International Conference (2021) – Reviewer of the 13th International Conference on Information & Communication Technology and System (2021)

Name	**Shintami Chusnul Hidayati, S.Kom., M.Sc., Ph.D.**
Position	Lecturer
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2009. - Master's degree (Science), National Taiwan University of Science and Technology, Taiwan, 2012. - Doctoral degree (Computer Science and Information Engineering), National Taiwan University of Science and Technology, Taiwan, 2017.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. An AI-based Assessment Monitoring System, 2021. 2. StyleMe: An AI Fashion Consultant for Personal Shopping and Style Advice, 2018.
Industry collaborations over the last 5 years	1. Microsoft Research Asia, 2018. 2. Samurai Spirit Inc., 2014 – 2017.

Patents and proprietary rights	None
Important publications over the last 5 years	**Journal Articles** 1. <u>Shintami Chusnul Hidayati</u>, Ting Wei Goh, Ji-Sheng Gary Chan, Cheng-Chun Hsu, John See, Lai-Kuan Wong, Kai-Lung Hua, Yu Tsao, and Wen-Huang Cheng, "Dress with Style: Learning Style from Joint Deep Embedding of Clothing Styles and Body Shapes," to appear in IEEE Transactions on Multimedia. (Impact Factor 2019: 6.051) 2. Wen-Huang Cheng, Sijie Song, Chieh-Yun Chen, <u>Shintami Chusnul Hidayati</u>, and Jiaying Liu, "Fashion Meets Computer Vision: A Survey," to appear in ACM Computing Surveys. (Impact Factor 2019: 7.990) 3. <u>Shintami Chusnul Hidayati</u>, Chuang-Wen You, Wen-Huang Cheng, and Kai-Lung Hua, "Learning and Recognition of Clothing Genres from Full-body Images," IEEE Transactions on Cybernetics, vol. 48, no. 5, pp. 1647 - 1659, 2018. (Impact Factor 2018: 10.387) 4. Kai-Lung Hua, <u>Shintami Chusnul Hidayati</u>, Fang-Lin He, Chia-Po Wei, and Yu-Chiang Frank Wang, "Context-Aware Joint Dictionary Learning for Color Image Demosaicking," Journal of Visual Communication and Image Representation, vol. 38, pp. 230-245, 2016. (Impact Factor 2016: 2.164) 5. Jordi Sanchez-Riera, Kai-Lung Hua, Yuan-Sheng Hsiao, Tekoing Lim, <u>Shintami Chusnul Hidayati</u>, and Wen-Huang Cheng, "A Comparative Study of Data Fusion for RGB-D Based Visual Recognition," Pattern Recognition Letters, vol. 73, pp. 1 - 6, 2016. (Impact Factor 2016: 2.164) 6. Tsung-Hung Tsai, Wei-Chih Jhou, Wen-Huang Cheng, Min-Chun Hu, I-Chao Shen, Tekoing Lim, Kai-Lung Hua, Ahmed Ghoneim, M. Anwar Hossain, and <u>Shintami Chusnul Hidayati</u>, "Photo sundial: Estimating the Time of Capture in Consumer Photos," Neurocomputing, vol. 177, pp. 529 - 542, 2016. (Impact Factor 2016: 3.317) **Peer-Reviewed Conference Papers** 1. <u>Shintami Chusnul Hidayati</u> and Yeni Anistyasari, "Body Shape Calculator: Understanding the Type of Body Shapes from Anthropometric Measurements," in Proc. Int. Conf. Multimedia Retrieval, Taipei, Taiwan, Nov. 16 – 19, 2021. 2. Ghali Marzani, Nanik Suciati, and <u>Shintami Chusnul Hidayati</u>, "Morphological Preprocessing for Low-Resolution Face Recognition using Common Space," in Proc. International Conference on ICT for Smart Society, Bandung, Indonesia, Aug. 2 – 4, 2021. 3. Yeni Anistyasari, Ekohariadi Ekohariadi, IG P Asto Buditjahjanto, and <u>Shintami Chusnul Hidayati</u>, "Exploring the Psychometric Properties of Computational Thinking Assessment in Introductory Programming," in Proc. Int. e-Engineering Education Services Conference (e-Engineering), Petra, Jordan, Jun. 22 – 23, 2021. 4. Firman Maulana, Hadziq Fabroyir, Darlis Herumurti, Imam Kuswardayan, and <u>Shintami Chusnul Hidayati</u>, "Real-time Landscape Generation in Games Using Parallel Procedural Content," in Proc. International Conference on Computer Engineering, Network, and Intelligent Multimedia, Surabaya, Indonesia, Nov. 17 – 18, 2020. 5. Ganendra Afrasya Salsabilla, Hadziq Fabroyir, Darlis Herumurti, Imam Kuswardayan, and <u>Shintami Chusnul Hidayati</u>, "Tachyon: Multiplatform Rhythm Game with Automatic Beatmap Generation," in

Proc. International Conference on Computer Engineering, Network, and Intelligent Multimedia, Surabaya, Indonesia, Nov. 17 – 18, 2020.

6. Marde Fasma'ul Aza, Nanik Suciati, and <u>Shintami Chusnul Hidayati</u>, "Performance Study of Facial Expression Recognition Using Convolutional Neural Network," in Proc. International Conference on Science in Information Technology, Palu, Indonesia, Oct. 21 – 22, 2020.

7. Muhammad Auliaramadani, Nanik Suciati, and <u>Shintami Chusnul Hidayati</u>, Hadziq Fabroyir, Ridho Rahman Hariadi, "Augmented Reality for 3D House Design Visualization from Floorplan Image," in Proc. International Conference on Electrical Engineering and Informatics, Aceh, Indonesia, Oct. 27-28, 2020.

8. <u>Shintami Chusnul Hidayati</u>, Raden Bimo Rizki Prayogo, Satria Ade Veda Karuniawan, Mhd. Fadly Hasan, and Yeni Anistyasari, "What's in a Caption?: Leveraging Caption Pattern for Predicting the Popularity of Social Media Posts," in Proc. IEEE International Conference on Vocational Education and Electrical Engineering (IEEE ICVEE), Surabaya, Indonesia, Oct. 3 - 4, 2020.

9. <u>Shintami Chusnul Hidayati</u>, Kai-Lung Hua, Yu Tsao, Jiaying Liu, Hong-Han Shuai, and Wen-Huang Cheng, "Garment Detectives: Discovering Clothes and Its Genre in Consumer Photos," in Proc. IEEE International Conference on Multimedia Information Processing and Retrieval (IEEE MIPR), San Jose, California, USA, Mar. 28 - 30, 2019.

10. <u>Shintami Chusnul Hidayati</u>, Cheng-Chun Hsu, Yu-Ting Chang, Kai-Lung Hua, Jianlong Fu, and Wen-Huang Cheng, "What dress fits me best? Fashion Recommendation on the Clothing Style for Personal Body Shape," in Proc. ACM International Conference on Multimedia (ACM MM), Seoul, Korea, Oct. 22 - 26, 2018.

11. Eric Massip, <u>Shintami Chusnul Hidayati</u>, Wen-Huang Cheng, and Kai-Lung Hua, "Exploiting Category-specific Information for Image Popularity Prediction in Social Media," in Proceedings of the IEEE International Conference on Multimedia and Expo (ICME) Workshops, San Diego, California, USA, Jul. 23 - 27, 2018.

12. <u>Shintami Chusnul Hidayati</u>, Yi-Ling Chen, Chao-Lung Yang, and Kai-Lung Hua, "Popularity Meter: An Influence- and Aesthetics-aware Social Media Popularity Predictor," in Proceedings of the ACM International Conference on Multimedia (ACM MM), Mountain View, California, USA, Oct. 23 - 27, 2017.

13. Zhao-Ming Liu, Yung-Yao Chen, <u>Shintami Chusnul Hidayati</u>, Shih-Che Chien, Feng-Chia Chang, and Kai-Lung Hua, "3D Model Retrieval Based on Deep Autoencoder Neural Networks," in Proceedings of the IEEE International Conference on Signals and Systems (ICSigSys), Bali, Indonesia, May 16 - 18, 2017.

14. Jordi Sanchez-Riera, <u>Shintami Chusnul Hidayati</u>, Kai-Lung Hua, Jen-Chieh Chiang, and Wen-Huang Cheng, "A Learning-based Tracking Algorithm for Hand Gesture," in Proceedings of the 29th IPPR Conference on Computer Vision, Graphics, and Image Processing (CVGIP), Keelung, Taiwan, Aug. 15 - 17, 2016.

15. Dang Duy Thang, <u>Shintami Chusnul Hidayati</u>, Yung-Yao Chen, Wen-Huang Cheng, Shih-Wei Sun, and Kai-Lung Hua, "A Spatialpyramid Scene Categorization Algorithm based on Locality-aware Sparse Coding," in Proceedings of the 2016 IEEE International Conference on Multimedia Big Data (BigMM), Taipei, Taiwan, Apr. 20 - 22, 2016.

16. Yu-Chen Chen, <u>Shintami Chusnul Hidayati</u>, Wen-Huang Cheng, Min-Chun Hu, and Kai-Lung Hua, "Locality Constrained Sparse Representation for Cat Recognition," in Proceedings of the 22nd

	International Conference on MultiMedia Modeling (MMM), Miami, USA, Jan. 4 - 6, 2016.

Activities in specialist bodies over the last 5 years	**Taught Curses**
	2019
	  - Odd Semester: Artificial Intelligence, Computational Intelligence, Computer Graphics
	  - Even Semester: Deep Learning, Artificial Intelligence, Advanced Topics in Computer Graphics, Computational Intelligence, Data Structure
	
	2020
	  - Odd Semester: Computer Graphics, Basic Programming, Data Structure
	  - Even Semester: Artificial Intelligence, Advanced Topics in Computer Graphics, Data Structure, Basic Algorithms and Programming
	
	Journal Activities
	  Reviewer
	    - IEEE Transactions on Multimedia
	    - IEEE MultiMedia
	    - IEEE Access
	    - Machine Vision and Applications
	    - Visual Computer
	    - IEICE Transactions on Information and Systems
	    - ITE Transactions on Media Technology and Applications
	    - MDPI Applied Sciences
	    - MDPI Electronics
	    - MDPI Information
	    - Journal of Physical Communication
	  Editor-in-chief
	    - Scientific Journal of Information Technology
	
	Conference Activities
	  Organizer/Co-organizer
	    - ACM Multimedia Grand Challenge on AI Meets Beauty: 2019, 2020
	  Chair/Co-chair
	    - IEEE Int. Conf. Multimedia and Expo: 2022
	    - ACM Int. Conf. Multimedia Retrieval: 2021
	    - ACM Multimedia Grand Challenge on AI Meets Beauty: 2018
	    - IEEE Int. Conf. Visual Communications and Image Processing: 2018
	  Program committee member
	    - IEEE Int. Conf. Multimedia and Expo: 2018, 2019, 2020, 2021
	    - Int. Conf. MultiMedia Modelling: 2020, 2021
	    - IEEE Int. Conf. Image Processing: 2018, 2019, 2020, 2021
	    - ACM Int. Conf. Multimedia Retrieval: 2021
	    - IEEE Int. Workshop on Multimedia Signal Processing: 2019, 2020, 2021
	    - Int. Conf. Information and Communication Technology and Systems: 2017, 2019, 2021
	    - Int. Conf. Vocational Education and Electrical Engineering: 2020, 2021
	    - ACM Int. Conf. Multimedia: 2018, 2019, 2020
	    - Int. Conf. Pattern Recognition: 2020

	- IEEE Int. Symposium on Circuits and Systems: 2020 - IEEE Int. Conf. Visual Communication and Image Processing: 2018, 2019 - ACM Int. Conf. Multimedia in Asia: 2019 - Int. Symp. Intelligent Signal Processing and Communication Systems: 2019

Area of Expertise: Intelligent Vision Computing

Name	**Prof. Ir. Handayani Tjandrasa, M.Sc., Ph.D.**
Position	Professor
Academic career	- Bachelor's degree, Institut Teknologi Sepuluh Nopember, Indonesia, 1975. - Master's degree (Computer Science), University of Wisconsin – Madison 1978. - Doctor's degree, University of Wisconsin, 1984.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Swing Trajectory Model for the New Design of Quadruped Robot using V-REP Simulator, 2020 2. Non-Proliferative Diabetic Retinopathy Classification Based on Hard Exudates Using Combination of FRCNN, Morphology, and ANFIS, 2020 3. Improving Spectral Quality of IHS-Pansharpening Result by Integrating Equalization Process using SVE-DWT for Satellite Imagery Data, 2020 4. Classification of Tobacco Leaf Pests using VGG16 Transfer Learning, 219 5. Classification of Diabetic Retinopathy and Normal Retinal Images using CNN and SVM, 2019 6. Red Small Dot Segmentation for Early Warning of Diabetic Retinopathy, 2018 7. Exudate Segmentation in Retinal Images of Diabetic Retinopathy using Saliency Method based on Region, 2018 8. Classification of P300 Event-related Potentials using Wavelet Transform, MLP, and Soft Margin SVM, 2018 9. A Soft Weighted Median Filter for Removing General Purpose Image Noise, 2017 10. Exudate Detection in Retinal Fundus Images using Combination of Mathematical Morphology and Renyi Entropy Thresholding, 2017 11. Classification of Alcoholic EEG using Wavelet Packet Decomposition, Principal Component Analysis, and Combination of Genetic Algorithm and Neural Network, 2017 12. Feature Extraction using Combination of Intrinsic Mode Functions and Power Spectrum for EEG Signal Classification, 2016 13. Feature Extraction using Statistical Moments of Wavelet Transform for Iris Recognition, 2016 14. Classification of EEG Signals using Common Spatial Pattern-principal Component Analysis and Interval Type-2 Fuzzy Logic System, 2016 15. Alcoholism Classification based on EEG Data using Independent Component Analysis (ICA), Wavelet De-noising and Probabilistic Neural Network (PNN), 2016 16. Classification of EEG Signals using Single Channel Independent Component Analysis, Power Spectrum, and Linear Discriminant Analysis, 2016 17. Identification of Oil Palm Plantations in IKONOS Images using Radially Averaged Power Spectrum Values, 2015
Industry collaborations over the last 5 years	None

Patents and proprietary rights	None
Important publications over the last 5 years	1. Severity Classification of Non-Proliferative Diabetic Retinopathy using Convolutional Support Vector Machine, 2020 2. Identification of Acute Lymphoblastic Leukemia Subtypes in Touching Cells Based on Enhanced Edge Detection, 2020 3. Combination of Aggregated Channel Features (ACF) Detector and Faster R-CNN to Improve Object Detection Performance in Fetal Ultrasound Images, 2018 4. Robot Motion Control using the Emotiv EPOC EEG System, 2018 5. Automatic Leukemia Cell Counting using Iterative Distance Transform for Convex Sets, 2018 6. Text Mining for Pest and Disease Identification on Rice Farming with Interactive Text Messaging, 2018 7. Hybrid Speckle Noise Reduction Method for Abdominal Circumference Segmentation of Fetal Ultrasound Images, 2018 8. Detection of Facial Expressions Using the Gabor and Haar Wavelet Features, 2018 9. Classification of P300 in EEG Signals for Disabled Subjects using Singular Spectrum Analysis, 2017 10. Urban Road Materials Identification using Narrow Near Infrared Vision System, 2017 11. New Lossless Compression Method using Cyclic Reversible Low Contrast Mapping (CRLCM), 2016 12. Glaucoma Detection in Fundus Retina Image using Adaptive Thresholding and Support Vector Machine, 2016 13. Lossless Image Compression Method using Reversible Low Contrast Mapping (RLCM), 2016 14. Classification of Mental Activities based on EEG Data using Hybrid Neural Network and Fuzzy Particle Swarm Optimization Methods with Crossmutated Operation, 2016 15. Image Orientation Improvement based on Human Presence using Gradient and Haar-like Features, 2015 16. Image Orientation Automatically based on the Presence of a Face using the HAAR-LIKE feature, 2015 17. Nucleus and Cytoplasm Segmentation on Cervical Smear Image using a Combination of Fuzzy C-Means Clustering and Radiating Gradient Vector Flow Snake Methods, 2015 18. Classification of Non-Proliferative Diabetic Retinopathy based on Segmented Exudates using K-Means Clustering, 2015
Activities in specialist bodies over the last 5 years	**2015** - Odd Semester: Computational Intelligence, Research Methodology and Philosophy of Science, Dissertation - Research 1, Dissertation - Research 2, Dissertation - Research 3, Seminar 1. **2016** - Odd Semester: Computational Intelligence, Research Methodology and Philosophy of Science, Seminar 1. - Even Semester: Digital Image Processing, Topics in Digital Image Processing, Seminar 2. **2017** - Odd Semester: Computational Intelligence, Research Methodology and Philosophy of Science

	- Even Semester: Artificial Intelligence, Digital Image Processing, Topics in Digital Image Processing, Research Methodology. 2018 - Odd Research Methodology and Philosophy of Science, Seminar 1, Computational Intelligence. - Even Semester: Digital Image Processing, Topics in Digital Image Processing, Seminar 2. 2019 - Odd Semester: Computational Intelligence, Research Methodology and Philosophy of Science. - Even Semester: Topics in Digital Image Processing, Digital Image Processing, Artificial Intelligence. 2020 - Odd Semester: Biomedical Computing, Computational Intelligence, Research Methodology and Philosophy of Science, Seminar 1.

Name	**Prof. Dr. Agus Zainal Arifin, S.Kom., M.Kom.**
Position	Professor
Academic career	- Bachelor's degree, Institut Teknologi Sepuluh Nopember, 1995. - Master's degree (Computer Science), Universitas Indonesia 2001. - Doctoral degree, Hiroshima University, 2007.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Image Classification Performance Evaluation for 3D Model Reconstruction, 2020 2. Line Operator as a CNN-Based Preprocessing Method for Osteoporosis Detection in Panoramic Dental Radiographs, 2020 3. Converting Images into Base Relief Using Image Processing Techniques, 2019 4. Tooth Segmentation Using Gamma Adjustment and Transition Region Filter Based on Wavelet Method, 2019 5. Age Estimation System Using Deep Residual Network Classification Method, 2019 6. Enhanced Topic Modeling using Dictionary for Questions and Answers, 2019 7. Adaptive Edge-Based Image Contrast Enhancement using Multi Sub-Histogram Analysis, 2019 8. 3D Region Merge for Tooth Segmentation in Cone-Beam Computed Tomography Images, 2018 9. Hierarchical Clustering Linkage for Merging Regions in Interactive Image Segmentation on Computed Tomography Dental Cone Beam, 2018 10. Branching Detection in Trabecular Bones Using Multiscale COSFIRE Filters for Osteoporosis Identification, 2018 11. Automatic Comparison of Products based on Opinion Features using Synonym Equations and Jaccard, 2018 12. Gaussian Kernel Based Conditional Spatial FCM Interactive Segmentation for Panoramic Radiography, 2018 13. Generating automatic markers based on composite directional images from frequency domains for dental panoramic radiographic

	segmentation, 2017
	14. Rainfall Forecasting using Autoregressive Integrated Moving Average, Single Input and Multi Input Transfer Function, 2017
	15. Combining Spatial Information and Line Features in an Adaptive Classifier for Trabecular Bone Segmentation, 2017
	16. Co-occurrence Techniques and Dictionary-Based Methods for Indonesian Thesaurus Construction, 2017
	17. Computer-assisted System for Osteoporosis Assessment using Mandibular Cortical Width Measurements on Dental Panoramic Radiographs, 2017
	18. Feature Extraction using Wavelet Transform Statistical Moments for Iris Recognition, 2016
	19. Improvement of Low-Quality Microscopic Images of Thick Blood Smears of Malaria Patients using Contrast and Edge Correction, 2016
	20. Phrase Suffix Tree Efficiency with Single Pass Clustering for Indonesian Web Document Grouping, 2016
	21. Measurement of Cortical Bone Thickness in Dental Panoramic Images based on Polynomial Curve, 2016
	22. Tooth Segmentation in Dental Panoramic Radiography using Decimation-free Directional Filter Bank Thresholding and Multistage Adaptive Thresholding, 2015
	23. Classification of Tuna using Decision Tree Algorithms and Image Processing Methods, 2015
	24. Image Thresholding based on Obscurity Index and Fuzzy Similarity Measure, 2015
	25. Non-Linear Spatial-Temporal Input Selection for Rainfall Forecasting Using Repetitive Neural Networks, 2018
	26. Feature Extraction based on Shape Descriptors and Copy Points for Tuna Image Classification, 2016
	27. Arabic Document Ranking using Latent Semantic Indexing, 2015
	28. Optimization of Weighting on Query Expansion with Term Relatedness to Query-Entropy based (TRQE), 2015
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. Multitask learning with general vector space for cross-lingual semantic relation detection, 2020
	2. Tweet Classification using Deep Learning Architecture for Concert Event Detection, 2020
	3. Automatic Segmentation of Dental Cone Beam Computed Tomography Image Based on Level Set Method Using Morphology Operators and Polynomial Fitting, 2020
	4. Separation of Overlapping Object Segmentation using Level Set with Automatic Initialization on Dental Panoramic Radiograph, 2020
	5. Enhancement of Low-Quality Blood Smear Image using Contrast and Edge Corrections, 2020
	6. Semantic Relation Detection based on Multi-task Learning and Cross-Lingual-View Embedding, 2020
	7. Multi-projection Deep Learning Network for Segmentation of 3D Medical Images, 2019
	8. A Robust Segmentation for Malaria Parasite Detection of Thick Blood Smear Microscopic Images, 2019

9. Automatic Segmentation of Mandibular Cortical Bone on Cone-Beam CT Images Based on Histogram Thresholding and Polynomial Fitting, 2019
10. Deteksi Bot Spammer Twitter Berbasis Time Interval Entropy dan Global Vectors for Word Representations Tweets Hashtag, 2019
11. Segmenting Tooth Components in Dental X-Ray Images using Gaussian Kernel-Based Conditional Spatial Fuzzy C-Means Clustering Algorithm, 2019
12. Correlation and Symmetrical Uncertainty-based Feature Selection for Multivariate Time Series Classification, 2019
13. Detection of Overlapping Teeth on Dental Panoramic Radiograph, 2019
14. Automatic image slice marking propagation on segmentation of dental CBCT, 2019
15. Query Expansion Based on Wikipedia Word Embedding and BabelNet Method for Searching Arabic Documents, 2019
16. Query Expansion menggunakan Word Embedding dan Pseudo Relevance Feedback, 2019
17. Performance Analysis of Specification Computer and Mobile with Implementation Tawaf Virtual Reality using A* Algorithm and RVO System, 2019
18. Iterated Region for Interactive Image Segmentation on Dental Panoramic Radiograph, 2019
19. Autonomy Stemmer Algorithm for Legal and Illegal Affix Detection use Finite-State Automata Method, 2019
20. Ambiguitas Machine Translation pada Cross Language Chatbot Bea Cukai, 2019
21. Incorporating index of fuzziness and adaptive thresholding for image segmentation, 2018
22. Segmentation of Malaria Parasite Candidate from Thickblood Smear Microscopic Images using Watershed and Adaptive Thresholding, 2018
23. Sentence Extraction based on Sentence Distribution and Part of Speech Tagging for Multi-document Summarization, 2018
24. Automatic Determination of Seeds for Random Walker by Seeded Watershed Transform for Tuna Image Segmentation, 2018
25. A Flexible Sub-Block in Region based Image Retrieval based on Transition Region, 2018
26. Inter and Intra Cluster on Self-Adaptive Differential Evolution for Multi-Document Summarization, 2018
27. Image Thresholding based on Hierarchical Clustering Analysis and Percentile Method for Tuna Image Segmentation, 2018
28. Indonesian News Classification using Naive Bayes and Two-Phase Feature Selection Model, 2017
29. Arabic Book Retrieval using Class and Book Index-Based Term Weighting, 2017
30. Region Merging Strategy using Statistical Analysis for Interactive Image Segmentation on Dental Panoramic Radiographs, 2017
31. Fuzzy Region Merging using Fuzzy Similarity Measurement on Image Segmentation, 2017
32. Least Squares Support Vector Machines Parameter Optimization based on Improved Ant Colony Algorithm for Hepatitis Diagnosis, 2017
33. RBF Kernel Optimization Method with Particle Swarm Optimization on SVM using the Analysis of Input Datas Movement, 2017
34. Trabecular Bone Segmentation based on Segment Profile

	Characteristics Using Extreme Learning Machine on Dental Panoramic Radiographs, 2017 35. Term Weighting Based on Positive Impact Factor Query for Arabic Fiqh Document Ranking, 2017 36. Analysis of Adaptif Local Region Implementation on Local Thresholding Method, 2017 37. Improving Multi-document Summary Method based on Sentence Distribution, 2016 38. Extracted Pixels Similarity Features (EPSF) using Interactive Image Segmentation Techniques, 2016 39. Web News Documents Clustering in Indonesian Language Using Singular Value Decomposition-principal Component Analysis (Svdpca) and Ant Algorithms, 2016 40. Region Based Image Retrieval Using Ratio of Proportional Overlapping Object, 2016 41. The Development of Osteoporosis Detective Analysis Method in Trabecular Condylus of Menopause Women using Panoramic Radiograph, 2016 42. Indonesian News Classification using Naive Bayes and Two-Phase Feature Selection Model, 2016 43. Query Region Determination based on Region Importance Index and Relative Position for Region-based Image Retrieval, 2016 44. Coverage, Diversity, and Coherence Optimization for Multi-Document Summarization, 2015 45. Preference Based Term Weighting for Arabic Fiqh Document Ranking, 2015 46. A Novel Strategy of Differential Evolution Algorithms Crossover Operator Based on Gray level Clusters Similarity for Automatic Multilevel Image Thresholding, 2015

Activities in specialist bodies over the last 5 years	2015
	  - Odd Semester: Topics in Data Mining, Seminar 1, Information Retrieval Systems, Topics in Information Retrieval Systems, Topics in Data Mining.
	
	2016
	  - Odd Semester: Seminar 1, Topics in Information Retrieval Systems, Information Retrieval Systems.
	  - Events: Data Mining, Topics in Computer Vision, Seminar 2, Dissertation Writing.
	
	2017
	  - Odd Semester: Topics in Information Retrieval Systems, Information Retrieval Systems.
	  - Even Semester: Social Media Analysis, Topics in Computer Vision.
	
	2018
	  - Odd Semester: Topics in Information Retrieval Systems, Seminar 1, Information Retrieval Systems.
	  - Even Semester: Topics in Computer Vision, Social Network Analysis, Seminar 2.
	
	2019
	  - Odd Semester: Professional Communication, Information Retrieval Systems, Topics in Information Retrieval Systems.

	- Even Semester: Seminar 2, Dissertation Writing, Research Methodology, Data Mining. 2020 - Odd Semester: Professional Communication, Information Retrieval Systems, Topics in Information Retrieval Systems, Seminar 1, Topics in Data Mining.

Name	**Dr. Eng. Chastine Fatichah, S.Kom., M.Kom.**
Position	Associate Professor, Head of Department
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, 2000. - Master's degree (Computer Science), Universitas Indonesia 2008. - Doctoral degree, (Computational Intelligence & Systems Science), Tokyo Institute of Technology, 2012.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. 2020 – 2021: Principal Investigator, Research project: Fast Deep Learning Segmentation of Brain Tumour 3D MRI Image and Prediction of Patient Survival 2. 2020 – 2021: Principal Investigator, Research project: Method for Gender Identification and Grouping of Human Ages from Ramus Mandibula Panoramic Radiography 3. 2019 – 2021: Co-Principal Investigator, Research project: Development of Accurate 3D Additive Manufacturing Generator Based on Medical Imagery for Head Skull Surgery Planning and Facial Bone Reconstruction 4. 2020: Principal Investigator, Development of Method for Automated Assessment of Indonesian Essay Answering with Deep Neural Network Transfer Learning Approach 5. 2020: Co-Principal Investigator, Research project: Vehicle Number Plates Recognition based on CCTV Video Data for Development of Smart Gate Parking System 6. 2018–2020: Principal Investigator, Research project: Event detection in urban city by crowdsourcing based spatial and temporal information using deep learning method 7. 2018–2020: Co-Principal Investigator, Research project: Development of Electronic-Nose for Beef Quality Detection 8. 2017–2019: Co-Principal Investigator, Research project: Information retrieval system for Arabic documents 9. 2017–2018: Co-Principal Investigator, Research project: Face recognition based on Video data for surveillance system 10. 2014 – 2016: Principal Investigator, Research project: CellMorph: Computer Aided for Morphological Cell Analysis on Microscopic Image for Cell Cancer Detection 11. 2014–2016: Principal Investigator, Research project: Multi Document Summarization of Indonesian News Based on Trending Issue Data Twitter with Trivial Event Detection as Keywords 12. 2014–2015: Consultant, International Partnership Research Project: An Exigent Redesign of Electronic Biomedical Management Kits for Enhanced Reliability in managing intractable diseases (Asthma, Diabetes, and Epilepsy) in the KSA.
Industry collaborations over the last 5 years	None

Patents and proprietary rights	1. Incident Report: Application of Incident Detection in Urban through Crowdsourcing Social Media Data, EC00201991701, 20 December 2019 2. Consumer Preference Extractor (CP-Extractor V.1.1), EC00201978665, 29 October 2019 3. BCE Application for Finding Initial Basic Feasible Solution in Transportation Problem, EC00202056261, 4 December 2020 4. Computer Program "ItsBehavex-Collab ", EC00202120797, 21 April 2021
Important publications over the last 5 years	1. Indra Kharisma Raharjana, Daniel Siahaan, **Chastine Fatichah**, User Stories and Natural Language Processing: A Systematic Literature Review, IEEE Access 9, 53811-53826, 2021. 2. Eko Prasetyo, Nanik Suciati and **Chastine Fatichah**, Multi-Level Residual Network VGGNet for Fish Species Classification, Journal of King Saud University-Computer and Information Sciences, 2021. 3. Ana Alimatus Zaqiah, Diana Purwitasari, **Chastine Fatichah**, "Text Generation with Content and Structure-Based Preprocessing in Imbalanced Data of Product Review," International Journal of Intelligent Engineering and Systems, Vol.14, No.1, pp. 516-527, 2021. 4. **Chastine Fatichah**, Wildan F. Lazuardi, Dini A. Navastara, Nanik Suciati, Abdul Munif, "A Content Filtering from Spam Posts on Social Media using Weighted Multimodal Approach," Journal of Computer Science, 17(1), pp. 55–66, 2021. 5. Yudhi Purwananto, **Chastine Fatichah**, Waskitho Wibisono, Ary M. Shiddiqi, Bagus J. Santoso, Nurlita D. Fatmawati, "Collision Avoidance Modelling in Airline Traffic Based on the Change of Airplane Movements and Dynamic Clouds," Journal of Computer Science, 17(1), pp. 33–43, 2021. 6. Aziz Fajar, Riyanarto Sarno, **Chastine Fatichah**, "Reconstructing and resizing 3D images from DICOM files," Journal of King Saud University-Computer and Information Sciences, 2020. 7. Avin Maulana, **Chastine Fatichah,** Nanik Suciati, "Facial Inpainting Using Generative Adversarial Network with Feature Reconstruction and Landmark Loss to Preserve Spatial Consistency in Unaligned Face Images," International Journal of Intelligent Engineering and Systems, Vol. 13, No. 6, pp. 218-228, 2020. 8. Ahmad Afiif Naufal, **Chastine Fatichah,** Nanik Suciati, "Preprocessed Mask RCNN for Parking Space Detection in Smart Parking Systems," International Journal of Intelligent Engineering and Systems, Vol. 13, No. 6, pp. 255-265, 2020. 9. Rizka Sholikah, Agus Zainal Arifin, **Chastine Fatichah**, Ayu Purwarianti, "Multitask Learning with General Vector Space for Cross-Lingual Semantic Relation Detection," Journal of King Saud University-Computer and Information Sciences, 2020. 10. Riyanarto Sarno, Shoffi Izza Sabilla, Dedy Rahman Wijaya, Dwi Sunaryono, **Chastine Fatichah**, "Electronic nose dataset for pork adulteration in beef," Data in Brief 32, 106139, Elsevier, 2020 11. Bilqis Amaliah, **Chastine Fatichah**, Erma Suryani, "A new heuristic method of finding the initial basic feasible solution to solve the transportation problem," Journal of King Saud University-Computer and Information Sciences, 2020 12. Yohanes Setiawan, **Chastine Fatichah**, Riyanarto Sarno, "A New Local Gaussian Variational Level Set for Globus Pallidus Segmentation," International Journal of Intelligent Engineering and Systems, Vol. 13, No. 5, pp. 317-326, 2020. 13. Khairiyah Nur Aisyah, **Chastine Fatichah**, Riyanarto Sarno,

"Multilevel thresholding and Morphological Relationship Approach for Automatic Detection of Anterior and Posterior Commissure in Mid-sagittal Brain MRI," International Journal of Intelligent Engineering and Systems, Vol. 13, No. 5, pp. 368-378, 2020.

14. Rizka Wakhidatus Sholikah, Agus Zainal Arifin, **Chastine Fatichah**, Ayu Purwarianti, "Semantic Relation Detection based on Multi-task Learning and Cross-Lingual-View Embedding," International Journal of Intelligent Engineering and Systems, Vo. 13, No. 3, 2020.

15. Agung Wiratmo, **Chastine Fatichah**, "Indonesian Short Essay Scoring Using Transfer Learning Dependency Tree LSTM," International Journal of Intelligent Engineering and Systems, Vo. 13, No. 2, 2020.

16. Fika Hastarita Rahman, Riyanarto Sarno, **Chastine Fatichah**, "Hybrid Approach of Structural Lyric and Audio Segments for Detecting Song Emotion," International Journal of Intelligent Engineering and Systems, Vo. 13, No. 1, 2020.

17. Bagus Setya Rintyarna, Riyanarto Sarno, **Chastine Fatichah**, "Enhancing the performance of sentiment analysis task on product reviews by handling both local and global context," International Journal of Information and Decision Sciences, Inderscience, Vol. 12, No. 1, 2020.

18. Bagus Setya Rintyarna, Riyanarto Sarno, **Chastine Fatichah**, "Evaluating the performance of sentence level features and domain sensitive features of product reviews on supervised sentiment analysis tasks," Journal of Big Data, Springer, Vo. 6, No. 1, 2019.

19. Tora Fahrudin, Joko Lianto Buliali, **Chastine Fatichah**, "Ina-BWR: Indonesian bigram word rule for multi-label student complaints," Egyptian Informatics Journal, Elsevier, Vol. 20, No. 3, pp. 151-161, November 2019.

20. Ahmad Saikhu, Agus Zainal Arifin, **Chastine Fatichah**, "Correlation and Symmetrical Uncertainty-Based Feature Selection for Multivariate Time Series Classification," International Journal of Intelligent Engineering and Systems, Vo. 12, No. 3, June 2019.

21. Tora Fahrudin, Joko Lianto Buliali, *Chastine Fatichah*, "Enhancing the Performance of Smote Algorithm by Using Attribute Weighting Scheme and New Selective Sampling Method for Imbalanced Data Set," International Journal of Innovative Computing Information and Control, Vol. 15, No. 2, pp. 423-444, 2019.

22. Bilqis Amaliah, **Chastine Fatichah**, Erma Suryani, "Total opportunity cost matrix – Minimal total: A new approach to determine initial basic feasible solution of a transportation problem," Egyptian Informatics Journal, Elsevier, Vol. 20, No.2, pp. 131-141, 2019.

23. Bagus Setya Rintyarna, Riyanarto Sarno, **Chastine Fatichah**, "Enhancing the performance of sentiment analysis task on product reviews by handling both local and global context," International Journal of Information and Decision Sciences, Inderscience, 2019.

24. Bagus Setya Rintyarna, Riyanarto Sarno, **Chastine Fatichah**, Semantic Features for Optimizing Supervised Approach of Sentiment Analysis on Product Reviews, Computers 8 (3), MDPI, 2019.

25. Fika Hastarita Rahman, Riyanarto Sarno, **Chastine Fatichah**, "Music Emotion Classification based on Lyrics-Audio using Corpus Based Emotion," International Journal of Electrical and Computer Engineering, Vol. 8, No. 3, June, 2018.

26. Nenden Siti Fatonah, Handyani Tjandrasa, **Chastine Fatichah**, "Automatic Leukemia Cell Counting using Iterative Distance Transform for Convex Sets," *International Journal of Electrical and Computer Engineering, Vol. 8, No. 3, June, 2018.*

27. Abdullah M. Iliyasu, *Chastine Fatichah*, "A Quantum Hybrid PSO Combined with Fuzzy k-NN Approach to Feature Selection and Cell Classification in Cervical Cancer Detection", Sensors, 17, 2935, 2017.
28. Joko Lianto B, **Chastine Fatichah** "Vehicle Detection on Images from Satellite using Oriented Fast and Rotated Brief", Journal of Engineering and Applied Sciences, Vol. 12, No. 17, pp. 4500-4503, 2017.
29. Hardika Khusnuliawati, **Chastine Fatichah,** Rully Soelaiman, "Multi-feature Fusion Using SIFT and LEBP for Finger Vein Recognition", Telecommunication Computing Electronics and Control, Vol. 15, No. 1, 2017.
30. Tora Fahrudin, Joko Lianto Buliali, **Chastine Fatichah,** "RANDSHUFF: An Algorithm to Handle Imbalance Class for Qualitative Data," International Review on Computers and Software (IRECOS), Vol. 11, No. 12, pp. 1093-1104, 2016.
31. Abdullah M. Iliyasu, **Chastine Fatichah**, Khaled A. Abuhasel, "Evidence Accumulation Clustering with Possibilitic Fuzzy C-Means base clustering approach to disease diagnosis," Automatika Journal for Control, Measurement, Electronics, Computing and Communications, Vol. 57, No. 3, pp. 822-835, 2016.
32. **Chastine Fatichah**, Joko Lianto, Ahmad Saikhu, "A Hybrid Fuzzy Morphology and Connected Components Labeling Methods for Vehicle Detection and Counting System," International Journal on Smart Sensing and Intelligent Systems, Vol. 9, No. 2, pp. 765-779, June 2016.
33. Abdullah M. Iliyasu, **Chastine Fatichah**, A Bi-Stage Technique for Segmenting Cervical Smear Images Using Possibilistic Fuzzy C-Means and Mathematical Morphology, Journal of Medical Imaging and Health Informatics, Vol. 6, No. 7, pp. 1663-1669, 2016.
34. **Chastine Fatichah**, Martin L. Tangel, Fei Yan, Janet P Betancourt, M. Rahmat Widyanto, Fangyan Dong, Kaoru Hirota, "Fuzzy feature representation for white blood cell differential counting in acute leukemia diagnosis," International Journal of Control, Automation and Systems, Springer Vol. 13, No. 3, pp.742-752, 2015.
35. Khaled A. Abuhasel, Abdullah M. Iliyasu, **Chastine Fatichah**, "A combined AdaBoost and NEWFM technique for medical data classification", Information Science and Applications, Lecture Notes in Electrical Engineering, Springer, Vol. 339, pp. 801-809, 2015.
36. Khaled A. Abuhasel, Abdullah M. Iliyasu, **Chastine Fatichah**, "A Hybrid Particle Swarm Optimization and Neural Network with Fuzzy Membership Function Technique for Epileptic Seizure Classification," Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII), Vol. 19, No. 3, pp. 447-455, 2015.

Activities in specialist bodies over the last 5 years	**TAUGHT COURSES:** 2015 - Odd Semester: Computational Intelligence 2016 - Odd Semester: Computational Intelligence - Even Semester: Artificial Intelligence, Analysis Social Media, Advanced Topics in Computer Vision. 2017 - Odd Semester: Advanced Topics in Data Mining, Seminar 1, Biomedical Computing, Computational Intelligence. - Even Semester: Seminar 2, Artificial Intelligence, Data Mining

	2018
	- Odd Semester: Advanced Topics in Data Mining, Computational Intelligence, Biomedical Computing, Computational Intelligence
	- Even Semester: Deep Learning, Data Mining, Seminar 2, Artificial Intelligence
	2019
	- Odd Semester: Advanced Topics in Data Mining, Seminar 1, Biomedical Computing
	- Even Semester: Seminar 2, Deep Learning, Computational Intelligence, Artificial Intelligence
	2020
	- Odd Semester: Computational Intelligence, Artificial Intelligence
	- Even Semester: Artificial Intelligence, Deep Learning
	REVIEWER OF INTERNATIONAL JOURNALS:
	- IEEE Access, 2019-2021
	- Journal of Biomedical Signal Processing and Control, Elsevier, 2016-2021
	- Journal of King Saud University - Computer and Information Sciences, Elsevier, 2019-2021
	- IEEE Transactions on Neural Networks and Learning Systems, 2019-2020
	- IEEE Transactions on Industrial Informatics, 2018-2020
	- MethodsX, Elsevier, 2020
	- Computers in Biology and Medicine, Elsevier, 2017-2019
	- Journal of E-Biomedicine, Elsevier, 2016
	- Journal of Applied Computing and Informatics, Elsevier, 2015
	- International Journal of Advancements in Computing Technology, Korea, 2015
	- Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII), Fujipress, Japan, 2014-2015

Name	**Dr. Eng. Nanik Suciati, S.Kom., M.Kom.**
Position	Associate Professor
Academic career	- Bachelor's degree (Computer Engineering), Institut Teknologi Sepuluh Nopember, 1994.
	- Master's degree (Computer Science), Universitas Indonesia, 1998.
	- Doctoral degree (Information Engineering), Hiroshima University, 2010.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. 2021 – 2021: Principal Investigator, Research project: Development of an Integrated Application for Face Recognition, Temperature Measurement and Mask Wear Detection Using Deep Learning
	2. 2021 – 2022: Principal Investigator, Research project: Preservation and Retrieval of Balinese Carvings Based on Relation of Motifs and Deep Learning
	3. 2021 – 2022: Principal Investigator, Research project: Balinese Script Translator in Ancient Lontar Manuscripts Based on Character Pair Rules and Deep Learning
	4. 2021 – 2022: Principal Investigator, Research project: Deep Learning for Detecting Fish's Species and Freshness

	5. 2020 – 2021: Principal Investigator, Research project: Reconstruction of Three-Dimensional Objects from Two-Dimensional Image Data Based-on Learning 6. 2020 – 2020: Principal Investigator, Research project: Measurement of student enthusiasm in lectures using the results of facial expression recognition in a video-based lecture monitoring system 7. 2019 – 2019: Principal Investigator, Research project: Development of Character Recognition System for Handwritten Document Image 8. 2019 – 2019: Principal Investigator, Research project: Traditional Fabric Image Recognition Through Smartphone Cameras Using Features Invariant to Rotation, Scale, and Exposure 9. 2019 – 2019: Principal Investigator, Research project: Development of 3D Learning Tools for Blind Students at SMPLB YPAB Surabaya 10. 2018 – 2018: Principal Investigator, Research project: Development of Photo Data Conversion Applications to 3D Sculptures for Object Recognition for Blind People 11. 2018 – 2018: Principal Investigator, Research project: Face Recognition on Video Data for Room Surveillance 12. 2017 – 2017: Principal Investigator, Research project: Deep Learning for Retrieval of Large Amounts of Image Data 13. 2016 – 2016: Principal Investigator, Research project: Exploration of Texture Features of Iris Image Using Wavelet Transform for Personal Identification 14. 2015 – 2016: Principal Investigator, Research project: Application Development for Classification of Indonesian Traditional Fabric Motifs
Industry collaborations over the last 5 years	None
Patents and proprietary rights	1. Incident Report: Application of Incident Detection in Urban through Crowdsourcing Social Media Data, EC00201991701, 20 December 2019 2. Hybrid Program ANFIS-PSOGA, EC00202134367, 22 Juli 2021
Important publications over the last 5 years	1. Anny Yuniarti, Agus Zainal Arifin, Nanik Suciati, A 3D template-based point generation network for 3D reconstruction from single images, Applied Soft Computing, vol. 111, pp. 1-9, 2021. 2. Eko Prasetyo, Nanik Suciati, Chastine Fatichah, Multi-Level Residual Network VGGNet for Fish Species Classification, Journal of King Saud University-Computer and Information Sciences, 2021. 3. Ni Putu Sutramiani, Nanik Suciati, Daniel Oranova Siahaan, MAT-AGCA: Multi Augmentation Technique on small dataset for Balinese character recognition using Convolutional Neural Network, ICT Express, 2021. 4. Chastine Fatichah, Wildan F. Lazuardi, Dini A. Navastara, Nanik Suciati, Abdul Munif, "A Content Filtering from Spam Posts on Social Media using Weighted Multimodal Approach," Journal of Computer Science, 17(1), pp. 55–66, 2021. 5. Fajar Astuti Hermawati, Handayani Tjandrasa, Nanik Suciati, Phase-based thresholding schemes for segmentation of fetal thigh cross-sectional region in ultrasound images, Journal of King Saud University-Computer and Information Sciences, 2021. 6. Novrindah Alvi Hasanah, Nanik Suciati, Diana Purwitasari, Identifying Degree-of-Concern on COVID-19 topics with text classification of Twitters, Register, Vol. 7, No. 1, pp. 50-62, 2021. 7. Avin Maulana, Chastine Fatichah, Nanik Suciati, "Facial Inpainting Using Generative Adversarial Network with Feature Reconstruction and Landmark Loss to Preserve Spatial Consistency in Unaligned Face

Images," International Journal of Intelligent Engineering and Systems, Vol. 13, No. 6, pp. 218-228, 2020.

8. Ahmad Afiif Naufal, Chastine Fatichah, Nanik Suciati, "Preprocessed Mask RCNN for Parking Space Detection in Smart Parking Systems," International Journal of Intelligent Engineering and Systems, Vol. 13, No. 6, pp. 255-265, 2020.

9. Ricky Eka Putra, Handayani Tjandrasa, Nanik Suciati, Severity classification of non-proliferative diabetic retinopathy using convolutional support vector machine, International Journal of Intelligent Engineering and Systems, Vol. 13, No. 4, pp. 156-170, 2020.

10. Nuning Septiana, Nanik Suciati, Combination of fast hybrid classification and k value optimization in k-nn for video face recognition, Register, Vol. 1, No. 6, pp. 65-73, 2020.

11. Ahmad Wahyu Rosyadi, Nanik Suciati, Image segmentation using transition region and k-means clustering, IAENG International Journal of Computer Science, Vol. 47, No. 1, pp. 47-55, 2020

12. I Wayan Agus Surya Darma, Nanik Suciati, Daniel Siahaan, Neural Style Transfer and Geometric Transformations for Data Augmentation on Balinese Carving Recognition using MobileNet, International Journal of Intelligent Engineering and Systems, Vol. 13, No. 6, pp. 349-363, 2020.

13. Eko Prasetyo, Raden Dimas Adityo, Nanik Suciati, Chastine Fatichah, Partial Centroid Contour Distance (PCCD) in Mango Leaf Classification, International Journal on Advanced Science, Engineering and Information Technology, Vol. 10, No. 5, pp. 2020.

14. W Nurul Khotimah, Tiara Anggita, Nanik Suciati, "Indonesian sign language recognition using kinect and dynamic time warping, Indonesian Journal of Electrical Engineering and Computer Science, Vo. 15, No. 1, pp. 495-503, 2019.

15. Rarasmaya Indraswari, Takio Kurita, Agus Zainal Arifin, Nanik Suciati, Eha Renwi Astuti, "Multi-projection deep learning network for segmentation of 3D medical images," Pattern Recognition Letters, Vo. 125, pp.791-797, 2019.

16. Rarasmaya Indraswari, Agus Zainal Arifin, Nanik Suciati, Eha Renwi Astuti, Takio Kurita, Automatic segmentation of mandibular cortical bone on cone-beam CT images based on histogram thresholding and polynomial fitting, International Journal of Intelligent Engineering and Systems, Vol. 12, No. 4, 2019.

17. Eko Prasetyo, R Dimas Adityo, Nanik Suciati, Chastine Fatichah, Multi-class K-support vector nearest neighbor for mango leaf classification, Telkomnika, Vol. 16, No. 4, 2019.

18. Fajar Astuti Hermawati, Handayani Tjandrasa, Nanik Suciati, Hybrid Speckle Noise Reduction Method for Abdominal Circumference Segmentation of Fetal Ultrasound Images, International Journal of Electrical & Computer Engineering, Vol. 8, No. 3, 2018.

19. Agus Eko Minarno, Ayu Septya Maulani, Arrie Kurniawardhani, Fitri Bimantoro, Nanik Suciati, Comparison of Methods for Batik Classification using Multi Texton Histogram, Telkomnika, Vol. 16, No. 63, 2018.

20. Fajar Astuti Hermawati, Handayani Tjandrasa, Nanik Suciati, Combination of aggregated channel features (ACF) detector and faster R-CNN to improve object detection performance in fetal ultrasound images, International Journal of Intelligent Engineering and Systems, Vo. 11, No. 6, June 2018.

Activities in specialist bodies over the last 5 years	**TEACHING** 2015 - Odd Semester: Topic in Human Computer Interaction, Computer Vision, Computer Graphics - Even Semester: Topic in Computer Graphics, Artificial Intelligence. 2016 - Odd Semester: Computer Vision, Computer Graphics, Computational Intelligence, Topic in Human Computer Interaction. - Even Semester: Topic in Computer Graphics, Topic in Digital Image Processing, 3D Modelling and Computer Animation, Artificial Intelligence. 2017 - Odd Semester: Computer Vision, Computer Graphics, Computational Intelligence, Topic in Human Computer Interaction. - Even Semester: Topic in Computer Graphics, 3D Modelling and Computer Animation, Artificial Intelligence. 2018 - Odd Semester: Computer Vision, Computer Graphics, Computational Intelligence. - Even Semester: Topic in Computer Graphics, 3D Modelling and Computer Animation, Topic in Computer Vision, Artificial Intelligence. 2019 - Odd Semester: Computer Vision, Seminar 1, Computational Intelligence. - Even Semester: Seminar 2, 3D Modelling and Computer Animation, Topic in Computer Vision, Artificial Intelligence. 2020 - Odd Semester: Computer Vision, Computational Intelligence, Computer Vision, Artificial Intelligence. - Even Semester: Computational Intelligence, Topic in Computer Vision, Artificial Intelligence, Seminar 2. **REVIEWER OF INTERNATIONAL JOURNALS:** - Journal of King Saud University - Computer and Information Sciences, Elsevier, 2020-2021 - Computer and Electronics in Agriculture, 2020

Name	**Dini Adni Navastara, S.Kom., M.Sc.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Informatics), Institut Teknologi Sepuluh Nopember, 2008. - Master's degree (Computer Engineering), Pusan National University, 2014.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember (ITS)
Research and development	1. 2021 – 2021: Research member, Research project: Development of iAssesment: Intelligent Application Based on Fuzzy Rule-Based

projects over the last 5 years	Algorithm for Student Competency Assessment and Effectiveness Measurement in Distance Learning 2. 2021 – 2021: Research member, Research project: Development of an Audio-Video Based Assessment Monitoring System (iProctor) using Artificial Intelligence 3. 2021 – 2021: Research member, Research project: Development of COVID-19 Detection based on Medical Image using Deep Learning Method, 2021 4. 2021 – 2021: Principal Investigator, Research project: Social Distancing Monitoring using Deep Learning Method on CCTV Video 5. 2020 – 2020: Principal Investigator, Research project: Vehicle License Plate Recognition on CCTV Video for Developing Smart Gate Parking System in Informatics ITS 6. 2020 – 2020: Research member, Research project: Measurement of student enthusiasm in lectures using the results of facial expression recognition in a video-based lecture monitoring system 7. 2019 – 2019: Principal Investigator, Research project: Development of Scientific Publication Data Framework for Citation Recommendations Based on Research Topics 8. 2018-2019: Research member, Research project: Measurement System of Bone Quality based on Dental Cone Beam Computerized Tomography Image 9. 2018 – 2018: Principal Investigator, Research project: Combination of Histogram of Oriented Gradients and Local Binary Patterns Features for Classification of Vehicle Types 10. 2017 – 2017: Principal Investigator, Research project: Clustering of Research Topic Trends to Recommend Procurement of Library Materials in ITS 11. 2017 – 2017: Principal Investigator, Research project: Combination of Spatial Information and Line Features in Adaptive Classifier for Trabecular Bone Segmentation on Dental Panoramic Radiograph 12. 2016 – 2016: Principal Investigator, Research project: Medical Data Classification System Using Multilayer Perceptron Backpropagation Network Algorithm and Fuzzy Set Theory
Industry collaborations over the last 5 years	1. Developing Skill Passport Application, Direktorat Kemitraan dan Penyelarasan Dunia Usaha dan Dunia Industri, General Directorate of Vocational Education, Ministry of Education and Culture, Indonesia, 2020 2. Developing Single Sign-On and Security Management Application, PEM Akamigas, Indonesia, 2020 3. Developing an Academic, Lecturer Data, and Office Application, PEM Akamigas, Indonesia, 2021 4. Developing Single Sign-On Application, Data and Information Center, Ministry of Social Affairs, Indonesia, 2021 5. Developing Research and Community Services Application, Musamus University, Indonesia, 2021 6. Developing Human Resource Integrated System (HRIS), PT. Badak NGL, Bontang, Indonesia, 2018 7. Developing e-Contract System, PT. Badak NGL, Bontang, Indonesia, 2017
Patents and proprietary rights	1. myITS Security Management Application: Application of controlling and managing users and all applications in ITS, EC00202047053, 18 September 2020 2. ItsBehavex-Collab Application: Deep-learning based application to help researchers in finding collaborators with similar topic interests, EC00202120797, 5 April 2021

	3. myITS Webinar Booking Web-Based Application, EC00202121132, 23 April 2021
Important publications over the last 5 years	1. D.A. Nirmalasari, N. Suciati, and D.A. Navastara. "Handwritten Text Recognition using Fully Convolutional Network." IOP Conference Series: Materials Science and Engineering. Vol. 1077. No. 1. IOP Publishing, 2021. 2. D.A. Navastara, M. F. Maulana, N. Suciati, and S. T. Sarena. "Vehicle Classification Based on CCTV Video Recording Using Histogram of Oriented Gradients, Local Binary Patterns, and Hierarchical Multi-SVM." IOP Conference Series: Materials Science and Engineering. Vol. 1077. No. 1. IOP Publishing, 2021. 3. D. Purwitasari, R. Alamsyah, D.A. Navastara, C. Fatichah, S. Sumpeno, and M.H. Purnomo. "Visualizing Academic Experts on a Subject Domain Map of Cartographic-Alike." Advances in Computer, Communication and Computational Sciences. Springer, Singapore, 707-719, 2021. 4. D.A. Navastara, H. Wiranto, C. Fatichah, and N. Suciati. "Facial Expression Recognition Using Wavelet Transform and Convolutional Neural Network." Advances in Computer, Communication and Computational Sciences. Springer, Singapore, 941-952, 2021 5. C. Fatichah, P.D.S. Wiyadi, D.A. Navastara, N. Suciati, and A. Munif. "Incident Detection based on Multimodal data from Social Media using Deep Learning Methods." 2020 International Conference on ICT for Smart Society (ICISS). IEEE, 2020. 6. Fajar, R., Suciati, N. and Navastara, D.A. "Real Time Human Activity Recognition Using Convolutional Neural Network and Deep Gated Recurrent Unit." 2020 International Conference on Electrical Engineering and Informatics (ICELTICs). IEEE, 2020. 7. Nafis, A.F., Navastara, D.A. and Yuniarti, A. "Facial Expression Recognition on Video Data with Various Face Poses Using Deep Learning." 2020 12th International Conference on Information Technology and Electrical Engineering (ICITEE). IEEE, 2020. 8. Navastara, D.A., Putra, W.Y.M. and Fatichah, C. "Drowsiness detection based on facial landmark and uniform local binary pattern." Journal of Physics: Conference Series. Vol. 1529. No. 5. IOP Publishing, 2020. 9. Fatichah, C., Lazuardi, W.F., Navastara, D.A., Suciati, N. and Munif, A. "Image spam detection on instagram using convolutional neural network." Intelligent and Interactive Computing. Springer, Singapore, 295-303, 2019 10. Navastara, D.A., Zaqiyah, A.A. and Fatichah, C. "Opinion Spam Detection in Product Reviews Using Self-Training Semi-Supervised Learning Approach." 2019 International Conference on Advanced Mechatronics, Intelligent Manufacture and Industrial Automation (ICAMIMIA). IEEE, 2019. 11. Fatichah, C., Alam, S.P. and Navastara, D.A. "Optical Flow Feature Based for Fire Detection on Video Data." 2019 1st International Conference on Artificial Intelligence and Data Sciences (AiDAS). IEEE, 2019. 12. Indraswari, R., Kurita, T., Arifin, A.Z., Suciati, N., Astuti, E.R. and Navastara, D.A. "3D Region Merging for Segmentation of Teeth on Cone-Beam Computed Tomography Images." 2018 Joint 10th International Conference on Soft Computing and Intelligent Systems (SCIS) and 19th International Symposium on Advanced Intelligent Systems (ISIS). IEEE, 2018. 13. Arifin, A.Z., Arifiani, S., Fariza, A., Navastara, D.A. and Indraswari, R. "Hierarchical Clustering Linkage for Region Merging in Interactive Image

S t a f f H a n d b o o k | **65**

	Segmentation on Dental Cone Beam Computed Tomography." 2018 International Conference on Applied Information Technology and Innovation (ICAITI). IEEE, 2018.
	14. Arifin, A.Z., Indraswari, R., Suciati, N., Astuti, E.R. and Navastara, D.A. "Region merging strategy using statistical analysis for interactive image segmentation on dental panoramic radiographs." Int. Rev. Comput. Softw 12.1 (2017): 63, 2017
	15. Ekoputris, R.O., Arifin, A.Z., Wijaya, A.Y. and Navastara, D.A "Trabecular Bone Segmentation Based on Segment Profile Characteristics Using Extreme Learning Machine on Dental Panoramic Radiographs." Annual Research Seminar (ARS). Vol. 3. No. 1. 2017.
	16. Saddam, M., Tjandrasa, H. and Navastara, D.A. "Classification of alcoholic EEG using wavelet packet decomposition, principal component analysis, and combination of genetic algorithm and neural network." 2017 11th International Conference on Information & Communication Technology and System (ICTS). IEEE, 2017.
	17. Rahma, A.S., Bisono, E.F., Arifin, A.Z., Navastara, D.A. and Indraswari, R. "Generating automatic marker based on combined directional images from frequency domain for dental panoramic radiograph segmentation." 2017 Second International Conference on Informatics and Computing (ICIC). IEEE, 2017.
	18. Adillion, I.G., Arifin, A.Z., Navastara, D.A. and Indraswari, R. "Incorporating spatial information and line feature on adaptive classifier for trabecular bone segmentation." 2017 11th International Conference on Information & Communication Technology and System (ICTS). IEEE, 2017.
	19. Fatichah, C., Navastara, D.A., Suciati, N. and Nuraini, L. "Determining the number of clusters for nuclei segmentation in breast cancer image." Eighth International Conference on Graphic and Image Processing (ICGIP 2016). Vol. 10225. International Society for Optics and Photonics, 2017.
	20. Budiman, W.Y., Tjandrasa, H. and Navastara, D.A. "Classification of EEG signals using common spatial pattern-principle component analysis and interval type-2 fuzzy logic system." 2016 International Conference on Information & Communication Technology and Systems (ICTS). IEEE, 2016.
	21. Arifin, A.Z., Sholikah, R.W., Fanny, D.H. and Navastara, D.A. "Region Based Image Retrieval Using Ratio of Proportional Overlapping Object." Telkomnika 14.4 (2016): 1608, 2016
Activities in specialist bodies over the last 5 years	2016 - Odd Semester: Graph Theory, Information System and Technology, Robotics. - Even Semester: Artificial Intelligence, Graph Theory, Algorithm and Computer Programming, Data Mining. 2017 - Odd Semester: Graph Theory, Robotika, Computational Intelligence. - Even Semester: Social Media Analysis, Automata, Algorithm and Computer Programming, Artificial Intelligence. 2018 - Odd Semester: Computational Intelligence, Graph Theory and Automata, Robotics. - Even Semester: Artificial Intelligence, Algorithm and Computer Programming.

	2019 - Odd Semester: Computational Intelligence, Robotics. - Even Semester: Artificial Intelligence, Social Network Analysis. 2020 - Odd Semester: Computational Intelligence, Robotics, Programming Fundamental. 1. 2020 – now: Directorate of ICT Development, ITS (Section Head of customer relations and business planning) 2. 2018 – now: ITS Professional Certification Institute (Certification Division)

Area of Expertise: Network-Based Computing

Name	**Prof. Tohari Ahmad S.Kom., MIT, Ph.D.**
Position	Professor
Academic career	- Bachelor's degree, Institut Teknologi Sepuluh Nopember, Indonesia, 2000. - Master's degree, Monash University, Australia, 2007. - Doctoral Degree, Royal Melbourne Institute of Technology, Australia, 2012
Employment	Lecturer, Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Reversible Data Hiding with Segmented Secrets and Smoothed Samples in Various Audio Genres, 2020 2. Evaluating the Performance of Fibbing Architecture in the Hybrid Software Defined Network, 2020 3. A New Approach of Botnet Activity Detection Model based on Time Periodic Analysis, 2020 4. Anomaly-based Intrusion Detection Approach for IoT Networks Using Machine Learning, 2020 5. Reversible Data Hiding Scheme based on General Difference Expansion Cluster, 2020 6. Path Selection in Software Defined Network Data Plane using Least Loaded Path, 2020 7. Cancellable Fingerprint Generation by Projection-based Transformation and Quantization, 2020 8. Reducing Computational Cost of Pair-Polar Coordinate-based Cancelable Fingerprint Template Matching, 2020 9. Feature Importance Ranking for Increasing Performance of Intrusion Detection System, 2020 10. Development of Load Balancing Mechanisms in SDN Data Plane Fat Tree using Modified Dijkstra's Algorithm, 2020 11. Improving the Capacity of Data Hiding by Modifying the Interpolation of Audio Samples, 2020 12. Improving the Performance of Histogram-based Data Hiding Method in the Video Environment, 2020 13. Hiding Data in Audio Files: A Smoothing-Based Approach to Improve the Quality of the Stego Audio, 2020 14. Improving Intrusion Detection System by Estimating Parameters of Random Forest in Boruta, 2020 15. Pearson Correlation Attribute Evaluation-based Feature Selection for Intrusion Detection System, 2020 16. B-Corr Model for Bot Group Activity Detection based on Network Flows Traffic Analysis, 2020 17. A Node Density-based Approach for Energy-Efficient Data Gathering Protocol in Wireless Sensor Network Environments, 2020 18. Improving the Performance of Data Hiding by Designing Three Samples-based Smoothing in Audio, 2020 19. Analyzing the Performance of Intrusion Detection Model using Weighted One-Against-One Support Vector Machine and Feature Selection for Imbalanced Classes, 2020 20. Improving the Capability of Reduced Difference Expansion based Digital Image Data Hiding, 2019 21. An Energy-Aware Computation Offloading Framework for a Mobile Crowdsensing Cluster using DMIPS Approach, 2019 22. Protecting Secret Data using RDE and Fuzzy Logic to Specify the Embedding Level, 2019

23. Histogram-based Multilayer Reversible Data Hiding Method for Securing Secret Data, 2019
24. Reversible Data Hiding Method by Extending Reduced Difference Expansion, 2019
25. Multiple Embedding Process for Increasing the Capacity of the Embedded Secret Message, 2019
26. A New Data Hiding Method for Protecting Bigger Secret Data, 2019
27. Hiding Secret Data in Grayscale Images by Improving the Method of Reduced Difference Expansion, 2019
28. A Grid-Based Clustering with Dynamic Forwarding Path for Energy-Efficient Data Gathering in Wireless Sensor Network Environments, 2019
29. Data Preprocessing and Feature Selection for Machine Learning Intrusion Detection Systems, 2019
30. Assessing Centroid-Based Classification Models for Intrusion Detection System Using Composite Indicators, 2019
31. Developing Audio Data Hiding Scheme using Random Sample Bits with Logical Operators, 2019
32. Cluster Analysis-Based Approach Features Selection on Machine Learning for Detecting Intrusion, 2019
33. Increasing Accuracy and Completeness of Intrusion Detection Model using Fusion of Normalization, Feature Selection Method and Support Vector Machine, 2019
34. Reversible Data Hiding in Audio Based on Discrete Cosine Transform and Location Maps, 2019
35. Analyzing The Effect of Block Size on the Quality of the Stego Audio, 2019
36. An Improved Secret Message Capacity using Modulus Function Based Color Image Data Hiding, 2018
37. Audio Data Hiding using Octal Modulus Function based Unsigned Integer Sample Values, 2018
38. Continuous Top-k Dominating Query of Incomplete Data over Data Streams, 2018
39. Data Refinement Approach for Answering Why-Not Problem Over K-Most Promising Product (K-MPP) Queries, 2018
40. Analyzing the Performance of Machine Learning Algorithms in Anomaly Network Intrusion Detection Systems, 2018
41. Position-based Scheme for Multi-Hop Routing Protocol in Cluster-Based Wireless Sensor Networks, 2018
42. Enhancement Of Pixel Value Ordering based Data Hiding by Row Block Partition, 2018
43. SCFT: Sector-based Cancelable Fingerprint Template, 2017
44. A Mobile Crowdsensing Framework for Integrating Smartphone and IoT Devices to Cloud Computing Services, 2017
45. Enhanced Pixel Value Modification based on Modulus Function for RGB Image Steganography, 2017
46. Edit Distance Weighting Modification using Phonetic and Typographic Letter Grouping over Homomorphic Encrypted Data, 2017
47. A Data Hiding Approach using Enhanced-RDE in Grayscale Images, 2017
48. Reversible Audio Steganography using Reduced Difference Expansion Method and Sample Value Modification, 2017
49. Increasing Performance of IDS by Selecting and Transforming Features using Quality Threshold Distance to Detect Intrusion in TCP/IP network, 2016
50. Overlapped Scheme for Neighboring Similarity Method in Video-

	Based Data Hiding, 2016 51. Hiding Secret Data by using Modulo Function in Quad Difference Expansion, 2016 52. Adaptive Image Compression USING Adaptive Huffman and LZW, 2016 53. Reversible Video Steganografi using Improved Reduced Difference Expansion and Gray Level Co-occurrence Matrix Analysis, 2016 54. Difference Expansion-Based Data Hiding Method by Changing Expansion Media, 2016 55. Development of File Security Methods Using Graph Coloring, 2016 56. An Improved Neighbouring Similarity Method for Video Steganography, 2016 57. Enhancing DE-based Data Hiding Method by Controlling the Expansion, 2016
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. High Quality PVM Based Reversible Data Hiding Method for Digital Images, 2019 2. Detecting Malicious Activities in a Computer Cluster for Developing Dynamic Honeypot, 2018 3. Enhancing the Capability of Data Hiding Method based on Reduced Difference Expansion, 2018 4. Adaptive Pixel Value Grouping for Protecting Secret Data in Public Computer Networks, 2018 5. Enhancing the Performance of Audio Data Hiding Method by Smoothing Interpolated Samples, 2018 6. Improving Prediction Error Expansion based Data Hiding Method for Securing Confidential Data, 2018 7. Securing Secret Data by Enhancing the Controlling Expansion Method, 2018 8. Protecting Data by Improving Quality of Stego Image based on Enhanced Reduced Difference Expansion, 2018 9. Information Hiding Scheme for Digital Images using Difference Expansion and Modulus Function, 2018 10. Medical Record Protection with Improved Grade Data Hiding Method on Audio Files, 2017 11. L-SCANN: Logarithmic Subcentroid and Nearest Neighbor, 2016 12. Audio Data Hiding Based on Sample Value Modification using Modulus Function, 2016 13. Increasing Accuracy of Process-based Fraud Detection using a Behavior Model, 2016

Activities in specialist bodies over the last 5 years	2016
	  - Odd Semester: Special Topics in Net Centric Computing, Digital System, Net Centric Computing, Advance topics in Multimedia Network, Seminar 2
	  - Even Semester: Computer Network, Advance Topics in Network Security, Digital System, Information and Network Security
	
	2017
	  - Odd Semester: Special Topics in Net Centric Computing, Information System and Technology, Digital System, Seminar 1, Advance topics in Multimedia Network
	  - Even Semester: Advance Topics in Network Security, Seminar 2, Information and Network Security, Computer Network

	2018 - Odd Semester: Computer Network, Undergraduate Pre-Thesis, Dissertation Writing, Information and Network Security, Net Centric Computing - Even Semester: Advance Topics in Network Security, Research Methodology, Digital System, Dissertation Writing 2019 - Odd Semester: Information and Network Security, Digital System, Advance Topics in Multimedia Network, Dissertation Writing - Even Semester: Advance Topics in Network Security, Digital System 2020 - Odd Semester: Computer Network, Digital System, Advance Topics in Multimedia Network, Research Dissertation I, Dissertation Writing

Name	**Ary Mazharuddin Shiddiqi, S.Kom., M.Comp.Sc., Ph.D.**
Position	Associate Professor, Secretary of Academic Affairs
Academic career	- Bachelor's degree, Institut Teknologi Sepuluh Nopember, Indonesia, 2004. - Master's degree, Monash University, Australia, 2010. - Doctoral Degree, University of Western Australia, Australia, 2019.
Employment	Lecturer, Secretary of Academic Affairs, Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Monitoring Computer Networks Using the Internet of Things based on Wemos D1 ESP6288, 2020 2. Optimization of Current Sensor Placement for Corrosion Detection in Water Pipelines, 2020 3. Micro-Climate Mapping and Modeling Based on 3D City Model to Support Land Use Structure, 2020 4. An Advanced Sensor Placement Strategy for Small Leaks Quantification Using Lean Graphs, 2020 5. Internet of Things Based User Oriented Wi-Fi Quality Analyzer, 2020 6. The Development of Blackhole Attack in AODV Routing Protocol, 2020 7. Applied Machine Learning in Load Balancing, 2020 8. GCRFP-Page Replacement for Solid State Drive Using Ghost-Cache, 2020 9. Increasing The Robustness of Classification Algorithms to Quantify Leaks Through Optimization, 2020 10. Development of Offloading Computing Mechanisms to Improve Performance and Resource Efficiency on Mobile Devices in Wireless Environments, 2019 11. An Enhanced Sensor Placement Strategy to Quantify Small Leaks in Water Distribution Networks using Weighted Lean Graphs, 2019 12. Sensor energy preservation for leak quantification using Distance-Based feature selection method, 2019 13. An Effective Sensor Placement Strategy to Quantify Multiple Small Leaks in Water Distribution Networks using Lean Graphs, 2018 14. Sensing-based leak quantification techniques in water distribution systems, 2018 15. Sensor placement strategy for locating leaks using lean graphs, 2017
Industry collaborations over the last 5 years	None

Patents and proprietary rights	None
Important publications over the last 5 years	**Books** Shiddiqi, Ary & Cardell-Oliver, Rachel & Datta, Amitava. (2018). Sensing-Based Leak Quantification Techniques in Water Distribution Systems. 10.1201/b21948-5. **International Journal Papers** 1. Shiddiqi, A.M., Cardell-Oliver, R., Datta, A. An Advanced Sensor Placement Strategy for Small Leaks Quantification Using Lean Graphs. Water 2020, 12, 3439. https://doi.org/10.3390/w12123439 **Domestic Journal Papers** 1. Junaidi, Wibowo, P., Yuniasri, D., Damayanti, P., Shiddiqi, A.M., Pratomo, B.A., "Applied Machine Learning in Load Balancing," Jurnal Ilmiah Teknologi Informasi, 2020, vol 18, no 2, pp. 76-84, doi: http://dx.doi.org/10.12962/j24068535.v18i2.a940 2. Suadi, W., Djanali, S., Wibisono, W., Anggoro, R., Shiddiqi, A.M., "Replacement for Solid State Drive Using Ghost-Cache," Jurnal Ilmiah Teknologi Informasi, 2020, vol 18, no 2, pp. 94-101, doi: http://dx.doi.org/10.12962/j24068535.v18i2.a986 3. Shiddiqi, A.M., "Increasing the Robustness of Classification Algorithms to Quantify Leaks Through Optimization," Jurnal Ilmiah Teknologi Informasi, 2020, vol 18, no 1, pp. 1-8, doi: ttp://dx.doi.org/10.12962/j24068535.v18i1.a841 **Conference Papers** 1. N. G. Razafindrobelina, R. Anggoro and A. M. Shiddiqi, "The development of a routing protocol based on Reverse-AODV by considering an energy threshold in VANET," 2021 IEEE International IOT, Electronics, and Mechatronics Conference, 2021, pp. 1-7. 2. Bantoso, B. J., A. M. Shiddiqi, Kusuma, R, "A Heuristic Load Balancing Algorithm for Cloud Computing in Heterogeneous Resource Environment", The 5th International Conference on Information Technology and Digital Applications, 13th-14th November 2020, Yogyakarta, Indonesia, Vol. 1077, no. 1, pp. 12-16, IOP Publshing. 3. A. M. Shiddiqi, R. M. Ijtihadie and M. I. I. Haq, "Internet of Things Based User Oriented Wi-Fi Quality Analyzer," 2020 International Conference on Computer Engineering, Network, and Intelligent Multimedia (CENIM), 2020, pp. 292-296. 4. R. Anggoro, W. Suadi, A. M. Shiddiqi, R. Ijtihadie, S. Lili and D. W. L. Pamungkas, "The Development of Blackhole Attack in AODV Routing Protocol," 2020 International Conference on Computer Engineering, Network, and Intelligent Multimedia, 2020, pp. 309-314.
Activities in specialist bodies over the last 5 years	2019 - Odd Semester: Computer Organization, Net Centric Computing - Even Semester: Knowledge Engineering, Web Programming, Digital Forensics, Software Design, Operating System, Computer Algorithms and Programming 2020 - Odd Semester: Computer Network, Computer Organization, Net Centric Computing

Name	**Hudan Studiawan S.Kom., M.Kom., Ph.D.**
Position	Assistant Professor
Academic career	- Bachelor's degree, Institut Teknologi Sepuluh Nopember, Indonesia, 2009. - Master's degree, Institut Teknologi Sepuluh Nopember, Indonesia, 2012. - PhD degree, Murdoch University, Australia, 2021.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	Forensic Investigation of Event Logs by Automatic Anomaly Detection
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. Anomaly Detection in Operating System Logs with Deep Learning-based Sentiment Analysis, 2020 2. Sentiment Analysis in a Forensic Timeline with Deep Learning, 2020 3. Automatic event log abstraction to support forensic investigation, 2020 4. A survey on forensic investigation of operating system logs, 2019 5. Graph clustering and anomaly detection of access control log for forensic purposes, 2017 6. Automatic log parser to support forensic analysis, 2017
Activities in specialist bodies over the last 5 years	Journal Reviewer 1. Computers & Security 2. IEEE Internet of Things Journal 3. Future Generation Computer Systems 4. Wiley Interdisciplinary Reviews series (WIREs) Forensic Science

Name	**Bagus Jati Santoso, S.Kom., Ph.D.**
Position	Assistant Professor
Academic career	- Bachelor's degree, Institut Teknologi Sepuluh Nopember, Indonesia, 2008. - Doctoral Degree, National Taiwan University of Science and Technology, Taiwan, 2016
Employment	Lecturer, Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Cloud-based middleware for supporting batch and stream access over smart healthcare wearable device, 2020 2. A Heuristic Approach for Multi-Objective Aircraft Conflict Detection and Resolution, 2019 3. Docker-based Network Functions Virtualization as a Learning Tool in Computer Network Course, 2019 4. A grid-based approach in answering Top-k dominating queries on groups, 2019 5. Answering Why-Not Questions on Reverse Skyline Queries Over Incomplete Data, 2019 6. Continuous Top-k Dominating Query of Incomplete Data over Data Streams, 2018 7. Data Refinement Approach for Answering Why-Not Problem Over K-Most Promising Product (K-Mpp) Queries, 2018 8. Efficient Skyline-based Web Service Composition with QoS-awareness and Budget Constraint, 2018

	9. Multi criteria decision system for distribution provisioning and resource optimization using analytical hierarchy process, 2017 10. Resource elasticity controller for docker-based web applications, 2017 11. Designing Efficient Schemes for Answering Dominance-Based Queries, 2016
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	None
Activities in specialist bodies over the last 5 years	**2017** - Odd Semester: Net Centric Computing, Operating System, Network Programming, Security Design of System and Network - Even Semester: Information and Network Security, Internetworking Technology, Computer Network **2018** - Odd Semester: Computer Network, Information and Network Security, Internetworking Technology, Network Programming, Operating System - Even Semester: Network Programming, Operating System **2019** - Odd Semester: Information and Network Security, Internetworking Technology, Computer Algorithms and Programming - Even Semester: Network Programming, Operating System **2020** - Odd Semester: Advanced Spreadsheet, Data and Information Management, Fundamental Programming, Computer Network

Name	**Dr. Baskoro Adi Pratomo S.Kom., M.Kom.**
Position	Assistant Professor
Academic career	- Bachelor's degree, Institut Teknologi Sepuluh Nopember, Indonesia, 2008. - Master's degree, Institut Teknologi Sepuluh Nopember, Indonesia, 2011. - PhD degree, Cardiff University, United Kingdom, 2021.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. BLATTA: Early Exploit Detection on Network Traffic with Recurrent Neural Networks, 2020 2. Applied Machine Learning in Load Balancing, 2020 3. Vote Identification and Integrity of Ballot in Paper-Based E-Voting System, 2018 4. Unsupervised Approach for Detecting Low-Rate Attacks on Network Traffic with Autoencoder, 2018 5. Clustering of SSH Brute-force Attack Logs using K-Clique Percolation, 2016 6. Design and Development of Voting Data Security for Electronic Voting (E-Voting), 2016

Industry collaborations over the last 5 years	- Ministry of Social Affairs Republic of Indonesia (2021) - National Cyber Security Centre, United Kingdom (2020-2021)
Patents and proprietary rights	None
Important publications over the last 5 years	1. BLATTA: Early Exploit Detection on Network Traffic with Recurrent Neural Networks, 2020 2. Unsupervised Approach for Detecting Low-Rate Attacks on Network Traffic with Autoencoder, 2018

Activities in specialist bodies over the last 5 years	2020:
	Even Semester:
	  - Network and System Security Design
	  - Network Programming
	  - Network-centric Computing

Area of Expertise: Programming Algorithm

Name	**Dr. Yudhi Purwananto, S.Kom., M.Kom.**
Position	Associate Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 1995. - Master's degree (Computer Science), Universitas Indonesia, Indonesia, 2002. - Doctoral degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2021.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	A Heuristic Approach for Multi-Objective Aircraft Conflict Detection and Resolution, 2019
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	Yudhi Purwananto, Chastine Fatichah, Waskitho Wibisono, Ary M. Shiddiqi, Bagus J. Santoso, Nurlita D. Fatmawati, "Collision Avoidance Modelling in Airline Traffic Based on the Change of Airplane Movements and Dynamic Clouds," Journal of Computer Science, 17(1), pp. 33–43, 2021
Activities in specialist bodies over the last 5 years	2018 - Even Semester: Probability and Statistics 2019 - Odd Semester: Operations Research, Linear Algebra - Even Semester: Numerical Computing, Probability and Statistics 2020 - Odd Semester: Operations Research, Linear Algebra

Name	**Dr. Diana Purwitasari, S.Kom., M.Sc.**
Position	Associate Professor (2001-...)
Academic career	- (Dr.) Department of Electrical Engineering, Institut Teknologi Sepuluh Nopember, Indonesia, March 2020 (Dissertation: "Modeling Scholar Profile in Expert Recommendation based on Multi-Layered Bibliographic Graph") Advisor: Prof. Mauridhi Hery Purnomo, Dr. Surya Sumpeno, Dr.Eng. Chastine Fatichah - (M.Sc.) Graduate School of Science and Engineering, Saga University, Japan, March 2009 (Thesis: "Adaptive Content-based Navigation Generating System for Web-based Learning Applications") Advisor: Prof. Kenzi Watanabe, Dr. Yasuhisa Okazaki - (S.Kom.) Department of Informatics Engineering, Institut Teknologi Sepuluh Nopember, Indonesia, September 2001, Minored in Software Engineering
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology - Algorithm and Programming Laboratory (IF184101 Programming Fundamental; IF184202 Data Structure) - Intelligent Computing and Vision Laboratory (IF184955 Information Retrieval; IF184957 Social Network Analysis)

Research and development projects over the last 5 years	1. (2020) Deep learning in generating spam data for product reviews with topic-based vector expansion (IDR 20M) 2. (2021) Social media recommendation system for supporting productivities based on working-age group behaviour with ego-centric network analysis to overcome COVID-19 movement restrictions (IDR 80M) 3. (2021) Fuzzy approaches for supporting decisions in controlling dengue infectious disease (IDR 20M) 4. (2021) Multi attentions based deep learning for translating Indonesian-Arabic texts (IDR 50M) 5. (2021) Credibility measure of Twitter accounts for understanding public concerns in COVID-19 era (IDR 50M)
Industry collaborations over the last 5 years	1. Developing student admission system, State Office of Education, East Java Province, Indonesia (2020) 2. Developing Skill Passport Application, Direktorat Kemitraan dan Penyelarasan Dunia Usaha dan Dunia Industri, Direktorat Jenderal Pendidikan Vokasi, Kemdikbud, Indonesia (2020) 3. SIWALAN – Sistem Informasi Warga Layanan Antar, Diskominfo, Tuban Regency, East Java Province, Indonesia (2020) 4. IEEE-Sights (#20-COV-30) Web-based Application for Tracing COVID-19 in East Java Province, Indonesia (2020)
Patents and proprietary rights	1. (2021) Program Komputer "MyITS.online TKA-EFL" Web-based application for online test on subjects of Academic Aptitude Test (tes kemampuan akademik) and english as foreign language at Institut Teknologi Sepuluh Nopember (ITS) 2. (2021) Program Komputer "ItsBehavex-Collab" Deep-learning based application to help researchers in finding collaborators with similar topic interests.
Important publications over the last 5 years	1. B.A. Sanjoyo, D. Purwitasari, M. Hariadi, K. Tsukasa, and M.H. Purnomo. "Shallow Water Models for Efficiently Visualizing Fluid Flow in Complex Topography Areas", IAENG International Journal of Applied Mathematics 51 (1): IJAM_51_1_04, 2021 2. N.A. Hasanah, N. Suciati, and D. Purwitasari. "Identifying Degree-of-Concern on COVID-19 topics with text classification of Twitters", Register: Jurnal Ilmiah Teknologi Sistem Informasi 7 (1): 50-62, 2021 3. A. Setiyoutami, D. Purwitasari, W. Anggraeni, E.M. Yuniarno, and M.H. Purnomo. "Modelling Dengue Spread as Dynamic Networks of Time and Location Changes", International Journal of Intelligent Engineering and Systems, 14 (3): 346-358, March 2021 4. A.A. Zaqiyah, D. Purwitasari, and C. Fatichah. "Text Generation with Content and Structure-Based Preprocessing in Imbalanced Data of Product Review", International Journal of Intelligent Engineering and Systems, 14 (1): 516-527, December 2020 5. N. Rijati, D. Purwitasari, S. Sumpeno, and M.H. Purnomo. "A Decision Making and Clustering Method Integration based on the Theory of Planned Behavior for Student Entrepreneurial Potential Mapping in Indonesia", International Journal of Intelligent Engineering and Systems, 13 (4): 129-144, August 2020 6. D. Purwitasari, C. Fatichah, S. Sumpeno, C. Steglich and M.H. Purnomo. "Identifying collaboration dynamics of bipartite author-topic networks with the influences of interest changes", Scientometrics 122: 1407–1443, 2020

Activities in specialist bodies over the last 5 years	2016
	  - Odd Semester: Data Structure, Information Retrieval, Computational Intelligence, Desain and Analysis Algorithms, Programming Fundamental
	
	2019
	  - Even Semester: Social Network Analysis, Artificial Intelligence
	
	2020
	  - Odd Semester: Information Retrieval, Computational Intelligence, Desain and Analysis Algorithms, Programming Fundamental
	
	1. IEEE Indonesia Section Humanitarian Technology and Community Activities (activity committee, 2021)
	2. Indonesian Artificial Intelligence Society (IAIS) Chapter Jatim (2020-2021)
	3. Pusat Unggulan IPTEKS Artificial Intelligence for Healthcare and Society (AIHeS) (vice chair, 2020-2021)
	4. Industrial Electronics Society (IES) Chapter Indonesia Section (Treasurer, 2020-2021)
	5. Penyusun Strategi Nasional Kecerdasan Artifisial Indonesia Tahun 2020-2045, Kelompok Kerja IV Riset dan Inovasi Industri (Maret-Agustus 2020)

Name	**Ir. F.X. Arunanto, M.Sc.**
Position	Associate Professor
Academic career	- Bachelor's degree (Computer Engineering), Institut Teknologi Sepuluh Nopember, Indonesia, 1982. - Master's degree (Computer Science), Curtin University of Technology, Australia,1998.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember, Indonesia
Research and development projects over the last 5 years	1. Feature Extraction using Combination of Intrinsic Mode Functions and Power Spectrum for EEG Signal Classification, 2016 2. Implementation of Transfer Rate Management on SDN-Based HDFS Process, 2016 3. Development of Human Mental State Recognition System Software Based on EEG Brain Activity Waves, 2016 4. Online Spatial Information Service Design with Spatial Data Based on Detailed Spatial Planning (RDTR), 2016 5. Classification of P300 in EEG Signals for disabled subjects using singular spectrum analysis, 2017 6. Development of Automatic Door System Based On E-KTP and Face Recognition, 2019 7. E-KTP with NFC-Reader to Open the Door, 2019 8. Application of Deep Learning Long Short-Term Memory Network Method in Time-Series Data Prediction, 2020
Industry collaborations over the last 5 years	
Patents and proprietary rights	None
Important publications over the last 5 years	None

Activities in specialist bodies over the last 5 years	2015
	  - Odd Semester: Programming Fundamentals, Grid and Parallel Computing, Topics in Parallel Computing and High Performance.
	
	2016
	  - Odd Semester: Grid and Parallel Computing, Basic Programming.
	  - Even Semester: Data Structure, Computer Organization.
	
	2017
	  - Odd Semester: Basic Programming, Grid and Parallel Computing.
	  - Even Semester: Data Structure, Computer Organization.
	
	2018
	  - Odd Semester: Basic Programming, Computer Organization.
	  - Even Semester: Data Structure, Basic Programming.
	
	2019
	  - Odd Semester: Computer Organization, Basic Programming.
	  - Even Semester: Data Structure, Grid and Parallel Computing, Basic Programming.
	
	2020
	  - Odd Semester: Basic Programming, Computer Organization.

Name	**Rully Soelaiman, S.Kom., M.Kom.**
Position	Associate Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 1994. - Master's degree (Computer Science), Universitas Indonesia, Indonesia, 2003.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. Application of Deep Learning Long Short-Term Memory Network Method in Time-Series Data Prediction, 2020 2. Hybrid Saliency-SVM Method Implementation for Automatic Data Training Selection in Image Segmentation, 2019 3. Performance Comparison between Baby-Step Giant-Step Method and Pollard Rho with Brent Cycle Detection Method in Causing Total Break Toward Digital Signature Algorithm Scheme, 2018 4. Application of Square Root Decomposition Technique and Mo's Algorithm in Algorithm Design Case Study: SPOJ Classic Counting Diff-Pairs, 2018 5. Implementation of the Rope Data Structure on the SPOJ Alphabetic Rope Problem, 2018 6. Design and Build an Online Auction Application (E-Auction) based on Android Mobile Devices, 2017 7. Smartphone-Based Hearing Aids to Help People with Hearing Loss, 2017 8. A comparative study of finger vein recognition by using Learning Vector Quantization, 2017 9. Implementation of Feature Extraction for Grouping Music Files Based on Similar Sound Characteristics, 2017 10. Design and Analysis of Dijkstra's Algorithm and Naive Visibility Graph

	Method for Solving Spoj Problems the Archipelago, 2016
	11. Comparing Algorithm Complexity in Solving Graph Isomorphism Problems, 2016
	12. Design and Build an Android-Based Car Driver Behavior Data Representation Application Using Accelerometer and Orientation Sensors, 2016
	13. NULIS Application Design: Learning Media for Dysgraphy Students, 2016
	14. Comparative Analysis of Single-Pass Six-Way Blend Techniques and Threshold Scheme Rendering Techniques for Sketches on Three-Dimensional Objects, 2016
	15. Implementation of Centerline Extraction Algorithm Based on The Principal Curve: A Case Study of Vehicle Segments, 2016
	16. Automatic Detection of Proliferative Diabetic Retinopathy with Hybrid Feature Extraction Based on Scale Space Analysis and Tracking, 2016
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. Hearing aids based on smartphone by implementing tympanic membrane and basiliar membrane compression, 2017 2. Multi-feature fusion using SIFT and LEBP for finger vein recognition, 2017

Activities in specialist bodies over the last 5 years	2016
	  - Odd Semester: Information Systems and Technology, Design and Analysis of Algorithms I, Special Topic Algorithms and Programming
	  - Even Semester: Data Structure, Algorithm Design and Analysis II
	
	2017
	  - Odd Semester: Algorithm Design and Analysis I, Basic Programming
	  - Even Semester: Algorithm and Computer Programming, Design and Analysis of Algorithm II, Data Structure
	
	2018
	  - Odd Semester: Special Topic
	  - Even Semester: Algorithm Design and Analysis
	
	2019
	  - Odd Semester: Special Topic, Data Structure
	  - Even Semester: Algorithm Design and Analysis
	
	2020
	  - Odd Semester: Special Topic, Data Structure

Name	**Dwi Sunaryono, S.Kom., M.Kom.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 1995. - Master's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2009.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology

Research and development projects over the last 5 years	1. Detecting Pork Adulteration in Beef for Halal Authentication Using an Optimized Electronic Nose System, 2020
	2. Design and Build Project Management Information System IT Department PT. Pertamina UPMS V Surabaya, 2020
	3. Assistance for the Online School Exam System for Middle School Students in the City of Surabaya, 2020
	4. Geotagging for Mapping Distribution of Meatballs Containing Borax based on Electronic Nose Detection, 2020
	5. Comparison of Scheduling Methods for Optimization Production Processes on PT. P, 2020
	6. Design and Build "Watch" Application as a Communication Media for Parents and Teachers, 2019
	7. Computer and Information Sciences, 2019
	8. Graph-based algorithms for discovering a process model containing invisible tasks, 2019
	9. Custom Web Design Using the Open Graph Protocol in a Web Case Study of Informatics Engineering Department, 2018
	10. Cover song recognition based on MPEG-7 audio features, 2017
	11. Comparison of behavioral similarity use TARs and Naïve algorithm for calculating similarity in business process model, 2017
	12. Fraud detection on event log of bank financial credit business process using Hidden Markov Model algorithm, 2017
	13. Song Recommendation System Based on Singer's Voice Type in Karaoke Applications, 2017
	14. Design and Build an Android Mobile Application Student Attendance System through Signature Matching Case Study Informatics Engineering Department ITS, 2017
	15. Design and Build Applications for Mobile Device-Based Community Poverty Mapping, 2016
	16. Determining bonus in Enterprise Resource Planning at Human Resource Management module using Key Performance Indicator, 2016
	17. Poverty classification using Analytic Hierarchy Process and k-means clustering, 2016
	18. Sales forecasting using Holt-Winters in Enterprise Resource Planning at sales and distribution module, 2016
	19. NULIS Application Design: Learning Media for Dysgraphy Students, 2016
	20. Software Design for Monitoring Indonesian Cement Prices and Area Manager Performance on Mobile Devices with QR-Code Technology, 2016
	21. Model Discovery of Parallel Business Processes using Modified Heuristic Miner, 2015
	22. Developing Workflow Patterns Based on Functional Subnets and Control—Flow Patterns, 2015
	23. Examination results of leukocytes and nitrites in the early detection of urinary tract infection, 2015
	24. Design and Implementation of Inventory Domain for Enterprise Resource Planning Using SOA and Workflow Approach, 2015
	25. Workflow common fragments extraction based on WSDL similarity and graph dependency, 2015
	26. Business process composition based on meta models
	27. Question/Answering with Non-Textual Feature Quality Predictor Answer, 2015

	28. Medical Record Software Design and Development using Windows Presentation Foundation Integrated with Daily Drink Application on Android Phone through Windows Communication Foundation, 2015
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. An android based course attendance system using face recognition, 2019 2. Classification of music mood using MPEG-7 audio features and SVM with confidence interval, 2018
Activities in specialist bodies over the last 5 years	2016 - Odd Semester: Programming Fundamentals, Data Structures, Mobile Device Programming - Even Semester: Framework-based Programming, Database Management, Data Structure, Information Technology Governance 2017 - Odd Semester: Basic Programming, Mobile Programming - Even Semester: Data Structure, Framework-based Programming, Database Management 2018 - Odd Semester: Mobile Programming, Framework Based Programming, Database Systems, Interface Based Programming - Even Semester: Software Project Management, Database Management, Framework Based Programming 2019 - Odd Semester: Database System, Basic Programming, Mobile Device Programming - Even Semester: Data Structure, Database Management, Interface Based Programming 2020 - Odd Semester: Database Systems, Web Programming, Enterprise Application Security, Mobile Programming

Name	**Fajar Baskoro, S.Kom., M.T.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 1997. - Master's degree (Engineering), Institut Teknologi Bandung, Indonesia, 2003.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. Analysis of Case Clusters and Epidemic Curves with the development of the East Java COVID-19 Tracing System, 2020 2. Adaptive Modeling of Time Series Data with Regression-Based Ensemble Learning: A Case Study on the Number of Confirmed COVID-19 Patients
Industry collaborations over the last 5 years	2019-2021, as a member of project team for Double Track for Highschool Education in East Java Region

Patents and proprietary rights	None
Important publications over the last 5 years	1. Multivariate Time Series Forecasting Using Recurrent Neural Networks for Meteorological Data, V Hariadi, A Saikhu, N Zakiya, AY Wijaya, F Baskoro, Conference SENATIK STT Adisutjipto Yogyakarta 5, 445-456 2. Question/Answering with Answer Quality Predictor Non-Textual Feature, 2015
Activities in specialist bodies over the last 5 years	2016 - Odd Semester: Software Design, Analysis and Design of Information Systems, Object Oriented Programming - Event: Software Project Management, Web Programming, Object Oriented Programming 2017 - Odd Semester: Analysis and Design of Information Systems, Object Oriented Programming, Special Topics of Algorithms and Programming, Information Systems and Technology - Event: Software Project Management, Web Programming 2018 - Odd Semester: Object Oriented Programming, Information Systems Analysis and Design, Web Programming, - Event: Framework-Based Programming, Information Systems Design and Analysis, Software Project Management 2019 - Odd Semester: Software Project Management, Object Oriented Programming - Even Semester: Framework Based Programming, Requirements Engineering 2020 - Odd Semester: Object Oriented Programming, Software Project Management

Name	**Misbakhul Munir Irfan Subakti, S.Kom., M.Sc.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 1999. - Master's degree (Science), National Taiwan University of Science and Technology, Taiwan, 2005. - Master's degree, University of Birmingham, UK, 2017.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. Development of a Reactive Routing Protocol with Energy Efficiency in Mind, 2021 2. Deep Learning on Generating Spam Data for Product Reviews by Expanding Topic-Based Word Vector Representations, 2020
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None

Important publications over the last 5 years	A variable-centered intelligent rule system,Irfan Subakti, Proc. of the 1st Annual International Conference: Information and Communication Technology Seminar 2005 (ICTS2005), P 167-174

Activities in specialist bodies over the last 5 years	2018
	   - Odd Semester: Special Topics, Operations Research, Introduction to Logic and Programming, Linear Algebra
	   - Even Semester: Algorithm and Computer Programming, Algorithm Design and Analysis,
	2019
	   - Odd Semester: Basic Programming, Web Programming
	   - Even Semester: Design and Analysis of Algorithms, Data Structures, Special Topics
	2020
	   - Odd Semester: Basic Programming, Web Programming

Name	**Agus Budi Raharjo, S.Kom., M.Kom., Ph.D.**
Position	Lecturer
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2013. - Master's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2014. - Doctoral degree (Computer Science), Universite D aix Marseille III, Prancis, 2020.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. Analysis of Case Clusters and Epidemic Curves with the Development of the East Java COVID-19 Tracing System, 2020 2. Adaptive Modeling of Time Series Data with Regression-Based Ensemble Learning: A Case Study of the Number of Confirmed COVID-19 Patients, 2020 3. Reliability in Ensemble Learning and Learning from Crowds, 2019 4. Dynamic Reliable Voting in Ensemble Learning, 2019 5. Decision Combinations in Crowds when Number of Reliable Annotators is Rare, 2017 6. Multi-Label Classification Merger Decision, 2015
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	None

Activities in specialist bodies over the last 5 years	2019
	   - Even Semester: Data Structure, Operating System
	
	2020
	   - Odd Semester: Object Oriented Programming, Computer Networking, Algorithm Design and Analysis

Area of Expertise: Software Engineering

Name	**Dr. Ir. Siti Rochimah, M.T.**
Position	Associate Professor
Academic career	- Bachelor's degree, Institut Teknologi Bandung, Indonesia, 1992. - Master's degree (Computer Engineering), Institut Teknologi Bandung, Indonesia, 1997. - Doctoral degree, Universiti Teknologi Malaysia, Malaysia, 2011.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. Design and Build a PPDB Ranking Module for East Java State High Schools / Vocational High Schools 2020 2. Development of Game-Based English Grammar Learning Applications, 2020 3. Security Characteristic Evaluation of New Students Admission Information System Based on ISO/IEC 25010 Quality Standard, 2020 4. Quality in use of Digital Wallet based on ISO/IEC 25022, 2020 5. How Agile Software Development Affect Software Reusability (Study Case: New Student Admissions Portal in East Java Province), 2020 6. Functional Suitability Measurement Based on ISO/IEC 25010 for e-Commerce Website, 2020 7. Maintainability Measurement and Evaluation of myITS Mobile Application using ISO 25010 Quality Standard, 2020 8. Portability Characteristics Evaluation of MyITS Mobile using ISO/IEC 25010 Quality Standard, 2020 9. Performance Efficiency Evaluation Frameworks Based on ISO 25010, 2020 10. Requirements Traceability for Detecting Defects in Agile Software Development, 2020 11. Measuring Scalable Business Process Model Complexity based on Basic Control Structure, 2020 12. A Serious Game for Measuring and Displaying Mathematics Competencies of Disabled Students, 2019 13. Use Case Diagram Similarity Measurement: A New Approach, 2019 14. A Development of Quality Model for Online Games Based on ISO/IEC 25010, 2019 15. Assessment of Academic Information System Quality from Two Perspectives: Product Quality and Quality in Use, 2019 16. Security Characteristic Evaluation Based on ISO/IEC 25023 Quality Model, Case Study: Laboratory Management Information System, 2018 17. Analyzing the Effect of Design Patterns on Software Maintainability: A Case Study, 2018 18. Measuring Performance Efficiency of Application Applying Design Patterns and Refactoring Method, 2018 19. Process Mining in Supply Chains: A Systematic Literature Review, 2018 20. Application of Design Patterns and Quality Measurement on Academic Information Systems, 2017 21. Mobile Application for Guidance and Provision of Toddler's Nutrition to Support e-PKK, 2016 22. PKK-man: A System to Manage PKK Activities in Indonesia, 2016
Industry collaborations over the last 5 years	None.

Patents and proprietary rights	None.
Important publications over the last 5 years	1. Siti Rochimah "Behavioral analysis for detecting code clones", 2018 2. Riyanarto Sarno, Siti Rochimah, Daniel Oranova Siahaan,, Adhatus Solichah Ahmadiyah "Accuracy improvement of the estimations effort in constructive cost model II based on logic model of fuzzy", 2017 3. Siti Rochimah, Sarwosri "The improvement of software quality model for academic websites based on multi-perspective approach", 2016 4. Siti Rochimah, Umi Laili Yuhana, "Classification of non-functional requirements using Semantic-FSKNN based ISO/IEC 9126", 2015 5. Siti Rochimah "Non-source code refactoring: A systematic literature review", 2015
Activities in specialist bodies over the last 5 years	**2015** - Odd Semester: Software Engineering, Software Evolution, Topics in Software Evolution. **2016** - Odd Semester: Software Engineering, Dissertation Writing, Software Evolution, Topics in Software Evolution. - Even Semester: Topics in Software Quality Assurance, Software Quality Assurance, Software Process Improvement, Research Methodology. **2017** - Odd Semester: Topics in Software Evolution, Dissertation Writing, Software Evolution. - Even Semester: Topics in Software Quality Assurance, Dissertation Writing, Software Project Management, Software Quality Assurance. **2018** - Odd Semester: Software Engineering, Seminar 1, Analysis and Design of Information Systems, Software Evolution. - Even Semester: Information System Analysis and Design, Software Quality Assurance, Seminar 2, Topics in Software Quality Assurance. **2019** - Odd Semester: Topics in Software Evolution, Software Evolution, Software Project Management. - Even Semester: Topics in Software Quality Assurance, Information System Analysis and Design, Software Quality Assurance. **2020** - Odd Semester: Software Project Management, Software Evolution, Seminar 1, Topics in Software Evolution

Name	**Daniel O. Siahaan, S.Kom., M.Sc., PD.Eng.**
Position	Associate Professor
Academic career	- Bachelor's degree (Computer Engineering), Institut Teknologi Sepuluh Nopember, 1999. - Master's degree (Science), Technische Universiteit Delft, Netherlands, 2002. - Doctoralal degree (Software Engineering), Technische Universiteit Eindhoven, Netherlands, 2004.

Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 3 years	1. Calculation of the Similarity of Two State Diagrams using Deterministic Methods, Basic Research (Ristek BRIN), 2021 2. Software Design Similarity Calculation Methods based on UML Diagrams Using Natural Language Processing and Artificial Intelligent, Doctoral Dissertation Research (RistekBRIN), 2019-2020. 3. Software Design Similarity Calculation Methods based on UML Diagrams Using Natural Language Processing and Artificial Intelligent, Doctoral Dissertation Research (RistekBRIN), 2019-2020. 4. Automated Method of Generating Questions based on Bloom Taxonomy based on Pattern Recognition and Deep Learning as the Basis for Standardizing the Level of Difficulty of Questions, Doctoral Dissertation Research (RistekBRIN), 2019-2020. 5. Extraction of User Stories from Natural Language for Identification of Software Requirements in Public Sector Applications Using Web Mining, Doctoral Dissertation Research (RistekBRIN), 2019-2020.
Industry collaborations over the last 5 years	None.
Patents and proprietary rights	**Aplikasi Sistem Informasi Akademik (SIA) Generik** ID: EC00201859725 Kategori: hak cipta | Tahun Permohonan :2018 Patent Holder: LPPM - ITS.
Important publications over the last 5 years	1. **Information security vulnerability prediction based on business process model using machine learning approach** Hariyanti, E., Djunaidy, A., Siahaan, D. *Computers and Security, 2021, 110, 102422* 2. **User Stories and Natural Language Processing: A Systematic Literature Review** Raharjana, I.K., Siahaan, D., Fatichah, C. IEEE Access, 2021, 9, pp. 53811–53826, 9393933 3. **Automated Class Diagram Assessment using Semantic and Structural Similarities** Fauzan, R., Siahaan, D., Rochimah, S., Triandini, E. International Journal of Intelligent Engineering and Systems, 2021, 14(2), pp. 52–66 4. **MAT-AGCA: Multi Augmentation Technique on small dataset for Balinese character recognition using Convolutional Neural Network** Sutramiani, N.P., Suciati, N., Siahaan, D. ICT Express, 2021 5. **A Different Approach on Automated Use Case Diagram Semantic Assessment** Fauzan, R., Siahaan, D., Rochimah, S., Triandini, E. International Journal of Intelligent Engineering and Systems, 2021, 14(1), pp. 496–505 6. **A maturity model for e-commerce adoption by small and medium enterprises in Indonesia** Triandini, E., Djunaidy, A., Siahaan, D. Journal of Electronic Commerce in Organizations, 2017, 15(1), pp. 44-58 7. **Game design document format for video games with passive dynamic difficulty adjustment** Atmaja, P.W., Siahaan, D.O., Kuswardayan, D.I. Register: Jurnal Ilmiah Teknologi Sistem Informasi, 2016, 2(2), pp. 86-97

Activities in specialist bodies over the last 5 years	2020 - Present
	  - Head of Center for Scientific Publicaation, Resarch and Community Service Directorate, Institut Teknologi Sepuluh Nopember.
	
	2012 - 2016
	  - Member of National Journal Accreditation (Arjuna) Development Team, Ministry of Research, Technology, and Higher Education.
	
	2014 - 2018
	  - Trainer for Series of Electronic Journal Management System Workshops, Ministry \of Research, Technology, and Higher Education.
	
	2006 - Present
	  - Member of IEEE Computer Society.
	
	2020
	  - Reviewer for number of journals: (1) Knowledge Based System, (2) Expert Systems with Applications, (3) Automation in Construction.
	  - (Chief) Editor for number of journals: (1) IPTEK The Journal for Technology and Science, (2) Sewagati, (3) Informal: Informatics Journal.

Name	**Dr. Umi Laili Yuhana, S.Kom., M.Sc.**
Position	Associate Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, 2002. - Master's degree (Science), National Taiwan University, Taiwan, 2008. - Doctor's degree (Electrical Engineering), Institut Teknologi Sepuluh Nopember, Indonesia, 2019.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. GeMAR: Geometry Augmented Reality Application for Elementary School Students, 2020 2. AUGGO: Augmented Reality and Marker-based Application for Learning Geometry in Elementary Schools, 2020 3. Sifte-Math, A Sifteo based Mathematics Assessment Serious Game for Deaf Children, 2020 4. Analysis of Students Ability Assessment Based on Bloom's Taxonomy Using Fuzzy Signatures, 2019 5. A Serious Game for Measuring and Displaying Mathematics Competencies of Disabled Students, 2019 6. Parsing the Semantic Structure of Math Story Problems in Indonesian using a Recursive Neural Network, 2019 7. Parsing the Semantic Structure of Indonesian Math Word Problems using the Recursive Neural Network 2019 8. HEIRDOM: Multiple Ending Scenario Game for Mathematics Learning Using Rule-Based System, 2018 9. Classifying the Complexity of Competency in Elementary School based on Supervised Learners, 2018 10. Making Standard Operating Procedures for the Development of Management Information Systems: Case Study of DPTSI ITS, 2018

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	11. Preparation and Testing of Operability Metrics for Academic Information Systems Based on ISO 25010, 2017
	12. Security Quality Measurement Framework for Academic Information System (AIS) based on ISO/IEC 25010 Quality Model, 2017
	13. MathBharata: A Serious Game for Motivating Disabled Students to Study Mathematics, 2017
	14. Predicting Math Performance of Children with Special Needs based on Serious Game, 2017
	15. Exploring the Cluster-Based Ability Pattern of Exam Participants for Determining the Rules of the Scoring System, 2017
	16. Property Aspects of Usability in Academic Information Systems from the Perspective of Technology Acceptance Model (TAM), 2016
	17. Iot and Machine Learning Implementation in Elementary Level Mathematics Learning Education through Serious Game, 2016
	18. Application Development for Recognizing Type of Infant's Cry Sound, 2016
	19. Design and Build a Web-Based Modular Academic Information System Framework with a Model-View-Controller Hierarchical Architecture Pattern, 2016
	20. PDITS: An Integrated Database Application to Support the Integration of Multi-Information Systems in the Institut Teknologi Sepuluh Nopember, 2016
	21. Generating Cultural Heritage Metadata as Linked Open Data, 2015
	22. Automatic Indonesia's Questions Classification based on Bloom's Taxonomy using Natural Language Processing a Preliminary Study, 2015
	23. Portability Characteristic Evaluation Academic Information System Assessment Module using AIS Quality Instrument, 2015
	24. Systematic Mapping of Software Quality Metrics, 2015
	25. Software Quality Measurement according to ISO/IEC 25000: Systematic Mapping, 2015
	26. Website Quality Measurement Based on ISO 9126: Systematic Mapping, 2015
	27. Usability Characteristic Evaluation on Administration Module of Academic Information System using ISO/IEC 9126 quality model, 2015
Industry collaborations over the last 5 years	None.
Patents and proprietary rights	None.
Important publications over the last 5 years	1. Eko Mulyanto Yuniarno, Umi Laili Yuhana, "A rule-based expert system for automatic question classification in mathematics adaptive assessment on indonesian elementary school environment", 2019 2. Siti Rochimah, Umi Laili Yuhana,, "Classification of non-functional requirements using Semantic-FSKNN based ISO/IEC 9126", 2015
Activities in specialist bodies over the last 5 years	2015 - Odd Semester: Information Systems and Technology, Software Design. 2019 - Odd Semester: Software Design, Software Engineering, Data and Information Management. - Semester Even: Requirements Engineering.

	2020
	- Odd Semester: Database Systems, Information Systems and Technology, Data and Information Management, Software Engineering, Seminar 1.

Name	**Sarwosri, S.Kom. M.T**
Position	Associate Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2000. - Master's degree (Computer Science), Institut Teknologi Bandung, Indonesia, 2006.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. Information System for Admission of New Students for East Java Province Office section (back end), 2020 2. Design and Implementation "Awasi" Application as a Communication Media for Parents and Teachers, 2019 3. Driver Behavior Scoring Application using Fusion Sensor, 2018 4. Gallon Water Sales Management Web Application using Just in Time Method, 2018 5. Custom Web Design using Open Graph Protocol on Web Case Study Informatics Engineering Department, 2018 6. Improved Business and Cost Estimation Accuracy of COCOMO II Based on Gaussian and BCO, 2017 7. Temporal Granularity Modeling to Find Relationships Between Indonesian Cultural Heritage Objects Using Ontology, 2017 8. Status Filtering Application and Comments on Facebook, 2016 9. Software Design for Monitoring Indonesian Cement Prices and Area Manager Performance on Mobile Devices with QR Code Technology, 2016 10. Rating Of Software Service Provider as a Services using Fuzzy AHP and Relative Service Ranking Value, 2015 11. Medical Record Software Design and Development using Windows Presentation Foundation Integrated with Daily Drink Application on Android Phone through Windows Communication Foundation, 2015
Industry collaborations over the last 5 years	None.
Patents and proprietary rights	None.
Important publications over the last 5 years	1. Sarwosri, Umi Laili Yuhana, Siti Rochimah, "Measuring the Quality of the Development Process Academic System with E-GQM Method", 2020 2. Siti Rochimah, Sarwosri, "The improvement of software quality model for academic websites based on multi-perspective approach", 2016.
Activities in specialist bodies over the last 5 years	2015 - Odd Semester: Database Systems, Analysis and Design of Information Systems. 2016 - Odd Semester: Analysis and Design of Information Systems, Database Systems. - Even Semester : Database Management, Software Project Management.

	2017 - Odd Semester: Database Systems, Analysis and Design of Information Systems. - Even Semester : Database Management, Software Project Management. 2018 - Odd Semester: Database Systems, Analysis and Design of Information Systems. - Even Semester : Information System Analysis and Design, Database Management, Software Project Management. 2019 - Odd Semester : Database Management, Software Project Management, Database System. - Even Semester : Information System Analysis and Design, Database Management. 2020 - Odd Semester : Software Project Management.

Name	**Rizky Januar Akbar, S.Kom., M.Eng.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, 2008. - Master's degree (Master of Engineering), Ritsumeikan University, Japan, 2012.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. E-learning Platform for Learning Web Programming using the Concept of Progressive Web Apps, 2017 2. Design and Build a Chat Application on the Android Platform with Input Media in the Form of Canvas and Shareable Canvas to Work in One Canvas Online, 2017 3. Functional Suitability Measurement using Goal-Oriented Approach based on ISO/IEC 25010 for Academics Information System, 2017 4. Design and Build Bump Detection System using Android Smartphone with Accelerometer, 2016 5. Design and Build a Web-Based Modular Academic Information System Framework with a Model-View-Controller Hierarchical Architecture Pattern, 2016 6. Poverty classification using Analytic Hierarchy Process and k-means clustering, 2016 7. Design and Build Applications for Poverty Level Mapping Mobile Device-Based Society, 2016 8. Design and Build a Programming E-Learning System on the Detection Module Program Code Plagiarism and Student Feedback System, 2017 9. Identification of Refactorization Opportunities in God Class Cases Based on Similarity Concept, 2017 10. Design and Build an Online Auction Application (E-Auction) based on Android Mobile Devices, 2017 11. Application of design patterns and quality measurement on academic information systems, 2018 12. Measuring performance efficiency of application applying design patterns and refactoring method, 2018

	13. Investigation of SQL Clone on MVC-based Application, 2018 14. Analyzing the Effect of Design Patterns on Software Maintainability: A Case Study, 2018 15. Refactoring the Anemic Domain Model using Pattern of Enterprise 16. Application Architecture and its Impact on Maintainability: A Case Study, 2019 17. Assessing the Impact of Enterprise Software Design Patterns on Maintainability: A Case Study, 2019
Industry collaborations over the last 5 years	None.
Patents and proprietary rights	None.
Important publications over the last 5 years	None.

Activities in specialist bodies over the last 5 years	2015
	   - Odd Semester: Object Oriented Programming, Topics in Programming Languages, Software Construction.
	
	2016
	  - Odd Semester: Software Construction, Object Oriented Programming, Programming Fundamentals.
	  - Event: Web Programming, Software Architecture.
	
	2017
	  - Odd Semester: Software Construction, Object Oriented Programming.
	  - Event Web Programming, Software Architecture.
	
	2018
	  - Odd Semester: Software Construction, Web Programming, Object Oriented Programming.
	  - Even Semester: Software Architecture, Framework Based Programming.
	
	2019
	  - Odd Semester: Object Oriented Programming, Framework Based Programming, Software Construction,
	  - Even Semester: Software Architecture, Framework Based Programming.
	
	2020
	  - Odd Semester: Object Oriented Programming, Software Construction.

Area of Expertise: Graphics, Interaction, and Game

Name	**Dr.Eng.Darlis Herumurti S.Kom., M.Kom.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2001. - Master's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2010. - Doctoral degree (Engineering), Kumamoto University, Japan, 2014.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Early Detection Application of Bone Fractures using Image Analysis of Dental Panoramic Radiographs, 2015 2. Summary of Indonesian News Multi Documents Based on Twitter Data Trending Issues with Non-Trivial Event Detection as Keyword Selection, 2015 3. Software for Classification of Indonesian Traditional Fabric Motifs, 2015 4. Game Development of Insect Phobia Therapy using Augmented Reality Technology on Android Devices, 2016 5. Multi Document Summary of Indonesian News Based on Twitter Data Trending Issues with Non-Trivial Event Detection as Keyword Selection, 2016 6. Software for Classification of Indonesian Traditional Fabric Motifs, 2016 7. Design And Implementation of "Termo": Intelligent Devices based on The Internet of Things (IoT) As Effort to Save Electricity in the Environment of ITS Information Engineering Department, 2017 8. Road Damage Detection System through Photo Images for Mobile-Based Road Infrastructure Repair Information, 2018 9. Design and Implementation of "Termo" Internet-Based Smart Devices as an Effort to Save Electric Power in the ITS Informatics Department, 2018 10. Utilization of Virtual Reality, Augmented Reality and Game Technology to Support Phobia Education and Therapy, 2018 11. Intelligent Decision-Making System to Determine Answers to Text Questions in Educational Game Applications Using the Human Experience Learning Method Approach and Natural Language Processing, 2019 12. Recognition of Traditional Fabric Imagery Through Smartphone Cameras Using Features Invariant to Rotation, Scale, and Exposure, 2019 13. Utilization of Virtual Reality, Augmented Reality and Game Technology to Support Phobia Education and Therapy, 2019 14. The Effect of Point of View on Virtual Reality Experiences: Tethered View vs. First-person View, 2019 15. Implementation of User Centered Design in the "Halal Check" Application to Support Automatic Identification of Halal Products Using OCR (Optical Character Recognition) Technology, 2019 16. Development of Data Collection Information Systems for Supporting Research at LPPM ITS, 2019 17. Information System for Archiving Document Reporting Research and Community Service at DRPM ITS, 2020

	18. Communication Protocol for Geolocation-based Market Workshop Generation and Data Mining for Mitigation of the Spread of COVID-19, 2020 19. SiNinja Development: Organizational and Official Performance Monitoring System in ITS Environment for Business Intelligence-Based Program Management and Control, 2020 20. Intelligent Decision-Making System to Determine Answers to Text Questions in Educational Game Applications Using the Human Experience Learning Method Approach and Natural Language Processing, 2020
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. Vehicle detection on images from satellite using oriented fast and rotated brief, 2017 2. Robot motion control using the emotiv EPOC EEG system, 2018 3. Local binary pattern method and feature shape extraction for detecting butterfly image, 2018
Activities in specialist bodies over the last 5 years	**2015** - Odd Semester: Virtual Reality and Augmentation, Topics in Game Development, Topics in Data Mining, Topics in Human-Computer Interaction **2016** - Odd Semester: Topics in Game Development, Digital Image Processing, Virtual Reality and Augmentation - Even Semester: Programming Fundamentals, Computational Intelligence, Artificial Intelligence, Topics in Virtual Reality and Augmentation **2017** - Odd Semester: Virtual Reality and Augmentation, Topics in Data Mining, Data Structures - Even Semester: Computer Graphics, Artificial Intelligence **2018** - Odd Semester: Topic in Data Mining, Seminar 1, Topic in Human and Computer Interaction - Even Semester: Smart Game, Seminar 2, Artificial Intelligence **2019** - Odd Semester: Topics in Human and Computer Interaction, Computer Graphics, Computational Intelligence - Even Semester: Smart Games, Topics in Game Development, Virtual Reality, and Augmented Reality, Seminar 2, Artificial Intelligence **2020** - Odd Semester: Computer Graphics, Topics in Human-Computer Interaction

Name	**Hadziq Fabroyir, S.Kom., Ph.D.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Informatics), Institut Teknologi Sepuluh Nopember, Indonesia, 2008. - Doctoral degree (Computer Science and Information Engineering), National Taiwan University of Science and Technology, Taiwan, 2018.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Development of myITS Research MBKM as a Facility to Support Kampus Merdeka Program, 2021 2. Development of Immersive Media as an Experiment Innovation in Waste Treatment Virtually, 2021 3. Development of Information System to Manage Incentives for Supervising Undergraduate Thesis to Improve Academic Article Outcome in ITS, 2021 4. Communication Protocol to Generate Geolocation- and Data-mining-based Marketplaces to Mitigate the Spreadth of COVID-19, 2020 5. Design of User Interface and Experience for Marketplace System during Pandemic Based on Messaging's Upload Data, 2020 6. AR-Geometry: Application for Learning Geometry Based on Markerless Augmented Reality to Optimize Lesson Absorption According to Student Learning Style, 2020 7. Information System for Archiving Reports of Research and Community Services in ITS, 2020 8. Informatic Open Library Systems: Design and Development of Integrated Library Information System at Department of Informatics, 2019 9. The Effect of Point of View on Virtual Reality Experience: Tethered View vs. First-person View, 2019
Industry collaborations over the last 5 years	None
Patents and proprietary rights	1. myITS WorkTime: Application to Track ITS Staff's Working Time and Location 2. myITS Single Sign-On (SSO): Application for Identity Access Management (IAM) to Provide Authentication and Authorization Services for Users in ITS
Important publications over the last 5 years	1. Mixed Reality Application Prototype to Explore the Real World in Real Time Through Third Person Point of View *Published in International Conference on Computer Engineering, Network, and Intelligent Multimedia (CENIM) on November 17, 2020* 2. Real-time Landscape Generation in Games Using Parallel Procedural Content *Published in International Conference on Computer Engineering, Network, and Intelligent Multimedia (CENIM) on November 17, 2020* 3. Tachyon: Multiplatform Rhythm Game with Automatic Beatmap Generation *Published in International Conference on Computer Engineering, Network, and Intelligent Multimedia (CENIM) on November 17, 2020* 4. AUGGO: Augmented Reality and Marker-based Application for Learning Geometry in Elementary Schools *Published in International Conference on Computer Engineering, Network, and Intelligent Multimedia (CENIM) on November 17, 2020* 5. Augmented Reality for 3D House Design Visualization from Floorplan Image *Published in Proceedings of the 6th International Conference on*

	Electrical Engineering and Informatics (ICEEI) on October 27, 2020
	6. Multitouch Interface is not Good for Spatial Navigation in Virtual Reality *Published in Proceedings of International Conference on Information & Communication Technology and System (ICTS) in 2019*
	7. Navigation in virtual environments using head-mounted displays: Allocentric vs. egocentric behaviors *Published in Computers in Human Behavior in March 2018*
Activities in specialist bodies over the last 5 years	2018 - Even Semester: Linear Algebra, Numerical Method, Programming Basics 2019 - Odd Semester: Computer Graphics, Topics on Games, VR, AR. - Even Semester: Human-Computer Interaction, Computer Graphics 2020 - Odd Semester: Human-Computer Interaction, Computer Graphics, Augmented and Virtual Realities - Even Semester: Human-Computer Interaction 2021 - Special Program: AWS Cloud Foundation, Azure Cloud Infrastructure

Name	**Imam Kuswardayan, S.Kom., M.T.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2001. - Master's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2009.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Planning and Development of the Multiplayer Friendship Game "SIMABA" for New Students, 2016 2. Mobile Device-Based Community Poverty Mapping Application, 2016 3. Design and Implementation of "Termo": Intelligent Devices Based on Internet of Things (IoT) as Effort to Save Electricity in the Environment of ITS Informatics Engineering Department, 2017 4. Design: "Halal Text" as Halal Product Introduction Innovation based on Name Text Input Through Android Smart Device Cameras using Optical Character Recognition (OCR) Technology, 2017 5. Evaluation of Pattern Recognition Images in OCR (Optical Character Recognition) Technology for La-Text Applications: Halal Detection Text, 2018 6. Utilization of Virtual Reality, Augmented Reality and Game Technology to Support Phobia Education and Therapy, 2018 7. Road Detection System Through Photo Images for Mobile-Based Road Infrastructure Repair Information, 2018 8. Design and Implementation of "Termo" Internet-Based Smart Devices as an Effort to Save Electric Power in the ITS Informatics Department, 2018 9. Utilization of Virtual Reality, Augmented Reality and Game Technology to Support Phobia Education and Therapy, 2019 10. The Effect of Point of View on Virtual Reality Experiences: Tethered

	View vs. First-person View, 2019
	11. Development of Data Collection Information Systems for Supporting Research at LPPM ITS, 2019
	12. Information System for Archiving Document Reporting Research and Community Service at DRPM ITS, 2020
	13. Market Workshop System User Experience and Interface Design in the Midst of a Pandemic Based on Instant Messaging Application Upload Data, 2020
	14. Geolocation-based Market Workshop Generation Communication Protocol and Data Mining for Mitigation of the Spread of COVID-19, 2020
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. Dynamic game balancing implementation using adaptive algorithm in mobile-based Safari Indonesia game, 2018 2. English education game using non-player character based on natural language processing, 2019 3. Survival education for user on unknown islands using simulation games, 2019 4. Design and implementation of educational game to improve arithmetic abilities for children, 2019 5. Termo: Smart Air Conditioner Controller Integrated with Temperature and Humidity Sensor, 2019 6. Implementation of Artificial Ant Colony Algorithm (AACA) in dynamic labyrinth generation for android, 2019 7. Development of First-Person Shooter Game with Survival Maze Based on Virtual Reality, 2020 8. Real-time Landscape Generation in Games Using Parallel Procedural Content, 2020 9. Tachyon: Multiplatform Rhythm Game with Automatic Beatmap Generation, 2020
Activities in specialist bodies over the last 5 years	**2016** - Odd Semester: IGS Special Topics, Topics in Game Development, Database Systems, Game Systems - Even Semester: Game Development Techniques, Web Programming, Database Management **2017** - Odd Semester: Game Systems, Database Systems, Information Systems and Technology, IGS Special Topics - Even Semester: Game Development Techniques, Database Management, Web Programming **2018** - Odd Semester: Game Development Techniques, Introduction to Game Development, Database Systems - Even Semester: Human and Computer Interaction, Game System, Database Management **2019** - Odd Semester: Database System, Game Development Techniques - Even Semester: Computer Algorithm and Programming, Game System

2020
- Odd Semester: Database System, Game Development Techniques
- Even Semester: Computer Algorithm and Programming, Game System

Name	**Anny Yuniarti, S.Kom., M.Comp.Sc.**
Position	Associate Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2003. - Master's degree (Computer Science), The University of Western Australia, Australia, 2008.
Employment	Lecturer at Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember.
Research and development projects over the last 5 years	1. 2020 - 2021: Member, Research project: 3D Object Reconstruction of Single Images using Learning-based Methods. 2. 2017 - 2019: Member, Research project: Virtual Reality, Augmented Reality and Game Technology for Supporting Education and Phobia Therapy. 3. 2018: Principal Investigator, Research project: Image Analysis using Pattern Recognition on the Optical Character Recognition of the La-text Application (Halal Detection using Text). 4. 2017: Principal Investigator, Research project: "Halal Text" Application Design for Halal Product Recognition using Android Smartphone Camera and Optical Character Recognition (OCR) Technology. 5. 2017-2018: Member, Research project: Design and Implementation of "Termo" Application: An IoT-based Smart Device as a means for Electricity Reduction Effort in the Department of Informatics ITS. 6. 2017: Member, Research project: Development of Hajj Simulation Game. 7. 2016: Member, Research project: Design and Development of a Multiplayer Friendship Simulation Game "SIMABA" for First Year College Students. 8. 2016: Member, Policy Study: Information Technology Policy for Achieving Smart Campus Environment in ITS. 9. 2015: Member, Research project: Development of an Automatic Fish Classification System at PT. Aneka Tuna Indonesia. 10. 2015: Member, Research project: Early Detection Application of Bone Fractures Using Image Analysis of Dental Panoramic Radiographs.
Industry collaborations over the last 5 years	None
Patents and proprietary rights	MyITS SSO: an Identity Access Management (IAM) at ITS, 2020
Important publications over the last 5 years	1. A 3D template-based point generation network for 3D reconstruction from single images. **A Yuniarti**, AZ Arifin, N Suciati. Applied Soft Computing, 107749, 2021. 2. Image Classification Performance Evaluation for 3D Model Reconstruction. **A Yuniarti**, N Suciati, AZ Arifin, 2020 International Conference on Radar, Antenna, Microwave, Electronics, and Telecommunications (ICRAMET), 2020. 3. Performance of Contrast-limited AHE in Preprocessing of Face Recognition with Training Image under Various Lighting Conditions. B Nugroho, **A Yuniarti**. 2020 6th Information Technology International Seminar (ITIS), 167-171. 2020.

	4. Combining of Extraction Butterfly Image using Color, Texture and Form Features. DSY Kartika, D Herumurti, B Rahmat, **A Yuniarti**, H Maulana, FT Anggraeny. 2020 6th Information Technology International Seminar (ITIS), 98-102, 2020. 5. Facial Expression Recognition on Video Data with Various Face Poses Using Deep Learning. AF Nafis, DA Navastara, **A Yuniarti**. 2020 12th International Conference on Information Technology and Electrical Engineering (ICITEE), 2020. 6. Effect of Number of Face Images based on Illumination Variation in the Training Process on Face Recognition Results. B Nugroho, **A Yuniarti**, EY Puspaningrum. International Conference on Information Technology and Business (ICITB), 287-295, 2019. 7. Termo: Smart Air Conditioner Controller Integrated with Temperature and Humidity Sensor. RR Hariadi, **A Yuniarti**, I Kuswardayan, D Herumurti, S Arifiani, AA Yunanto, 2019 12th International Conference on Information & Communication Technology and System (ICTS), 2019. 8. A review of deep learning techniques for 3D reconstruction of 2D images. **A Yuniarti**, N Suciati. 2019 12th International Conference on Information & Communication Technology and System (ICTS), 2019. 9. Overcoming glossophobia based on virtual reality and heart rate sensors. D Herumurti, **A Yuniarti,** P Rimawan, AA Yunanto. 2019 IEEE International Conference on Industry 4.0, Artificial Intelligence, and Communications Technology (IAICT), 2019. 10. Converting image into bas reliefs using image processing techniques. N Suciati, MT Baihaqi, H Tjandrasa, AZ Arifin, C Fatichah, **A Yuniarti,** et al., Journal of Physics: Conference Series 1196 (1), 012037, 2019. 11. Implementation of Reconstruction Filter to Create Motion Blur Effect in Urho3D Game Engine. **A Yuniarti**, RR Hariadi, YUI Syihab. 2018 International Conference on Computer Engineering, Network and Intelligent Multimedia (CENIM), 2018. 12. Ensemble method for indonesian twitter hate speech detection. MA Fauzi, **A Yuniarti.** Indonesian Journal of Electrical Engineering and Computer Science vol 11 no 1, 2018. 13. Detection of Branching in Trabecular Bone Using Multiscale COSFIRE Filter for Osteoporosis Identification. RC Wihandika, AZ Arifin, **A Yuniarti.** Proceedings of the 4th International Conference on Frontiers of Educational Technologies, 2018. 14. Arabic book retrieval using class and book index-based term weighting. MA Fauzi, AZ Arifin, **A Yuniarti.** International Journal of Electrical and Computer Engineering 7 (6), 3705, 2017. 15. Resize My Image: A mobile app for interactive image resizing using multi operator and interactive genetic algorithm. **A Yuniarti,** S Anggara, B Amaliah. 2016 International Conference on Information & Communication Technology and Systems (ICTS), 2016.
Activities in specialist bodies over the last 5 years	**Teaching Activities** 2015 - Odd Semester: Computer Graphics 2016 - Odd Semester: (1) Computer Graphics, (2) Computer Vision - Even Semester: (1) Human Computer Interaction, (2) Algorithms and Computer Programming 2017

	- Odd Semester: (1) Computer Graphics, (2) Computational Intelligence - Even Semester: (1) Human Computer Interaction, (2) Artificial Intelligence 2018 - Odd Semester: (1) Computer Graphics, (2) Computational Intelligence - Even Semester: (1) Human Computer Interaction, (2) Artificial Intelligence **Reviewer of Academic Journal Papers:** - IEEE Transactions on Industrial Informatics, 2019 - Kinetik Journal, 2021 - Bulletin of Electrical Engineering and Informatics, 2021

Name	**Wijayanti Nurul Khotimah, S.Kom., M.Sc.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2008. - Master's degree (Computer Science), National Taiwan University of Science and Technology, Taiwan, 2011.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Predicting Survival of Cervical Cancer Based on Support Vector Machine and Bayesian Survival Analysis, 2015 (as team member) 2. Development of Automatic Tuna Fish Classification System, 2015 (as team member) 3. Development of Automatic Sign Language Recognition for Deaf People, 2015 (as team leader) 4. Sign Language Recognition System by Using Kinect Technology and Rule-based Neural Network Algorithm, 2016 (as team leader) 5. Deep Learning Large Image Data Retrieval, 2017 (as team member) 6. Integration between Static Feature and Dynamic Feature for Indonesian Sign Language Recognition System, 2017 (as team leader) 7. Indonesian Sign Language Recognition System by Using Deep Learning Method, 2018 (as team leader) 8. Effectiveness of Virtual Reality Technology, Augmented Reality and Game to Support Educational and Phobia Therapy, 2018 (as team member) 9. Facial Recognition on Video Data for Room Control, 2018 (as team member)
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. Sitting to Standing and Walking Therapy for Post-Stroke Patients using Virtual Reality System, 2015 2. Tuna Fish Classification using Decision Tree Algorithm and Image Processing Method, 2015 3. Combining Decision Tree and Back Propagation Genetic Algorithm Neural Network for Recognizing Word Gestures in Indonesian Sign Language using Kinect, 2017 4. Dynamic Indonesian Sign Language Recognition by Using Weighted K-Nearest Neighbor, 2017

	5. Alphabet Sign Language Recognition using Leap Motion Technology and Rule Based Backpropagation-Genetic Algorithm Neural Network, 2017
	6. Converting Image into Bas Reliefs using Image Processing Techniques, 2019
	7. Indonesian Sign Language Recognition using Kinect and Dynamic Time Warping, 2019
	8. A High-performance Spectral-spatial Residual Network for Hyperspectral Image Classification with Small Training Data, 2020
Activities in specialist bodies over the last 5 years	**2015** - Odd Semester: Design and Analysis Algorithm I, Introduction to Information Technology and Communication, Computer Graphic **2016** - Odd Semester: Design and Analysis Algorithm I, Basic Programming - Even Semester: Human and Computer Interaction, Design and Analysis Algorithm II, Design and Analysis Algorithm I **2017** - Odd Semester: Design and Analysis Algorithm II, Design and Analysis Algorithm I, Computer Graphics - Even Semester: Design and Analysis Algorithm II, Human Computer Interaction - Editor of JUTI journal **2018** - Odd Semester: Computer Graphics, Object Oriented Programming, Basic Programming - Even Semester: Design and Analysis Algorithm, Computer Algorithm and Programming - Reviewer of ISICO conference - Editor of JUTI Journal

Name	**Siska Arifiani, S.Kom., M.Kom.**
Position	Lecturer
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2013. - Master's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2016.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Design and Implementation of Secure Virtual Class System to Support Online Learning, 2020 2. Design and Implementation Automatic Software Testing Mechanism by using Soft Computing and Gray Box Technique, 2020 3. AR-Geometry: A Learning Media that Implements Marker Less Augmented Reality to Optimize the Material Understanding based on Student Learning Style, 2020. 4. The Development of myITS Research MBKM as Facility to Help "Kampus Merdeka" Program, 2021. 5. The Development of Immersive Media as Innovative Technology in Virtual Waste Treatment Technology Practicum, 2021. 6. The Development of IoT (Internet of Things) and Big Data Technology for Making Remote Electricity Monitoring & Control Systems to

	Support Energy Saving Policies at ITS
Industry collaborations over the last 5 years	None
Patents and proprietary rights	Game SIJI Simulasi Haji sebagai Inovasi Belajar Tatacara Pelaksanaan Ibadah Haji dengan Benar (https://pdki-indonesia.dgip.go.id/detail/EC00201855326?type=copyright&keyword=Simulasi+Haji)
Important publications over the last 5 years	1. AUGGO: Augmented Reality and Marker-based Application for Learning Geometry in Elementary Schools, 2020 International Conference on Computer Engineering, Network, and Intelligent Multimedia (CENIM) 1. Development of First-Person Shooter Game with Survival Maze Based on Virtual Reality, 2020 6th Information Technology International Seminar (ITIS) 2. Mixed Reality Application Prototype to Explore the Real World in Real Time Through Third Person Point of View, 2020 International Conference on Computer Engineering, Network, and Intelligent Multimedia (CENIM) 3. A Literature Review for Non-player Character Existence in Educational Game, Cyber Physical, Computer and Automation System: A Study of New Technologies 2021 4. The Implementation of Artificial Intelligence in Geometry Validation for Psychomotor Aspect Assessment, International Conference on Educational Assessment and Policy (ICEAP 2020)
Activities in specialist bodies over the last 5 years	2019 - Even Semester: Human Computer Interaction 2020 - Odd Semester: Basic Programming, Database Management - Even Semester: Introduction of ICT, Human Computer Interaction, Computer Animation and 3D Modeling

STAFF HANDBOOK

MAGISTER OF INFORMATICS (MIP) PROGRAM
DEPARTMENT OF INFORMATICS

FACULTY OF INTELLIGENT ELECTRICAL AND INFORMATICS TECHNOLOGY
INSTITUT TEKNOLOGI SEPULUH NOPEMBER

Contents

Area of Expertise: Applied Modeling and Computing

Name	**Prof. Dr. Ir. Joko Lianto Buliali, M.Sc.**
Position	Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 1991. - Master's degree (Computer Science), UMIST and the Victoria University of Manchester, Indonesia, 1995. - Doctor's degree (Computer Science), UMIST and the Victoria University of Manchester, 1998.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Prediction of Biochemical Oxygen Demand using Radial Basis Function Network, 2020 2. Determining the Number of Optimum Clusters in Flight Route Segments using Automatic Dependent Surveillance-Broadcast Data, 2020 3. Analysis of Relationship Characteristics of Late Payments Based on Billing Payments in 2019 4. Anomaly Detection on Flight Routes using a Similarity and Clustering Approach based on Automatic Dependent Surveillance Broadcasts, 2019 5. Weighting of Friend Relationships for Predicting Academic Achievement of University Delegates in the Following Competition, 2019 6. Optimal Partitioning in Flight Route Anomaly Detection, 2019 7. Cluster Phenomenon to Determine Flight Route Anomaly Detection, 2019 8. System Dynamics Testing Methods: Reliability Model, Average Reliability, and Service Demand, 2019 9. Real-time Detection of Data Completeness Levels for Traffic Simulation using Text Similarity and Time Relevance of Data from Social Media, 2018 10. Particle Swarm Optimization Implementation on K-Means for Automatic Dependent Surveillance-Broadcast Data Clustering, 2018 11. Model of Reliability, Average Reliability, Availability, Maintainability and Carrying Capacity for Services with a System Dynamics Approach, 2018 12. Flight Route Anomaly Detection via Optimal Waypoints, 2017 13. Feasibility Study of Sales Force Automation Application at PT. Semesta Nustra Distrindo, 2017 14. Predictive Modeling of First Year Evaluation Based on Demographic Data: Case Study of Telkom University Students, Indonesia, 2016 15. General Regression Neural Network for Predicting Traffic Flow, 2016 16. Intelligent Computing Algorithm for Predicting the Number of Vehicle Users as an Indicator of Traffic Congestion, 2016 17. FCM and PSO-SVR Hybrid Method for Traffic Flow Data Prediction, 2015 18. Identification of Gaussian Mixture Model Optimal Parameters for Speaker Identification in Noise Environments using Endpoint Detection Residues, 2015 19. Strategic Planning of Information Systems/Information Technology at Nusa Cendana University, 2015

	20. Service Desk evaluation using Six Sigma and ITIL V3 approaches at PT XYZ, 2015
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. Ina-BWR: Indonesian bigram word rule for multi-label student complaints, 2019 2. Enhancing the Performance of Smote Algorithm by Using Attribute Weighting Scheme and New Selective Sampling Method for Imbalanced Data Set, 2019 3. Text Based Approach for Similar Traffic Incident Detection from Twitter, 2018 4. Vehicle Detection on Images from Satellite using Oriented Fast and Rotated Brief, 2017 5. A Hybrid Fuzzy Morphology and Connected Components Labeling Methods for Vehicle Detection and Counting System., 2016 6. RANDSHUFF: An Algorithm to Handle Imbalance Class for Qualitative Data, 2016
Activities in specialist bodies over the last 5 years	2015 - Odd Semester: Information Systems and Technology, Topics in Optimization Engineering, Seminar 1, Dissertation - Research 2, Dissertation - Research 1, Modeling and Simulation, Probability and Statistics 2016 - Odd Semester: Information Systems and Technology, Modeling and Simulation, Probability and Statistics, Topics in Data Mining - Even Semester: Information Systems and Technology, Topics in Modeling and Simulation, Research Methodology, Mathematics Informatics, Multivariate Data Analysis 2017 - Odd Semester: Probability and Statistics, Modeling and Simulation, Seminar 1, Information Systems and Technology, Thesis - Even Semester: Information Systems and Technology, Seminar 2, Research Methodology, Topics in Modeling and Simulation, Mathematics Informatics, E-Business 2018 - Odd Semester: Numerical Computing, Topics in Modeling and Simulation, Information Systems and Technology, Thesis – Methodology - Even Semester: Information Systems and Technology, Topics in Time Series Data Analysis, Research Methodology, Probability and Statistics 2019 - Odd Semester: E-Business, Information Systems and Technology, Numerical Computing, Research Methodology and Philosophy of Science, Topics in Modeling and Simulation - Even Semester: Research Methodology, Topics in Time Series Data Analysis, Information Systems and Technology, Simulation Modeling, Probability and Statistics, Multivariate Data Analysis

	2020 - Odd Semester: Linear Algebra, Numerical Computing, Information Systems and Technology, Probability and Statistics, Research Methodology and Philosophy of Science

Name	**Dr. Ahmad Saikhu, S,Si., M.T.**
Position	Associate Professor
Academic career	- Bachelor's degree (Statistics), Institut Teknologi Sepuluh Nopember, Indonesia, 1994. - Master's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2000. - Doctor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2019.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical an Informatics Technology
Research and development projects over the last 5 years	1. Correlation and Symmetrical Uncertainty-Based Feature Selection for Multivariate Time Series Classification, 2019 2. Spatio-Temporal Recurrent Neural Networks Modeling for Number of Users Prediction on Wireless Traffic Networks, 2020 3. Non-Linear Spatio-Temporal Input Selection for Rainfall Forecasting Using Recurrent Neural Networks, 2018 4. Rainfall Forecasting by using Autoregressive Integrated Moving Average, Single Input and Multi Input Transfer Function, 2017 5. Mobile Application for Scheduling of Medical Staff in Emergency Condition using Integer Programming, 2015 6. Improving ARIMA Forecasting Accuracy using Decomposed Signal on PH and Turbidity at SCADA Based Water Treatment, 2020 7. Generalized Regression Neural Network for Predicting Traffic Flow, 2016 8. Intelligent Method for Dipstick Urinalysis using Smartphone Camera, 2015 9. Effectiveness Analysis of Service System Based on Visit Patterns to Improve the Efficiency of Customer Service Queuing System, 2021 10. Predicting COVID-19 Confirmed Case in Surabaya using Autoregressive Integrated Moving Average, Bivariate and Multivariate Transfer Function, 2020 11. Prediction of Multivariate Time Series Data Using Echo State Network and Harmony Search, 2019 12. A Fast Dynamic Assignment Algorithm for Solving Resource Allocation Problems, 2021
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. Correlation and Symmetrical Uncertainty-Based Feature Selection for Multivariate Time Series Classification, 2019 2. Spatio-temporal Recurrent Neural Networks Modeling for Number of Users Prediction on Wireless Traffic Networks, 2020
Activities in specialist bodies over the last 5 years	2019 - Odd Semester: Probability and Statistics, Time Series Data Analysis - Even Semester: Multivariate Data Analysis, Predictive Analytics and Machine Learning, Simulation

	2020
	- Odd Semester: Numerical Computation, Discrete Mathematics

Name	**Dr. Bilqis Amaliah, S.Kom., M.Kom.**
Position	Associate Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 1999. - Master's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2007. - Doctoral degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2020.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Early Warning System Anomaly Ph Sensor Readings and Turbidity in Water Treatment Plants, 2020. 2. Development of Initial Basic Feasible Solution Method using Heuristic Approach to Achieve Optimal Solution of Transportation Problem, 2020 3. Halal Food Product Study: Halal Assurance Assessment Model, Traceability, and Logistics, 2018 4. Development of Neural Networks Method in Multivariate Time Series Data Classification, 2018 5. Preparation of Operational Control Planning Application for PDAM Surya Sembada Surabaya City, 2017
Industry collaborations over the last 5 years	None
Patents and proprietary rights	BCE Application for Finding Initial Basic Feasible Solution in Transportation Problem, EC00202056261, 4 December 2020
Important publications over the last 5 years	1. A New Heuristic Method of Finding the Initial Basic Feasible Solution to Solve the Transportation Problem, 2020 2. Total Opportunity Cost Matrix–Minimal Total: A New Approach to Determine Initial Basic Feasible Solution of a Transportation Problem, 2019 3. Finding the Shortest Paths among Cities in Java Island using Node Combination based on Dijkstra Algorithm, 2016 4. Blood Traceability System for Indonesian Blood Supply Chain, 2015
Activities in specialist bodies over the last 5 years	2015 - Odd Semester: Numerical Computing, Computational Intelligence, Topics in Optimization Engineering, Discrete mathematics 2016 - Odd Semester: Numerical Computing, Probability and Statistics, Computational Intelligence - Even Semester: Linear Algebra, Artificial intelligence 2017 - Odd Semester: Discrete mathematics, Numerical Computing 2020 - Odd Semester: Linear Algebra, Operations Research

Area of Expertise: Architecture and Computer Networking

Name	**Prof. Ir. Supeno Djanali, M.Sc., Ph.D.**
Position	Professor
Academic career	- Bachelor's degree (Computer Engineering), Institut Teknologi Sepuluh Nopember, Indonesia, 1974. - Master's degree (Computer Science), University of Wisconsin - Madison, United States,1978. - Doctoral degree (Computer Science), University of Wisconsin - Madison, United States,1984.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Real Time Train Monitoring using Google Maps, 2015 2. Adaptive Gateway Discovery Hybrid on AODV Internet Network Using Fuzzy Algorithm, 2015 3. Route Efficiency in Dynamic Source Routing Protocols Using Path Aware-Short, 2015 4. Increasing the capacity of the secret data using DEpixels blocks and adjusted RDE-based on grayscale images, 2015 5. A conceptual information of technology framework to support rice farming in Timor Leste, 2015 6. Development of Human Mental State Recognition System Software Based on EEG Brain Activity Waves, 2016 7. Smart System for Emergency Vehicle Using Android, 2016 8. Electronic Voting: Means for Security and Validity of General Elections in Indonesia, 2016 9. Classification of EEG Signals Using Single Channel Independent Component Analysis, Power Spectrum, and Linear Discriminant Analysis, 2016 10. Design and development of voting data security for electronic voting (E-Voting), 2016 11. Feature extraction using combination of intrinsic mode functions and power spectrum for EEG signal classification, 2016 12. Improved Information Retrieval Performance in SQL Databases Using Data Adapters with Bigdata Case Study, 2017 13. Performance Analysis and Study of Encryption Methods on Web-Based Electronic Mail Applications, 2017 14. Blackhole Attack Detection Analysis on Mobile Ad-Hoc Network Using Genetic Algorithm Methods, 2017 15. Classification of P300 in EEG Signals for Disabled Subjects using Singular Spectrum Analysis, 2017 16. AODV-PNT Performance Study with Added Factor Number of Neighbor Nodes on VANET, 2018 17. Improved Information Retrieval Performance on SQL Database using Data Adapter, 2018 18. Audio Data Hiding using Octal Modulus Function Based Unsigned Integer Sample Values, 2018 19. An Improved Secret Message Capacity Using Modulus Function Based Color Image Data Hiding, 2018 20. Design and Build a Sharia Crowdfunding System to Minimize Riba, 2019 21. Increasing accuracy and completeness of intrusion detection model using fusion of normalization, feature selection method and support

	vector machine, 2019
	22. Developing audio data hiding scheme using random sample bits with logical operators, 2019
	23. Assessing Centroid-Based Classification Models for Intrusion Detection System Using Composite Indicators, 2019
	24. An Optimum Clustered Grid-Based Particle Swarm Optimization to Enhance Efficiency Energy in Wireless Sensor Networks, 2019
	25. Improving the Capability of Reduced Difference Expansion based Digital Image Data Hiding., 2019
	26. Using Internet of Things Technology to Help the Learning Process in Schools, 2019
	27. Design and Build a Secure Virtual Class System to Support Online Learning, 2020
	28. Design and Build a Virtual Class System to Support the Online Learning Process, 2020
	29. Analyzing the performance of intrusion detection model using weighted one-against-one support vector machine and feature selection for imbalanced classes, 2020
	30. Development of Greedy Perimeter Stateless Routing (GPSR) with Overlay Network Concept on VANETs, 2020
	31. GCRFP-PAGE Replacement for Solid State Drive using Ghost-Cache, 2020
Industry collaborations over the last 5 years	
Patents and proprietary rights	None.
Important publications over the last 5 years	1. Routing Optimization on Aodv_Ext Protocol using Link Expiration Time (LET), 2015
	2. Routing Protocol Performance in Wireless Mesh Network Environment with Combined Scalable Video Coding, 2015
	3. CORO: Graph-Based Automatic Intrusion Detection System Signature Generator for E-Voting Protection, 2015
	4. Graph-based forensic analysis of web honeypot, 2016
	5. Reliable Fault-Tolerant on Clustering-Based Wireless Sensor Network, 2016
	6. Server Workload Model Identification: Monitoring and Control Tools for Linux, 2016
	7. Audio Data Hiding Based on Sample Value Modification using Modulus Function, 2016
	8. Implementation of NFC Technology on Smartphones as Authentication Agents in the E-Vote System, 2017
	9. Implementation of the Overlay Network Concept on Greedy Perimeter Stateless Routing (GPSR) at VANETs, 2017
	10. Modification Of the Aodv-Br Protocol using Link Expiration Time (Let) To Improve Link Stability in The Mobile Ad-Hoc Network (Manet) Environment, 2017
	11. Study of Greedy Perimeter Stateless Routing Performance Based on Overlay Network on VANET, 2018
	12. Vote Identification and Integrity of Ballot in Paper-Based E-Voting System, 2018
	13. Modify Route Discovery on Ad-hoc on-Demand Distance Vector (AODV) Based on One-Hop Node Connectivity Level in VANETs, 2018
	14. Classification of P300 Event-related Potentials using Wavelet Transform, MLP, and Soft Margin SVM, 2018

	15. Text Mining for Pest and Disease Identification on Rice Farming with Interactive Text Messaging, 2018
Activities in specialist bodies over the last 5 years	**2015** - Odd Semester: Digital Systems, Seminar 1, Research Methodology and Philosophy of Science, Dissertation - Research 2, Network-Based Computing. **2016** - Odd Semester: Network-Based Computing, Seminar 2, Research Methodology and Philosophy of Science, Digital Systems. - Even Semester: Computer Organization, Topics in Wireless Networks, Research Methodology. **2017** - Odd Semester: Digital Systems, Network-Based Computing, Research Methodology and Philosophy of Science. - Even Semester: Topics in Wireless Networks, Research Methodology. **2018** - Odd Semester: Research Methodology and Philosophy of Science, Network-Based Computing, Digital Systems, Computer Networks. - Even Semester: Digital Systems, Research Methodology, Topics in Wireless Networks. **2019** - Odd Semester: Network-Based Computing, Research Methodology and Philosophy of Science, Computer Organization. - Even Semester: Digital Systems, Research Methodology, Topics in Wireless Networks. **2020** - Odd Semester: Network-Based Computing, Research Methodology and Philosophy of Science, Computer Organization.

Name	**Royyana Muslim I, S.Kom, M.Kom, Ph.D.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, 2000. - Master's degree (Computer Science), Institut Teknologi Sepuluh Nopember, 2005. - Doctoral degree (Engineering), Kumamoto University, 2013.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Indoor Position Detection Using Arduino Microcontroller and Multi Sensor, 2015 2. Portable Vehicle Exhaust Test Equipment with Arduino and Smoke Sensor, 2015 3. Interactive Whiteboard and Instant Quiz for Multimedia Classroom Activity, 2015 4. Survey on Handling Broadcast Storm Problems on AODV Routing Protocol at MANET, 2015 5. Countermeasures against Attack Avoidance Techniques on Intrusion Prevention Systems, 2015 6. Intrusion Detection System using N-Gram and Cosine Similarity, 2016

7. Survey of Clustering Routing Techniques Based on Mobility on Wireless Ad-hoc Networks, 2016

8. Rsync and Rdiff implementation on Moodle's backup and restore feature for course synchronization over the network, 2016

9. Optimization of Replacement Strategy for Progressive Cache Method in Content Centric Networking (CCN), 2016

10. Development of Authentication and Authorization Mechanisms for Config Management in the Case of Linux Container Based Shared Web Hosting, 2016

11. Hiding Secret Data by using Modulo Function in Quad Difference Expansion, 2016

12. Design a Transformation Mechanism for Data Security, 2016

13. Utilization of Four-Wheel Vehicle Traffic Density to Support Communication Reliability on In-City Ad-Hoc Networks, 2016

14. Proposed Information Technology Policy as an Umbrella to Realize ITS in one-hand in a Smart Campus Environment, 2016

15. Data Center Cloud Computing Power Optimization on High Performance Computing (HPC) Workloads with Realtime Predictive Scheduling, 2017

16. Edit Distance Weighting Modification using Phonetic and Typographic Letter Grouping over Homomorphic Encrypted Data, 2017

17. Multi Criteria Decision System for Distribution Provisioning and Resource Optimization using Analytical Hierarchy Process, 2017

18. A Mobile Crowdsensing Framework for Integrating Smartphone and Iot Devices to Cloud Computing Services, 2017

19. Implementation of Work Instruction as a Solution for Handling Critical IT Incidents in Units at ITS, 2017

20. Performance Study of Wireless Access in Vehicle Environment 802.11 p in Ad-Hoc on-Demand Distance Vector Routing (AODV) with Nakagami Propagation Model and Two Ray Ground, 2018

21. Oversight of Congestion Control Mechanisms on Transmission Control Protocols in Software Defined Networks, 2018

22. Data Replication using the Detection Controller Module to Prevent Bottlenecks in The Data Center, 2018

23. Development of Uploading Media Components to Support E-Learning in Dynamic Network Conditions, 2018

24. Query Dominates Continuous Top-k of Incomplete Data over Data Streams, 2018

25. Docker-Based Network Function Virtualization as a Learning Tool in Computer Networking Course, 2019

26. Analyzing the Effect of Block Size on Stego Audio Quality, 2019

27. Energy Aware Computing Offloading Framework for Mobile Crowdsensing Clusters Using the DMIPS Approach, 2019

28. Using Internet of Things Technology to Help the Learning Process in Schools, 2019

29. Data Security Method Development, 2019

30. Protection Methods to Improve Data Security on Computer Networks, 2019

31. Development of Adaptive Routing Mechanisms and Routing Hole Handling for Congestion Reduction and Improvement of Wireless Sensor Network Performance, 2019

32. Node Density-Based Approach to Energy Efficient Data Collection Protocol in Wireless Sensor Network Environment, 2020

	33. Hiding Data in Audio Files: An Alignment-based Approach to Improving Audio Quality Stego, 2020 34. Security audit on cloud-based servers using AES-256 and SHA-256, 2020 encrypted data 35. Development of the Load Balance Mechanism at SDN Data Plane Fat Tree using Modified Dijkstra Algorithm, 2020 36. Development of Blackhole Attacks on AODV Routing Protocol, 2020 37. Internet of Things User Oriented Wi-Fi Quality Analyzer, 2020 38. Evaluating the Performance of Fibbing Architectures in Hybrid Software Defined Networks, 2020 39. Preparation of Activity Recommendations for Improving Information Security for Ten November Institute of Technology Students Based on NIST SP 800-50, 2020 40. Development of Data Hiding Methods and Optimization of Intrusion Detection Systems on Computer Networks for Data Protection, 2020
Industry collaborations over the last 5 years	
Patents and proprietary rights	None
Important publications over the last 5 years	1. Developing Electronic Mango Traceability in Indonesia, 2016 2. Detecting Malicious Activities in a Computer Cluster for Developing Dynamic Honeypot, 2018 3. Design Virtual Machine Allocation Management in a Heterogeneous Hypervisor Environment, 2019
Activities in specialist bodies over the last 5 years	2015 - Odd Semester: Operating Systems, Computer Organization, Network Programming, Topics in Cloud Computing. 2016 - Odd Semester: Operating Systems, Cloud Computing, Topics in Cloud Computing, Network Programming. - Even Semester: Distributed Systems, Information and Network Security, Cloud Computing. 2017 - Odd Semester: Operating Systems, Network Programming, Topics in Cloud Computing. - Even Semester: Topics in Network Design and Auditing, Cloud Computing, Distributed Systems, Information Security and Networks. 2018 - Odd Semester: Cloud Computing, Distributed Systems, Topics in Network Design and Auditing, Topics in Distributed Systems. - Even Semester: Topics in Cloud Computing, Network Programming. 2019 - Odd Semester: Seminar 1, Cloud Computing, Distributed Systems, Topics in Distributed Systems. - Even Semester: Topics in Cloud Computing, Seminar 2, Network Programming. 2020 - Odd Semester: Technology between Networks, Distributed Systems, Cloud Computing, Topics in Distributed Systems.

Name	**Dr. Eng. Radityo Anggoro, S.Kom., M.Eng.Sc.**
Position	Assistant Professor & Secretary of Financial Affairs
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2006. - Master's degree (Engineering Science), National Taiwan University of Science and Technology, Taiwan, 2008. - Doctorate's degree (Engineering), Kumamoto University, Japan, 2014.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. 2021, as a member of research group, Development of Systems and Architectures Supporting Online Learning Technology 2. 2021, as a leader of research group, Development of a Reactive Routing Protocol with Energy Efficiency in Mind 3. 2021, as a leader of research group, Implementing the Reverse-AODV Protocol by Considering the Energy Consumption Factor at the Routing Stage at VANET 4. 2021, as a member of research group, Development of Application of Physical Vulnerability Map of Building in Surabaya Due to Potential Recent Earthquake: A Multi-Scale Study 5. 2021, as a member of research group, Antenna Configuration System Development to Increase AIS Receiver Range 6. 2020, as a member of research group, Design and Build Miniature Intelligent Autonomous Vehicles 7. 2020, as a member of research group, Development of Data Hiding Methods and Optimization of Intrusion Detection Systems on Computer Networks for Data Protection 8. 2020, as a leader of research group, Development of On Demand Vector Ad-hoc Routing Protocol with Clustering and Ant Colony Methods on Vehicular Ad-hoc Networks 9. 2020, as a member of research group, Design a Secure Virtual Class System to Support Online Learning 10. 2020, as a member of research group, Optimization of Current Sensor Placement for Corrosion Detection in Water Pipelines 11. 2019, as a member of research group, Informatic Open Library Systems: Design and Build Integrated Library Information Systems at the Informatics Department Library 12. 2019, as a member of research group, Design and Build Cloud Computing Security Audit Software with Encrypted Data 13. 2019, as a member of research group, Development of Online Attendance System with Face Matching and Digital Signature 14. 2018, as a member of research group, Development of Data Aggregation and Delivery Protocols to Save Energy and Guarantee the Reliability of Data Delivery in Wireless Sensor Network Environments 15. 2018, as a member of research group, Securing Messages on Sundanese Language Documents Using Steganography Format Based Method 16. 2018, as a member of research group, Development of Online Attendance System with Face-Matching Fingerprint Substitute
Industry collaborations over the last 5 years	
Patents and proprietary rights	None
Important publications over the last 5 years	1. The development of a routing protocol based on Reverse-AODV by considering an energy threshold in VANET, NG Razafindrobelina, R Anggoro, AM Shiddiqi, 2021 IEEE International IOT, Electronics and Mechatronics Conference 2. Security audit in cloud-based server by using encrypted data AES-256 and

	SHA-256, M Husni, HT Ciptaningtyas, W Suadi, RM Ijtihadie, R Anggoro, MF Salam, IOP Conference Series: Materials Science and Engineering 830 (3), 032015 3. A grid-based clustering with dynamic forwarding path for energy-efficient data gathering in wireless sensor network environments, W Wibisono, T Ahmad, R Anggoro, ICIC express letters. Part B, Applications 4. An android based course attendance system using face recognition, D Sunaryono, J Siswantoro, R Anggoro, Journal of King Saud University-Computer and Information Sciences 5. Improvement Performance of Clustered Shortest Geopath Routing Protocol Using Data Aggregation in Wireless Sensor Network Environments, W Wibisono, R Anggoro, Journal of Physics: Conference Series 1108 (1), 012121 6. Text Steganography on Sundanese Script using Improved Line Shift Coding, HT Ciptaningtyas, R Anggoro, MBA Fadhillah, 2018 International Electronics Symposium on Knowledge Creation 7. Position-based scheme for multi-hop routing protocol in cluster-based wireless sensor networks, W Wibisono, T Ahmad, R Anggoro, 2018 4th International Conference on Wireless and Telematics (ICWT), 1-6 8. Improvement Performance of Clustered Shortest Geopath Routing Protocol Using Adaptive Path and Data Aggregation in Wireless Sensor Network Environments, R Rozita, W Wibisono, R Anggoro, MISEIC 2018

Activities in specialist bodies over the last 5 years	**TAUGHT COURSES:**
	
	2015
	  - Odd Semester: Net Centric Computing, Operating Systems
	
	2016
	  - Odd Semester: Operating Systems.
	  - Even Semester: Design and Audit Network, Computer Networks
	
	2017
	  - Odd Semester: Operating Systems, Wireless Networks
	  - Even Semester: Design and Audit Network, Computer Networks
	
	2018
	  - Odd Semester: Operating Systems, Mobile Computing
	  - Even Semester: Design and Audit Network, Computer Networks
	2019
	  - Odd Semester: Operating Systems, Mobile Computing
	  - Even Semester: Design and Audit Network, Computer Networks
	
	2020
	  - Odd Semester: Computer Networks

Area of Expertise: Intelligent Information Management

Name	**Prof. Drs.Ec.Ir. Riyanarto Sarno,M.Sc,Ph.D.**		
Position	Professor		
Academic career	- Bachelor's degree (Electrical Engineering), Institut Teknologi Bandung, Indonesia, 1983. - Master's degree (Science), The University of New Brunswick, Canada, 1988. - Doctor's degree (Computer Science), University of New Brunswick, Canada, 1892.		
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology		
Research and development projects over the last 5 years	No	Title of Research Projects	Years	Position
	1	Operasional Pengambilan Data Skrining Covid-19 menggunakan INOSEC19 (*Operational Data Collection for Covid-19 Screening using INOSEC19*)	2021	Principal Investigator
	2	Adopsi Prototipe Electronic Nose INOSEC19 untuk uji skrining COVID-19 secara terbatas di lingkungan ITS (*Adoption of INOSEC19, an Electronic Nose Prototype for a limited COVID-19 screening test in the ITS environment*)	2021	Principal Investigator
	3	Pengembangan Prototipe Uji Kalibrasi Electronic Nose INOSEC19 untuk Skrining Cepat Covid-19 (*Development of INOSEC19, an Electronic Nose Prototype of Covid-19 Rapid Detection, for Calibration Test*)	2021	Principal Investigator
	4	Pengembangan Electronic Nose Berbasis Integrasi IOT Dan Komputasi Cloud untuk Deteksi Covid-19 Menggunakan Keringat Ketiak Pasien (*Development of Artificial Intelligence System for Brain Surgery Planning based on Patient Medical Images*)	2021-2023	Principal Investigator
	5	Pengembangan Sistem *Artificial Intelligence* untuk Perencanaan Bedah Otak Berdasarkan Citra Medis Pasien (*Development of Artificial Intelligence System for Brain Surgery Planning based on Patient Medical Images*)	2021-2023	Principal Investigator
	6	Rapid Detection of COVID-19 through Sweat Analysis by using an Electronic Nose	2020-2021	Principal Investigator
	7	Pengembangan 3 Dimensi Akurat Berdasarkan Citra Medis Anatomi dan Morfologi Otak untuk Perencanaan Bedah Saraf Otak (*Developing 3D Brain Anatomical Morphological Accurate Generator (BAMAG) Based on Medical Images for Planning Brain Surgery*)	2019-2022	Principal Investigator
	8	Pengembangan 3 Dimensi Generator Manufaktur Aditif Akurat Berdasarkan Citra Medis Untuk Perencanaan Bedah Tengkorak Kepala Dan Rekonstruksi Tulang Wajah	2019-2021	Principal Investigator

	No	Name of Collaboration	Hospital / Industry	Position	Year
		(*Developing Accurate 3D Additive Manufacturing Generator based on Medical Images for Planning Cranioplasty Surgery and Craniofacial Reconstruction Surgery*)			
	9	Pengembangan Workflow Visual untuk Operasi Otak dan Kepala (*Developing Visual Workflow for Brain and Cranio Surgery*)	2020	Principal Investigator	
	10	Pengembangan Electronic-Nose Untuk Deteksi Kemurnian Daging Sapi (*Development of Electronic-Nose for Detecting Pork Adulteration in Beef*)	2018-2020	Principal Investigator	
	11	Pengembangan Mixed Reality Simulator untuk Operasi Otak (*Developing A Mixed Reality Simulator for Brain Surgery*)	2019	Principal Investigator	
	12	Sistem Enterprise Tanggap Proses Bisnis (*Business Process Aware Enterprise System*)	2017-2019	Principal Investigator	
Industry collaborations over the last 5 years	No	Name of Collaboration	Hospital / Industry	Position	Year
	1	**Research Collaboration:** Perbedaan Hasil Analisis Bau Keringat Ketiak Menggunakan Alat i-Nose C-19 dan RT-PCR Pasien COVID-19 dan Non-Covid-19 (*Differences in the Results of the Analysis of Armpit Odor Sweat Using the i-Nose C-19 and RT-PCR Equipment for COVID-19 and Non-Covid-19 Patients*)	Dr. Soetomo Academic General Hospital	Partner	2021
	2		Indrapura Hospital	Partner	2021
	3	**Research Collaboration:** Perbandingan Antara Hasil Skrining Cepat Covid-19 Melalui Bau Keringat Ketiak Menggunakan Alat Electronic Nose dengan Hasil Swab PCR (*Comparison between the Results of Covid-19 Rapid Screening Through Armpit Odor Sweat Using an Electronic Nose with PCR Swab Results*)	A. Yani Islamic Hospital	Partner	2021
	4		Jemursari Islamic Hospital	Partner	2021
	5		Navy Central Hospital Dr. Ramelan	Partner	2021
	6	**Research Collaboration:** Pengembangan Prototipe Uji Kalibrasi Electronic Nose INOSEC19 untuk Skrining Cepat Covid-19 (*Development of INOSEC19, an Electronic Nose Prototype of Covid-19 Rapid Detection, for Calibration Test*)	PT. Dempo Metalindo	Industry Partner	2021

	No	Title		Status	Year
	7	**Research Collaboration:** Rapid Detection of Covid-19 through Sweat Analysis by using an Electronic Nose	Dr. Soetomo Academic General Hospital	Partner	2021
	8	**Research Collaboration:** Pengembangan 3 Dimensi Akurat Berdasarkan Citra	Dr. Soetomo Academic General Hospital	Partner	2019 - 2023
	9	Medis Anatomi dan Morfologi Otak untuk Perencanaan Bedah Saraf	PT. Bumandhala Caja Indonesia	Marketing Partner	2019 - 2023
	10	Otak (*Developing 3D Brain Anatomical Morphological Accurate Generator (BAMAG) Based on Medical Images for Planning Brain Surgery*)	National Hospital	Partner	2019 - 2023
	11	**Research Collaboration :** Pengembangan 3 Dimensi Generator Manufaktur	CV. Bumandhala Caja Indonesia	Marketing Partner	2019 - 2021
	12	Aditif Akurat Berdasarkan Citra Medis Untuk Perencanaan Bedah Tengkorak Kepala Dan	Plastic Surgery Division – Airlangga University Hospital	Partner	2019 - 2021
	13	Rekonstruksi Tulang Wajah (*Developing Accurate 3D Additive Manufacturing Generator based on Medical Images for Planning Cranioplasty Surgery and Craniofacial Reconstruction Surgery*)	iDiG RCMed	Partner	2019 - 2021
Patents and proprietary rights	No	Title	Patents and Proprietary Rights	Status	Year
	1	MODUL PEMOTONG 3 DIMENSI MODEL MENGGUNAKAN RAYCASTING	Computer Copyright	*Granted*	2021
	2	MODUL APLIKASI ELECTRONIC NOSE SIGNAL REPOSITORY UNTUK MENYIMPAN SINYAL BAU KERINGAT KETIAK BERBASIS CLOUD	Computer Copyright	*Granted*	2021
	3	INOSEC19	Brand	*Registered*	2021
	4	PENENTUAN POSITIF DAN NEGATIF PENYAKIT COVID-19 PDA PASIEN MENGGUNAKAN SISTEM ELECTRONIC NOSE	Paten	*Registered*	2021

		MELALUI BAU KERINGAT KETIAK			
	5	SISTEM ELECTRONIC NOSE UNTUK DETEKSI KEMURNIAN DAGING SAPI TERHADAP DAGING BABI	Paten	*Registered*	2021
	6	ELECTRONIC NOSE UNTUK SKRINING CEPAT PENDERITA (POSITIF) ATAU SEHAT (NEGATIF) DARI PENYAKIT COVID-19 MENGGUNAKAN BAU KERINGAT KETIAK	Paten	*Registered*	2021
	7	BOX SISTEM ELECTRONIC NOSE	Industrial Design	*Registered*	2020
	8	VIDEO VISUAL WORKFLOW DALAM BENTUK ANIMASI 3 DIMENSI UNTUK KASUS CRANIOSYNOSTOSIS	Video Copyright	*Granted*	2020
	9	MODUL VISUAL WORKFLOW BERDASARKAN MODEL PROSES BISNIS UNTUK KASUS CRANIOSYNOSTOSIS	Video Copyright	*Granted*	2020
	10	BASIS DATA TEKSTUAL IMAGE DIGITAL IMAGING AND COMMUNICATION IN MEDICINE (DICOM) 3 DIMENSI OTAK	Database Copyright	*Granted*	2020
	11	BASIS DATA TEKSTUAL IMAGE 2 DIMENSI OTAK	Database Copyright	*Granted*	2020
	12	MODUL VIRTUAL REALITY 3 DIMENSI UNTUK WORKFLOW KASUS CRANIOSYNOSTOSIS MENGGUNAKAN FILE DICOM DARI CT-SCAN	Computer Copyright	*Granted*	2020
	13	MODUL VIRTUAL REALITY 3 DIMENSI UNTUK WORKFLOW KASUS CRANIOPLASTY MENGGUNAKAN FILE DICOM DARI CT-SCAN	Computer Copyright	*Granted*	2020
	14	MODUL VIRTUAL REALITY TEKSTUAL IMAGE DIGITAL IMAGING AND COMMUNICATION IN MEDICINE (DICOM) 3 DIMENSI OTAK	Computer Copyright	*Granted*	2020
	15	MODUL APLIKASI SIGNAL REPOSITORY UNTUK MENYIMPAN DATA SINYAL YANG DIPROSES DALAM ELECTRONIC NOSE	Computer Copyright	*Granted*	2020

	16	MODUL APLIKASI PEMBUATAN OBJEK 3D DARI PERSIMPANGAN OBJEK 3D UNTUK PEMODELAN IMPLAN	Computer Copyright	*Granted*	2020
	17	MODUL APLIKASI ACCURATE 3D GENERATOR UNTUK MENGHASILKAN 3D MODEL YANG AKURAT BERDASARKAN DIGITAL IMAGING AND COMMUNICATIONS IN MEDICINE (DICOM)	Computer Copyright	*Granted*	2020
	18	MODUL APLIKASI PENGHALUSAN PERMUKAAN DARI OBJEK 3D IMPLAN	Computer Copyright	*Granted*	2020
	19	MODUL APLIKASI PEMBENTUKAN MODEL IMPLAN MENGGUNAKAN RAY CASTING	Computer Copyright	*Granted*	2020
	20	MODUL APLIKASI SIGNAL REPOSITORY UNTUK MENYIMPAN DATA SINYAL YANG DIPROSES DALAM ELECTRONIC NOSE	Computer Copyright	*Granted*	2020
	21	APLIKASI DICOM 3D REPOSITORY UNTUK MENYIMPAN DIGITALIMAGING AND COMMUNICATION IN MEDICINE (DICOM) DALAMBENTUK 3 DIMENSI	Computer Copyright	*Granted*	2020
	22	APLIKASI MULTIPLANAR 3D VIEWER UNTUK MENAMPILKANSAGITAL, KORONAL, DAN AKSIAL SECARA SINKRON	Computer Copyright	*Granted*	2020
	23	APLIKASI 3D AUTOMATIC CO-REGISTERATION UNTUKMENYATUKAN GAMBAR DARI BERBAGAI MODALITAS	Computer Copyright	*Granted*	2020
	24	MODUL APLIKASI HEAD ALIGNMENT BERDASARKANANTERIOR COMMISSURE (AC), POSTERIOR COMMISSURE (PC),DAN MIDLINE	Computer Copyright	*Granted*	2020
	25	MODUL APLIKASI PENENTUAN LOKASI VENTRALINTERMEDIATE NUCLEUS (VIM) SECARA OTOMATISBERDASARKAN	Computer Copyright	*Granted*	2020

	No	Title and Authors		Type	Status	Year
		METODE COORDINATE-BASED				
	26	MODUL APLIKASI PENENTUAN LOKASI VENTRALINTERMEDIATE NUCLEUS (VIM) SECARA OTOMATIS BERDASARKAN METODE GUIOT		Computer Copyright	*Granted*	2020
	27	MODUL APLIKASI DICOM EXPORTER UNTUK MENGEKSPOR DIGITAL IMAGING AND COMMUNICATION IN MEDECINE (DICOM)KE APLIKASI LAIN		Computer Copyright	*Granted*	2020
	28	MODUL APLIKASI PENGELOLAAN FILE DICOM MENJADI FILE DICOM STANDARD		Computer Copyright	*Granted*	2020
	29	MODUL FUSI MEDICAL IMAGE UNTUK MENAMPILKAN GABUNGAN GAMBAR DARI BERBAGAI MODALITAS		Computer Copyright	*Granted*	2020
	30	MODUL APLIKASI ACCURATE 3D GENERATOR UNTUK MENGHASILKAN 3D MODEL YANG AKURAT BERDASARKAN DIGITAL IMAGING AND COMMUNICATIONS IN MEDICINE (DICOM)		Computer Copyright	*Granted*	2020
	31	APLIKASI "MOLEN" – MOBILE ELECTRONIC NOSE UNTUK DETEKSI KUALITAS DAGING SAPI		Computer Copyright	*Granted*	2019

Important publications over the last 5 years	No	Year	Title and Authors	Vol/No	Journal
	1	2021	**Riyanarto Sarno**, Kelly Rossa Sungkono, Muhammad Taufiqulsa'di, Hendra Darmawan, Achmad Fahmi, Kuwat Triyana. *Improving Efficiency for Discovering Business Processes Containing Invisible tasks in Non-free Choice*	*Accepted*	Journal of Big Data (**Scopus Q1**)
	2	2021	Dewi Rahmawati, **Riyanarto Sarno**. *Anomaly Detection using Control Flow Pattern and Fuzzy Regression in Port Container Handling*	Vol. 33, Issue 1	Journal of King Saud University-Computer and Information Sciences (**Scopus Q1**)
	3	2021	Aziz Fajar, **Riyanarto Sarno**, Chastine Fatichah, Achmad	In Press	Journal of King Saud

			Fahmi. *Reconstructing and resizing 3D images from DICOM files*		University-Computer and Information Sciences **(Scopus Q1)**
	4	2021	Dedy Rahman Wijaya, **Riyanarto Sarno**, Enny Zulaika. *DWTLSTM for Electronic Nose Signal Processing in Beef Quality Monitoring*	Vol. 326	Sensors and Actuators B: Chemical **(Scopus Q1)**
	5	2021	**Riyanarto Sarno**, Kuwat Triyana, Shoffi Izza Sabilla, Dedy Rahman Wijaya, Dwi Sunaryono, dan Chastine Fatichah. *Detecting Pork Adulteration in Beef for Halal Authentication Using an Optimized Electronic Nose System*	Vol. 8	IEEE Access **(Scopus Q1)**
	6	2021	Irene RHT Tangkawarow, **Riyanarto Sarno**, Daniel Siahaan. *Modeling Business Rule Parallelism by Introducing Inclusive and Complex Gateways in Semantics of Business Vocabulary and Rules.*	Vol. 14, Issue 1	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	7	2021	Nabil Haidarrahman Pribadi, **Riyanarto Sarno**, Adhatus Solichah Ahmadiyah, Kelly Rossa Sungkono. *Semantic Recommender System Based on Semantic Similarity Using FastText and Word Mover's Distance*	Vol. 14, Issue 2	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	8	2021	Kelly R. Sungkono, **Riyanarto Sarno**, Fransisca D. Amadea, Ariqoh F. Irbah. *Graph-Based Process Model Discovery for Mining Invisible Non-Prime Tasks in Hybrid Choice-Parallel Relationships*	Vol. 14, Issue 3	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	9	2021	Malikhah, **Riyanarto Sarno**, Shoffi Izza Sabilla. *Ensemble Learning for Optimizing Classification of Pork Adulteration in Beef Based on Electronic Nose Dataset*	Vol. 14, Issue 4	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	10	2021	Achmad Fahmi, Heri Subianto, Priya Nugraha, Muhammad Hamdan, Asra Al Fauzi, Anggraini Dwi Sensusiati, Budi Utomo, **Riyanarto Sarno**, Agus	31(4)	Turkish Neurosurgery (Scopus Q3)

			Turchan, Mohammad Hasan Machfoed, Takaomi Taira, Abdul Hafid Bajamal. *VIM Line Technique for Determining the Ventral Intermediate Location*		
	11	2020	Shoffi Izza Sabilla, **Riyanarto Sarno**, Kuwat Triyana, Kenshi Hayashi. *Deep Learning in a Sensor Array System based on the Distribution of Volatile Compounds from Meat Cuts using GC-MS Analysis*	Vol. 29, 2020	Sensing and Bio-Sensing Research **(Scopus Q1)**
	12	2020	Dedy Rahman Wijaya, **Riyanarto Sarno**, Enny Zulaika. *Noise Filtering Framework for Electronic Nose Signals: An application for beef quality monitoring*	Vol. 157, February 2019	Computers and Electronics in Agriculture **(Scopus Q1)**
	13	2020	Mhd Arief Hasan, **Riyanarto Sarno**, Shoffi Izza Sabilla. *Optimizing Machine Learning Parameters for Classifying the Sweetness of Pineapple Aroma Using Electronic Nose*	Vol. 13, No.5	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	14	2020	Muhammad Ainul Yaqin, **Riyanarto Sarno**, Siti Rochimah. *Measuring Scalable Business Process Model Complexity Based on Basic Control Structure*	Vol. 13, No.6	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	15	2020	**Riyanarto Sarno**, Fernandes Sinaga, Kelly Rossa Sungkono. *Anomaly Detection in Business Processes using Process Mining and Fuzzy Association Rule Learning*	Vol. 7, No. 5	Journal of Big Data **(Scopus Q1)**
	16	2020	**Riyanarto Sarno**, Shoffi Izza Sabilla, Dedy Rahman Wijaya, Dwi Sunaryono, Chastine Fatichah. *Electronic nose dataset for pork adulteration in beef*	Vol. 32	Data in Brief (Scopus Q2)
	17	2020	**Riyanarto Sarno**, Shoffi Izza Sabilla, Dedy Rahman Wijaya, Hariyanto. *Electronic Nose for Detecting Multilevel Diabetes using Optimized Deep Neural Networor*	Vol. 28, No. 1, 2020	Engineering Letters (Scopus Q2)
	18	2020	Achmad Fahmi, Heri Subianto, Priya Nugraha, Muhammad Hamdan, Asra Al Fauzi, Anggraini Dwi Sensusiati , Budi Utomo,	Vol. 77	International Journal of Surgery Case Report (Scopus Q3)

			Riyanarto Sarno, Agus Turchan, Mohammad Hasan Macfoed, Takaomi Taira, Abdul Hafid Bajamal. *Vim line technique thalamotomy for Parkinson tremor: Case series*		
	19	2020	Yohanes Setiawan, Chastine Fatichah, **Riyanarto Sarno**. *A New Local Gaussian Variational Level Set for Globus Pallidus Segmentation*	Vol. 13, No. 5	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	20	2020	Khairiyyah Nur Aisyah, Chastine Fatichah, **Riyanarto Sarno**. *Multilevel Thresholding and Morphological Relationship Approach for Automatic Detection of Anterior and Posterior Commissure in Mid-sagittal Brain MRI*	Vol. 13, No. 5	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	21	2020	Yohanes Setiawan, Kelly Rossa Sungkono, **Riyanarto Sarno**. *A New Similarity Method based on Weighted Graph Models for Matching Parallel Business Process Models*	Vol. 13, No. 5	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	22	2020	Khairiyyah Nur Aisyah, Kelly Rossa Sungkono, **Riyanarto Sarno**. *A New Similarity Method based on Weighted-Linear Temporal Logic Tree and Weighted Directed Acyclic Graph for Graph-based Business Process Models*	Vol. 13, No. 5	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	23	2020	Adiba Sabilla Ajrina, **Riyanarto Sarno**, Hari Ginardi, Aziz Fajar. *Mining Zone Determination of Natural Sandy Gravel using Fuzzy AHP and SAW, MOORA and COPRAS Methods.*	Vol. 13, No. 5	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	24	2020	Sulaiman Wakhid, **Riyanarto Sarno**, Shoffi Izza Sabilla, Dike Bayu Maghfira. *Detection and Classification of Indonesian Civet and Non-Civet Coffee Based on Statistical Analysis Comparison Using E-Nose.*	Vol. 13, No. 4	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)

	25	2020	Sinarring Azi Laga, **Riyanarto Sarno**. *Temperature effect of electronic nose sampling for classifying mixture of beef and pork*	Vol. 19, No. 3	Indonesian Journal of Electrical Engineering and Computer Science (Scopus Q3)
	26	2020	Ryco Puji Setyono, **Riyanarto Sarno**. *Comparative method of moora, copras and topsis based on weighting of best worst method in supplier selection at ABC mining companies in Indonesia*	Vol. 19, No. 2	Indonesian Journal of Electrical Engineering and Computer Science (Scopus Q3)
	27	2020	Indra Waspada, **Riyanarto Sarno**, Kelly Rossa Sungkono. *An Improved Method of Parallel Model Detection for Graph-Based Process Model Discovery*	Vol. 13, No. 2	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	28	2020	Budi Harjo, **Riyanarto Sarno**, Siti Rochimah. *Automatic Web Service Composition for SaaS Business Intelligence*	Vol. 13, No. 2	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	29	2020	Bagus Setya Rintyarna, **Riyanarto Sarno**, Chastine Fatichah. *Enhancing the performance of sentiment analysis task on product reviews by handling both local and global context*	Vol. 12, No. 1	International Journal of Information and Decision Sciences (Scopus Q3)
	30	2020	Suhariyanto, **Riyanarto Sarno**, Chastine Fatichah, Edi Faisal. *Aspect Based Sentiment Analysis: A Systematic Literature Review*	Vol. 5, No. 1	Journal of Applied Intelligent System
	31	2019	Cahyaningtyas Sekar Wahyuni, Kelly Rossa Sungkono, **Riyanarto Sarno**. *Novel Parallel Business Process Similarity Methods based on Weighted-Tree Declarative Pattern Models*	Vol. 13, No. 1, pp. 65-77	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	32	2019	Ahmad Yusuf Ardiansyah and **Riyanarto Sarno**. *Performance Analysis of Wireless Sensor Network with Load Balancing for Data Transmission using XBEE ZB Module*	vol. 14, no. 2, pp. 1-13	Indonesian Journal of Electrical Engineering and Computer Science (IJEECS) (Scopus Q3)

	33	2019	Afrianda Cahyapratama, Kelly Rossa Sungkono, **Riyanarto Sarno**. *Gap Analysis Business Process Model by Using Structural Similarity*	vol. 14, no. 2, pp. 1-12	Indonesian Journal of Electrical Engineering and Computer Science (IJEECS) (Scopus Q3)
	34	2019	M. Jupri and **Riyanarto Sarno**. *Data Mining, Fuzzy AHP And TOPSIS For Optimizing Taxpayer Supervision*		Indonesian Journal of Electrical Engineering and Computer Science (IJEECS) (Scopus Q3)
	35	2019	Maryamah, Agus Zainal Arifin, **Riyanarto Sarno**, Yasuhiko Morimoto. *Query Expansion Based on Wikipedia Word Embedding and BabelNet Method for Searching Arabic Documents*	vol. 12, no. 5, pp. 202-213	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	36	2019	Bagus Setya Rintyarna, **Riyanarto Sarno,** Chastine Fatichah. *Evaluating the Performance of Sentence Level Features and Domain Sensitive Features of Product Reviews on Supervised Sentiment Analysis Tasks*	vol. 6, no. 84, pp. 1-19	Journal of Big Data **(Scopus Q1)**
	37	2019	Dedy Rahman Wijaya, **Riyanarto Sarno**, Enny Zulaika. *Noise filtering framework for electronic nose signals: An application for beef quality monitoring*	Volume 157, Pages 305-321.	Elsevier, Computers and Electronics in Agriculture **(Scopus Q1)**
	38	2019	Farza Nurifan, **Riyanarto Sarno**, Kelly Rossa Sungkono. *Aspect based Sentiment Analysis for Restaurant Reviews using Hybrid ELMo-Wikipedia and Hybrid Expanded Opinion Lexicon-SentiCircle*	vol. 12, no. 6, pp. 47-58	International Journal of Intelligent Engineering and Systems (IJIES) (Scopus Q2)
	39	2019	Ari Firmanto, **Riyanarto Sarno**. *Aspect-Based Sentiment Analysis Using Grammatical Rules, Word Similarity, and SentiCircle*	Vol. 12, No. 5	International Journal of Intelligent Engineering & Systems (IJIES) (Scopus Q2)
	40	2019	Umi Salamah, **Riyanarto Sarno**, Agus Zainal Arifin, Anto Satriyo Nugroho, Ismail Ekoprayitno Rozi, Puji Budi	*In Press*	Int. J. Biomedical Engineering and

				Setia Asih. *Enhancement of low quality blood smear image using contrast and edge corrections.*		Technology (Scopus Q3)
	41	2019	**Riyanarto Sarno**, Kelly Rossa Sungkono. *A Survey of graph-based algorithms for discovering business processes*	Vol. 5, No. 2	International Journal of Advances in Intelligent Informatics (IJAIN) (Scopus Q3)
	42	2019	Bagus Setya Rintyarna, **Riyanarto Sarno**, Chastine Fatichah. *Semantic Features for Optimizing Supervised Approach of Sentiment Analysis on Product Reviews*	Vol. 8, No. 3	Computers (Scopus Q2)
	43	2019	Bambang Jokonowo, **Riyanarto Sarno**, Siti Rochimah, Bagus Priambodo. *Process Mining : Measuring Key Performance Indicator Container Dwell Time*	Vol.16, No. 1,	Indonesian Journal of Electrical Engineering and Computer Science (IJEECS) (Scopus Q3)
	44	2019	Reza Amalia Priyantina, **Riyanarto Sarno**. *Sentiment Analysis of Hotel Aspect for Optimization Management Hotel Review Analysis Using Latent Dirichlet Allocation (LDA) Similarity and Sentiwordnet.*	Vol. 12, Issue 4	International Journal of Intelligent Engineering and Systems (IJIES) (Scopus Q2)
	45	2019	Dewi Ayu Khusnul Khotimah, **Riyanarto Sarno**. *Sentiment Analysis of Hotel Aspect Using PLSA (Probability Latent Semantic Analysis).*	Vol. 12, Issue 4	International Journal of Intelligent Engineering and Systems (IJIES) (Scopus Q2)
	46	2019	Kelly Rossa Sungkono, Ulva Erida Nur Rochmah, **Riyanarto Sarno**. *Heuristic Linear Temporal Logic Pattern Algorithm in Business Process Model.*	Vol. 12, Issue 4	International Journal of Intelligent Engineering and Systems (IJIES) (Scopus Q2)
	47	2019	Aziz Fajar, **Riyanarto Sarno**. *Agent Based Simulation and Optimization of Parallel Task to Reduce Asynchronous Waiting Time on Business Process.*	Vol 17, No 4	TELKOMNIKA (Scopus Q3)
	48	2019	Irwan Alnarus Kautsar, **Riyanarto sarno**. *A Supportive Tool for Project*	Vol.9, No. 2 , pp.630-	International Journal on Advanced

		Based Learning and Laboratory Based Education	639.	Science Engineering and Information Technology
49	2019	Lukman Hakim, **Riyanarto Sarno**, Kelly Rossa Sungkono. *Modified Alpha++ Algorithm for Discovering the Hybrid of Non-Free Choice and Invisible Task of Business Processes.*	Vol. 12, Issue 3, pp. 31-40	International Journal of Intelligent Engineering and Systems (IJIES) (Scopus Q2)
50	2019	Dedy Rahman Wijaya, **Riyanarto Sarno**, Enny Zulaika. *Noise Filtering Framework for Electronic Nose Signals: An application for beef quality monitoring.*	Vol. 157	Elsevier, Computers and Electronics in Agriculture (Scopus Q1)
51	2019	Mohammad Fikri, **Riyanarto Sarno**. *A Comparative Study of Sentiment Analysis using SVM and SentiWordNet*	Vol. 13, No. 3, pp. 902-909	Indonesian Journal of Electrical Engineering and Computer Science (IJEECS) (Scopus Q3)
52	2019	**Riyanarto Sarno**, Kelly Rossa Sungkono, Reynaldo Johanes, Dwi Sunaryono. *Graph-Based Algorithms for Discovering A Process Model Containing Invisible Tasks.*	Vol. 12, Issue 2, pp.85-94	International Journal of Intelligent Engineering and Systems (IJIES) (Scopus Q2)
53	2019	**Riyanarto Sarno**, Dedy Rahman Wijaya. *Recent Development in Electronic Nose Data Processing for Beef Quality Assessment.*	Vol. 17, No. 1, pp.337-348	TELKOMNIKA (Scopus Q3)
54	2019	Gita Intani Budiawati, **Riyanarto Sarno**. *Time and Cost Optimization of Business Process RMA using PERT and Goal Programming.*	Vol. 17, No. 2	TELKOMNIKA (Scopus Q3)

Activities in specialist bodies over the last 5 years	2016
	   – **Odd Semester:**
	      Bachelor: Systems Audit
	      Master: Advance topics in System Audit, Advance topics in Software Project Management
	   – **Even Semester:**
	      Bachelor: Knowledge Engineering, Enterprise System, Specific Topics in Intelligent Information Management
	      Master: Advance topics in Knowledge Based Engineering
	
	2017
	   – **Odd Semester:**
	      Bachelor: Systems Audit, Knowledge Engineering			

	Master: Software Engineering, Advance topics in System Audit – **Even Semester:** 　**Bachelor:** Software Project Management, Enterprise System 　**Master:** Advance topics in Knowledge Based Engineering 2018 – **Odd Semester:** 　**Master:** Software Engineering, Advance topics in System Audit, Advance topics in Software Evolution – **Even Semester:** 　**Bachelor:** Software Project Management, Enterprise System, Introduction to Process Mining 　**Master:** Advance topics in Software Project Management, Advance topics in Knowledge Based Engineering 2019 – **Odd Semester:** 　**Bachelor:** Software Project Management 　**Master:** Software Engineering – **Even Semester:** 　**Bachelor:** System Audit, Introduction to Process Mining, 2020 – **Odd Semester:** 　**Bachelor:** Software Project Management 　**Master:** Software Engineering, Advance topics in System Audit – **Even Semester:** 　**Master:** Advance topics in Software Project Management **International Journal Editor:** 1. International Journal of Intelligent Engineering and Systems 2. International Journal of Advances in Intelligent Informatics **International Journal Reviewer**: 1. Journal of King Saud (2020) 2. IEEE Access (2020)

Name	**Ratih Nur Esti Anggraini, S.Kom., M.Sc., Ph.D.**
Position	Lecturer
Academic career	- Bachelor's degree (Computer Science), Sepuluh Nopember Institute of Technology, Indonesia, 2008. - Master's degree (Science), National Taiwan University of Science and Technology, Taiwan, 2012. - Doctoral degree (Mathematic Engineering), University of Bristol, 2021.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. The Development of Research Ethics Review System (STEPDAL) based on Rule Engine and Text Understanding for Ethical Review Result Recommendation, 2021 2. The Development of Automatic Reviewer Scheduling Module in Research Ethics Review System, 2021 3. Flexible Requirement Verification for Adaptive Systems, 2020 4. Mobile Application for Guidance and Provision of Toddler's Nutrition to Support e-PKK, 2016

	5. PKK-man: A System to Manage PKK Activities in Indonesia, 2016
	6. Tools for Detecting Punctuation Errors in Scientific Papers, 2016
	7. Infant and Pregnancy Encyclopedia Application, 2015
	8. Decomposition using Refined Process Structure Tree (RPST) and Control Flow Complexity Metrics, 2015
	KMS-CS: A Client Server Application for Storing Toddler Health Information in Posyandu, 2015
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. A Graded Approach to Requirement Satisfaction for Evolving Systems, 2019
	2. Capturing Requirement Correlation in Adaptive Systems, 2018
	3. Fuzzy Representation for Flexible Requirement Satisfaction, 2017
Activities in specialist bodies over the last 5 years	2015 − Odd Semester: Software Design, Analysis and Design of Information Systems, Database Systems − Even Semester: Software Design Process, Database Management 2021 − Even Semester: Database Management, Analysis and Design of Information Systems, Computer Programming, Knowledge-based Engineering

Name	**Shintami Chusnul Hidayati, S.Kom., M.Sc., Ph.D.**
Position	Lecturer
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2009. - Master's degree (Science), National Taiwan University of Science and Technology, Taiwan, 2012. - Doctoral degree (Computer Science and Information Engineering), National Taiwan University of Science and Technology, Taiwan, 2017.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. An AI-based Assessment Monitoring System, 2021. 2. StyleMe: An AI Fashion Consultant for Personal Shopping and Style Advice, 2018.
Industry collaborations over the last 5 years	1. Microsoft Research Asia, 2018. 2. Samurai Spirit Inc., 2014 – 2017.
Patents and proprietary rights	None
Important publications over the last 5 years	**Journal Articles** 1. <u>Shintami Chusnul Hidayati</u>, Ting Wei Goh, Ji-Sheng Gary Chan, Cheng-Chun Hsu, John See, Lai-Kuan Wong, Kai-Lung Hua, Yu Tsao, and Wen-Huang Cheng, "Dress with Style: Learning Style from Joint Deep Embedding of Clothing Styles and Body Shapes," to appear in IEEE Transactions on Multimedia. (Impact Factor 2019: 6.051) 2. Wen-Huang Cheng, Sijie Song, Chieh-Yun Chen, <u>Shintami Chusnul Hidayati</u>, and Jiaying Liu, "Fashion Meets Computer Vision: A Survey," to appear in ACM Computing Surveys. (Impact Factor 2019: 7.990)

3. Shintami Chusnul Hidayati, Chuang-Wen You, Wen-Huang Cheng, and Kai-Lung Hua, "Learning and Recognition of Clothing Genres from Full-body Images," IEEE Transactions on Cybernetics, vol. 48, no. 5, pp. 1647 - 1659, 2018. (Impact Factor 2018: 10.387)

4. Kai-Lung Hua, Shintami Chusnul Hidayati, Fang-Lin He, Chia-Po Wei, and Yu-Chiang Frank Wang, "Context-Aware Joint Dictionary Learning for Color Image Demosaicking," Journal of Visual Communication and Image Representation, vol. 38, pp. 230-245, 2016. (Impact Factor 2016: 2.164)

5. Jordi Sanchez-Riera, Kai-Lung Hua, Yuan-Sheng Hsiao, Tekoing Lim, Shintami Chusnul Hidayati, and Wen-Huang Cheng, "A Comparative Study of Data Fusion for RGB-D Based Visual Recognition," Pattern Recognition Letters, vol. 73, pp. 1 - 6, 2016. (Impact Factor 2016: 2.164)

6. Tsung-Hung Tsai, Wei-Chih Jhou, Wen-Huang Cheng, Min-Chun Hu, I-Chao Shen, Tekoing Lim, Kai-Lung Hua, Ahmed Ghoneim, M. Anwar Hossain, and Shintami Chusnul Hidayati, "Photo sundial: Estimating the Time of Capture in Consumer Photos," Neurocomputing, vol. 177, pp. 529 - 542, 2016. (Impact Factor 2016: 3.317)

Peer-Reviewed Conference Papers

1. Shintami Chusnul Hidayati and Yeni Anistyasari, "Body Shape Calculator: Understanding the Type of Body Shapes from Anthropometric Measurements," in Proc. Int. Conf. Multimedia Retrieval, Taipei, Taiwan, Nov. 16 – 19, 2021.

2. Ghali Marzani, Nanik Suciati, and Shintami Chusnul Hidayati, "Morphological Preprocessing for Low-Resolution Face Recognition using Common Space," in Proc. International Conference on ICT for Smart Society, Bandung, Indonesia, Aug. 2 – 4, 2021.

3. Yeni Anistyasari, Ekohariadi Ekohariadi, IG P Asto Buditjahjanto, and Shintami Chusnul Hidayati, "Exploring the Psychometric Properties of Computational Thinking Assessment in Introductory Programming," in Proc. Int. e-Engineering Education Services Conference (e-Engineering), Petra, Jordan, Jun. 22 – 23, 2021.

4. Firman Maulana, Hadziq Fabroyir, Darlis Herumurti, Imam Kuswardayan, and Shintami Chusnul Hidayati, "Real-time Landscape Generation in Games Using Parallel Procedural Content," in Proc. International Conference on Computer Engineering, Network, and Intelligent Multimedia, Surabaya, Indonesia, Nov. 17 – 18, 2020.

5. Ganendra Afrasya Salsabilla, Hadziq Fabroyir, Darlis Herumurti, Imam Kuswardayan, and Shintami Chusnul Hidayati, "Tachyon: Multiplatform Rhythm Game with Automatic Beatmap Generation," in Proc. International Conference on Computer Engineering, Network, and Intelligent Multimedia, Surabaya, Indonesia, Nov. 17 – 18, 2020.

6. Marde Fasma'ul Aza, Nanik Suciati, and Shintami Chusnul Hidayati, "Performance Study of Facial Expression Recognition Using Convolutional Neural Network," in Proc. International Conference on Science in Information Technology, Palu, Indonesia, Oct. 21 – 22, 2020.

7. Muhammad Auliaramadani, Nanik Suciati, and Shintami Chusnul Hidayati, Hadziq Fabroyir, Ridho Rahman Hariadi, "Augmented Reality for 3D House Design Visualization from Floorplan Image," in Proc. International Conference on Electrical Engineering and Informatics, Aceh, Indonesia, Oct. 27-28, 2020.

8. Shintami Chusnul Hidayati, Raden Bimo Rizki Prayogo, Satria Ade

	Veda Karuniawan, Mhd. Fadly Hasan, and Yeni Anistyasari, "What's in a Caption?: Leveraging Caption Pattern for Predicting the Popularity of Social Media Posts," in Proc. IEEE International Conference on Vocational Education and Electrical Engineering (IEEE ICVEE), Surabaya, Indonesia, Oct. 3 - 4, 2020. 9. <u>Shintami Chusnul Hidayati</u>, Kai-Lung Hua, Yu Tsao, Jiaying Liu, Hong-Han Shuai, and Wen-Huang Cheng, "Garment Detectives: Discovering Clothes and Its Genre in Consumer Photos," in Proc. IEEE International Conference on Multimedia Information Processing and Retrieval (IEEE MIPR), San Jose, California, USA, Mar. 28 - 30, 2019. 10. <u>Shintami Chusnul Hidayati</u>, Cheng-Chun Hsu, Yu-Ting Chang, Kai-Lung Hua, Jianlong Fu, and Wen-Huang Cheng, "What dress fits me best? Fashion Recommendation on the Clothing Style for Personal Body Shape," in Proc. ACM International Conference on Multimedia (ACM MM), Seoul, Korea, Oct. 22 - 26, 2018. 11. Eric Massip, <u>Shintami Chusnul Hidayati</u>, Wen-Huang Cheng, and Kai-Lung Hua, "Exploiting Category-specific Information for Image Popularity Prediction in Social Media," in Proceedings of the IEEE International Conference on Multimedia and Expo (ICME) Workshops, San Diego, California, USA, Jul. 23 - 27, 2018. 12. <u>Shintami Chusnul Hidayati</u>, Yi-Ling Chen, Chao-Lung Yang, and Kai-Lung Hua, "Popularity Meter: An Influence- and Aesthetics-aware Social Media Popularity Predictor," in Proceedings of the ACM International Conference on Multimedia (ACM MM), Mountain View, California, USA, Oct. 23 - 27, 2017. 13. Zhao-Ming Liu, Yung-Yao Chen, <u>Shintami Chusnul Hidayati</u>, Shih-Che Chien, Feng-Chia Chang, and Kai-Lung Hua, "3D Model Retrieval Based on Deep Autoencoder Neural Networks," in Proceedings of the IEEE International Conference on Signals and Systems (ICSigSys), Bali, Indonesia, May 16 - 18, 2017. 14. Jordi Sanchez-Riera, <u>Shintami Chusnul Hidayati</u>, Kai-Lung Hua, Jen-Chieh Chiang, and Wen-Huang Cheng, "A Learning-based Tracking Algorithm for Hand Gesture," in Proceedings of the 29th IPPR Conference on Computer Vision, Graphics, and Image Processing (CVGIP), Keelung, Taiwan, Aug. 15 - 17, 2016. 15. Dang Duy Thang, <u>Shintami Chusnul Hidayati</u>, Yung-Yao Chen, Wen-Huang Cheng, Shih-Wei Sun, and Kai-Lung Hua, "A Spatialpyramid Scene Categorization Algorithm based on Locality-aware Sparse Coding," in Proceedings of the 2016 IEEE International Conference on Multimedia Big Data (BigMM), Taipei, Taiwan, Apr. 20 - 22, 2016. 16. Yu-Chen Chen, <u>Shintami Chusnul Hidayati</u>, Wen-Huang Cheng, Min-Chun Hu, and Kai-Lung Hua, "Locality Constrained Sparse Representation for Cat Recognition," in Proceedings of the 22nd International Conference on MultiMedia Modeling (MMM), Miami, USA, Jan. 4 - 6, 2016.
Activities in specialist bodies over the last 5 years	**Teaching** 2019 - Odd Semester: Artificial Intelligence, Computational Intelligence, Computer Graphics - Even Semester: Deep Learning, Artificial Intelligence, Advanced Topics in Computer Graphics, Computational Intelligence, Data Structure 2020 - Odd Semester: Computer Graphics, Basic Programming, Data Structure

- Even Semester: Artificial Intelligence, Advanced Topics in Computer Graphics, Data Structure, Basic Algorithms and Programming

Journal Activities

Reviewer
- IEEE Transactions on Multimedia
- IEEE MultiMedia
- IEEE Access
- Machine Vision and Applications
- Visual Computer
- IEICE Transactions on Information and Systems
- ITE Transactions on Media Technology and Applications
- MDPI Applied Sciences
- MDPI Electronics
- MDPI Information
- Journal of Physical Communication

Editor-in-chief
- Scientific Journal of Information Technology

Conference Activities

Organizer/Co-organizer
- ACM Multimedia Grand Challenge on AI Meets Beauty: 2019, 2020

Chair/Co-chair
- IEEE Int. Conf. Multimedia and Expo: 2022
- ACM Int. Conf. Multimedia Retrieval: 2021
- ACM Multimedia Grand Challenge on AI Meets Beauty: 2018
- IEEE Int. Conf. Visual Communications and Image Processing: 2018

Program committee member
- IEEE Int. Conf. Multimedia and Expo: 2018, 2019, 2020, 2021
- Int. Conf. MultiMedia Modelling: 2020, 2021
- IEEE Int. Conf. Image Processing: 2018, 2019, 2020, 2021
- ACM Int. Conf. Multimedia Retrieval: 2021
- IEEE Int. Workshop on Multimedia Signal Processing: 2019, 2020, 2021
- Int. Conf. Information and Communication Technology and Systems: 2017, 2019, 2021
- Int. Conf. Vocational Education and Electrical Engineering: 2020, 2021
- ACM Int. Conf. Multimedia: 2018, 2019, 2020
- Int. Conf. Pattern Recognition: 2020
- IEEE Int. Symposium on Circuits and Systems: 2020
- IEEE Int. Conf. Visual Communication and Image Processing: 2018, 2019
- ACM Int. Conf. Multimedia in Asia: 2019
- Int. Symp. Intelligent Signal Processing and Communication Systems: 2019

Area of Expertise: Intelligent Vision Computing

Name	**Prof. Ir. Handayani Tjandrasa, M.Sc., Ph.D.**
Position	Professor
Academic career	- Bachelor's degree, Institut Teknologi Sepuluh Nopember, Indonesia, 1975. - Master's degree (Computer Science), University of Wisconsin – Madison 1978. - Doctor's degree, University of Wisconsin, 1984.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Swing Trajectory Model for the New Design of Quadruped Robot using V-REP Simulator, 2020 2. Non-Proliferative Diabetic Retinopathy Classification Based on Hard Exudates Using Combination of FRCNN, Morphology, and ANFIS, 2020 3. Improving Spectral Quality of IHS-Pansharpening Result by Integrating Equalization Process using SVE-DWT for Satellite Imagery Data, 2020 4. Classification of Tobacco Leaf Pests using VGG16 Transfer Learning, 219 5. Classification of Diabetic Retinopathy and Normal Retinal Images using CNN and SVM, 2019 6. Red Small Dot Segmentation for Early Warning of Diabetic Retinopathy, 2018 7. Exudate Segmentation in Retinal Images of Diabetic Retinopathy using Saliency Method based on Region, 2018 8. Classification of P300 Event-related Potentials using Wavelet Transform, MLP, and Soft Margin SVM, 2018 9. A Soft Weighted Median Filter for Removing General Purpose Image Noise, 2017 10. Exudate Detection in Retinal Fundus Images using Combination of Mathematical Morphology and Renyi Entropy Thresholding, 2017 11. Classification of Alcoholic EEG using Wavelet Packet Decomposition, Principal Component Analysis, and Combination of Genetic Algorithm and Neural Network, 2017 12. Feature Extraction using Combination of Intrinsic Mode Functions and Power Spectrum for EEG Signal Classification, 2016 13. Feature Extraction using Statistical Moments of Wavelet Transform for Iris Recognition, 2016 14. Classification of EEG Signals using Common Spatial Pattern-principal Component Analysis and Interval Type-2 Fuzzy Logic System, 2016 15. Alcoholism Classification based on EEG Data using Independent Component Analysis (ICA), Wavelet De-noising and Probabilistic Neural Network (PNN), 2016 16. Classification of EEG Signals using Single Channel Independent Component Analysis, Power Spectrum, and Linear Discriminant Analysis, 2016 17. Identification of Oil Palm Plantations in IKONOS Images using Radially Averaged Power Spectrum Values, 2015
Industry collaborations over the last 5 years	None

Patents and proprietary rights	None
Important publications over the last 5 years	1. Severity Classification of Non-Proliferative Diabetic Retinopathy using Convolutional Support Vector Machine, 2020 2. Identification of Acute Lymphoblastic Leukemia Subtypes in Touching Cells Based on Enhanced Edge Detection, 2020 3. Combination of Aggregated Channel Features (ACF) Detector and Faster R-CNN to Improve Object Detection Performance in Fetal Ultrasound Images, 2018 4. Robot Motion Control using the Emotiv EPOC EEG System, 2018 5. Automatic Leukemia Cell Counting using Iterative Distance Transform for Convex Sets, 2018 6. Text Mining for Pest and Disease Identification on Rice Farming with Interactive Text Messaging, 2018 7. Hybrid Speckle Noise Reduction Method for Abdominal Circumference Segmentation of Fetal Ultrasound Images, 2018 8. Detection of Facial Expressions Using the Gabor and Haar Wavelet Features,2018 9. Classification of P300 in EEG Signals for Disabled Subjects using Singular Spectrum Analysis, 2017 10. Urban Road Materials Identification using Narrow Near Infrared Vision System, 2017 11. New Lossless Compression Method using Cyclic Reversible Low Contrast Mapping (CRLCM), 2016 12. Glaucoma Detection in Fundus Retina Image using Adaptive Thresholding and Support Vector Machine, 2016 13. Lossless Image Compression Method using Reversible Low Contrast Mapping (RLCM), 2016 14. Classification of Mental Activities based on EEG Data using Hybrid Neural Network and Fuzzy Particle Swarm Optimization Methods with Crossmutated Operation, 2016 15. Image Orientation Improvement based on Human Presence using Gradient and Haar-like Features, 2015 16. Image Orientation Automatically based on the Presence of a Face using the HAAR-LIKE feature, 2015 17. Nucleus and Cytoplasm Segmentation on Cervical Smear Image using a Combination of Fuzzy C-Means Clustering and Radiating Gradient Vector Flow Snake Methods, 2015 18. Classification of Non-Proliferative Diabetic Retinopathy based on Segmented Exudates using K-Means Clustering, 2015
Activities in specialist bodies over the last 5 years	2015 - Odd Semester: Computational Intelligence, Research Methodology and Philosophy of Science, Dissertation - Research 1, Dissertation - Research 2, Dissertation - Research 3, Seminar 1. 2016 - Odd Semester: Computational Intelligence, Research Methodology and Philosophy of Science, Seminar 1. - Even Semester: Digital Image Processing, Topics in Digital Image Processing, Seminar 2. 2017 - Odd Semester: Computational Intelligence, Research Methodology and Philosophy of Science

	- Even Semester: Artificial Intelligence, Digital Image Processing, Topics in Digital Image Processing, Research Methodology. 2018 - Odd Research Methodology and Philosophy of Science, Seminar 1, Computational Intelligence. - Even Semester: Digital Image Processing, Topics in Digital Image Processing, Seminar 2. 2019 - Odd Semester: Computational Intelligence, Research Methodology and Philosophy of Science. - Even Semester: Topics in Digital Image Processing, Digital Image Processing, Artificial Intelligence. 2020 - Odd Semester: Biomedical Computing, Computational Intelligence, Research Methodology and Philosophy of Science, Seminar 1.

Name	**Prof. Dr. Agus Zainal Arifin, S.Kom., M.Kom.**
Position	Professor
Academic career	- Bachelor's degree, Institut Teknologi Sepuluh Nopember, 1995. - Master's degree (Computer Science), Universitas Indonesia 2001. - Doctoral degree, Hiroshima University, 2007.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Image Classification Performance Evaluation for 3D Model Reconstruction, 2020 2. Line Operator as a CNN-Based Preprocessing Method for Osteoporosis Detection in Panoramic Dental Radiographs, 2020 3. Converting Images into Base Relief Using Image Processing Techniques, 2019 4. Tooth Segmentation Using Gamma Adjustment and Transition Region Filter Based on Wavelet Method, 2019 5. Age Estimation System Using Deep Residual Network Classification Method, 2019 6. Enhanced Topic Modeling using Dictionary for Questions and Answers, 2019 7. Adaptive Edge-Based Image Contrast Enhancement using Multi Sub-Histogram Analysis, 2019 8. 3D Region Merge for Tooth Segmentation in Cone-Beam Computed Tomography Images, 2018 9. Hierarchical Clustering Linkage for Merging Regions in Interactive Image Segmentation on Computed Tomography Dental Cone Beam, 2018 10. Branching Detection in Trabecular Bones Using Multiscale COSFIRE Filters for Osteoporosis Identification, 2018 11. Automatic Comparison of Products based on Opinion Features using Synonym Equations and Jaccard, 2018 12. Gaussian Kernel Based Conditional Spatial FCM Interactive Segmentation for Panoramic Radiography, 2018 13. Generating automatic markers based on composite directional images from frequency domains for dental panoramic radiographic

	segmentation, 2017 14. Rainfall Forecasting using Autoregressive Integrated Moving Average, Single Input and Multi Input Transfer Function, 2017 15. Combining Spatial Information and Line Features in an Adaptive Classifier for Trabecular Bone Segmentation, 2017 16. Co-occurrence Techniques and Dictionary-Based Methods for Indonesian Thesaurus Construction, 2017 17. Computer-assisted System for Osteoporosis Assessment using Mandibular Cortical Width Measurements on Dental Panoramic Radiographs, 2017 18. Feature Extraction using Wavelet Transform Statistical Moments for Iris Recognition, 2016 19. Improvement of Low-Quality Microscopic Images of Thick Blood Smears of Malaria Patients using Contrast and Edge Correction, 2016 20. Phrase Suffix Tree Efficiency with Single Pass Clustering for Indonesian Web Document Grouping, 2016 21. Measurement of Cortical Bone Thickness in Dental Panoramic Images based on Polynomial Curve, 2016 22. Tooth Segmentation in Dental Panoramic Radiography using Decimation-free Directional Filter Bank Thresholding and Multistage Adaptive Thresholding, 2015 23. Classification of Tuna using Decision Tree Algorithms and Image Processing Methods, 2015 24. Image Thresholding based on Obscurity Index and Fuzzy Similarity Measure, 2015 25. Non-Linear Spatial-Temporal Input Selection for Rainfall Forecasting Using Repetitive Neural Networks, 2018 26. Feature Extraction based on Shape Descriptors and Copy Points for Tuna Image Classification, 2016 27. Arabic Document Ranking using Latent Semantic Indexing, 2015 28. Optimization of Weighting on Query Expansion with Term Relatedness to Query-Entropy based (TRQE), 2015
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. Multitask learning with general vector space for cross-lingual semantic relation detection, 2020 2. Tweet Classification using Deep Learning Architecture for Concert Event Detection, 2020 3. Automatic Segmentation of Dental Cone Beam Computed Tomography Image Based on Level Set Method Using Morphology Operators and Polynomial Fitting, 2020 4. Separation of Overlapping Object Segmentation using Level Set with Automatic Initialization on Dental Panoramic Radiograph, 2020 5. Enhancement of Low-Quality Blood Smear Image using Contrast and Edge Corrections, 2020 6. Semantic Relation Detection based on Multi-task Learning and Cross-Lingual-View Embedding, 2020 7. Multi-projection Deep Learning Network for Segmentation of 3D Medical Images, 2019 8. A Robust Segmentation for Malaria Parasite Detection of Thick Blood Smear Microscopic Images, 2019

9. Automatic Segmentation of Mandibular Cortical Bone on Cone-Beam CT Images Based on Histogram Thresholding and Polynomial Fitting, 2019
10. Deteksi Bot Spammer Twitter Berbasis Time Interval Entropy dan Global Vectors for Word Representations Tweets Hashtag, 2019
11. Segmenting Tooth Components in Dental X-Ray Images using Gaussian Kernel-Based Conditional Spatial Fuzzy C-Means Clustering Algorithm, 2019
12. Correlation and Symmetrical Uncertainty-based Feature Selection for Multivariate Time Series Classification, 2019
13. Detection of Overlapping Teeth on Dental Panoramic Radiograph, 2019
14. Automatic image slice marking propagation on segmentation of dental CBCT, 2019
15. Query Expansion Based on Wikipedia Word Embedding and BabelNet Method for Searching Arabic Documents, 2019
16. Query Expansion menggunakan Word Embedding dan Pseudo Relevance Feedback, 2019
17. Performance Analysis of Specification Computer and Mobile with Implementation Tawaf Virtual Reality using A* Algorithm and RVO System, 2019
18. Iterated Region for Interactive Image Segmentation on Dental Panoramic Radiograph, 2019
19. Autonomy Stemmer Algorithm for Legal and Illegal Affix Detection use Finite-State Automata Method, 2019
20. Ambiguitas Machine Translation pada Cross Language Chatbot Bea Cukai, 2019
21. Incorporating index of fuzziness and adaptive thresholding for image segmentation, 2018
22. Segmentation of Malaria Parasite Candidate from Thickblood Smear Microscopic Images using Watershed and Adaptive Thresholding, 2018
23. Sentence Extraction based on Sentence Distribution and Part of Speech Tagging for Multi-document Summarization, 2018
24. Automatic Determination of Seeds for Random Walker by Seeded Watershed Transform for Tuna Image Segmentation, 2018
25. A Flexible Sub-Block in Region based Image Retrieval based on Transition Region, 2018
26. Inter and Intra Cluster on Self-Adaptive Differential Evolution for Multi-Document Summarization, 2018
27. Image Thresholding based on Hierarchical Clustering Analysis and Percentile Method for Tuna Image Segmentation, 2018
28. Indonesian News Classification using Naive Bayes and Two-Phase Feature Selection Model, 2017
29. Arabic Book Retrieval using Class and Book Index-Based Term Weighting, 2017
30. Region Merging Strategy using Statistical Analysis for Interactive Image Segmentation on Dental Panoramic Radiographs, 2017
31. Fuzzy Region Merging using Fuzzy Similarity Measurement on Image Segmentation, 2017
32. Least Squares Support Vector Machines Parameter Optimization based on Improved Ant Colony Algorithm for Hepatitis Diagnosis, 2017
33. RBF Kernel Optimization Method with Particle Swarm Optimization on SVM using the Analysis of Input Datas Movement, 2017
34. Trabecular Bone Segmentation based on Segment Profile

	Characteristics Using Extreme Learning Machine on Dental Panoramic Radiographs, 2017
	35. Term Weighting Based on Positive Impact Factor Query for Arabic Fiqh Document Ranking, 2017
	36. Analysis of Adaptif Local Region Implementation on Local Thresholding Method, 2017
	37. Improving Multi-document Summary Method based on Sentence Distribution, 2016
	38. Extracted Pixels Similarity Features (EPSF) using Interactive Image Segmentation Techniques, 2016
	39. Web News Documents Clustering in Indonesian Language Using Singular Value Decomposition-principal Component Analysis (Svdpca) and Ant Algorithms, 2016
	40. Region Based Image Retrieval Using Ratio of Proportional Overlapping Object, 2016
	41. The Development of Osteoporosis Detective Analysis Method in Trabecular Condylus of Menopause Women using Panoramic Radiograph, 2016
	42. Indonesian News Classification using Naive Bayes and Two-Phase Feature Selection Model, 2016
	43. Query Region Determination based on Region Importance Index and Relative Position for Region-based Image Retrieval, 2016
	44. Coverage, Diversity, and Coherence Optimization for Multi-Document Summarization, 2015
	45. Preference Based Term Weighting for Arabic Fiqh Document Ranking, 2015
	46. A Novel Strategy of Differential Evolution Algorithms Crossover Operator Based on Gray level Clusters Similarity for Automatic Multilevel Image Thresholding, 2015

Activities in specialist bodies over the last 5 years	2015
	  - Odd Semester: Topics in Data Mining, Seminar 1, Information Retrieval Systems, Topics in Information Retrieval Systems, Topics in Data Mining.
	
	2016
	  - Odd Semester: Seminar 1, Topics in Information Retrieval Systems, Information Retrieval Systems.
	  - Events: Data Mining, Topics in Computer Vision, Seminar 2, Dissertation Writing.
	
	2017
	  - Odd Semester: Topics in Information Retrieval Systems, Information Retrieval Systems.
	  - Even Semester: Social Media Analysis, Topics in Computer Vision.
	
	2018
	  - Odd Semester: Topics in Information Retrieval Systems, Seminar 1, Information Retrieval Systems.
	  - Even Semester: Topics in Computer Vision, Social Network Analysis, Seminar 2.
	
	2019
	  - Odd Semester: Professional Communication, Information Retrieval Systems, Topics in Information Retrieval Systems.

	- Even Semester: Seminar 2, Dissertation Writing, Research Methodology, Data Mining. 2020 - Odd Semester: Professional Communication, Information Retrieval Systems, Topics in Information Retrieval Systems, Seminar 1, Topics in Data Mining.

Name	**Dr. Eng. Chastine Fatichah, S.Kom., M.Kom.**
Position	Associate Professor, Head of Department
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, 2000. - Master's degree (Computer Science), Universitas Indonesia 2008. - Doctoral degree, (Computational Intelligence & Systems Science), Tokyo Institute of Technology, 2012.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. 2020 – 2021: Principal Investigator, Research project: Fast Deep Learning Segmentation of Brain Tumour 3D MRI Image and Prediction of Patient Survival 2. 2020 – 2021: Principal Investigator, Research project: Method for Gender Identification and Grouping of Human Ages from Ramus Mandibula Panoramic Radiography 3. 2019 – 2021: Co-Principal Investigator, Research project: Development of Accurate 3D Additive Manufacturing Generator Based on Medical Imagery for Head Skull Surgery Planning and Facial Bone Reconstruction 4. 2020: Principal Investigator, Development of Method for Automated Assessment of Indonesian Essay Answering with Deep Neural Network Transfer Learning Approach 5. 2020: Co-Principal Investigator, Research project: Vehicle Number Plates Recognition based on CCTV Video Data for Development of Smart Gate Parking System 6. 2018–2020: Principal Investigator, Research project: Event detection in urban city by crowdsourcing based spatial and temporal information using deep learning method 7. 2018–2020: Co-Principal Investigator, Research project: Development of Electronic-Nose for Beef Quality Detection 8. 2017–2019: Co-Principal Investigator, Research project: Information retrieval system for Arabic documents 9. 2017–2018: Co-Principal Investigator, Research project: Face recognition based on Video data for surveillance system 10. 2014 – 2016: Principal Investigator, Research project: CellMorph: Computer Aided for Morphological Cell Analysis on Microscopic Image for Cell Cancer Detection 11. 2014–2016: Principal Investigator, Research project: Multi Document Summarization of Indonesian News Based on Trending Issue Data Twitter with Trivial Event Detection as Keywords 12. 2014–2015: Consultant, International Partnership Research Project: An Exigent Redesign of Electronic Biomedical Management Kits for Enhanced Reliability in managing intractable diseases (Asthma, Diabetes, and Epilepsy) in the KSA.
Industry collaborations over the last 5 years	None

Patents and proprietary rights	1. Incident Report: Application of Incident Detection in Urban through Crowdsourcing Social Media Data, EC00201991701, 20 December 2019
	2. Consumer Preference Extractor (CP-Extractor V.1.1), EC00201978665, 29 October 2019
	3. BCE Application for Finding Initial Basic Feasible Solution in Transportation Problem, EC00202056261, 4 December 2020
	4. Computer Program "ItsBehavex-Collab ", EC00202120797, 21 April 2021
Important publications over the last 5 years	1. Indra Kharisma Raharjana, Daniel Siahaan, **Chastine Fatichah**, User Stories and Natural Language Processing: A Systematic Literature Review, IEEE Access 9, 53811-53826, 2021.
	2. Eko Prasetyo, Nanik Suciati and **Chastine Fatichah**, Multi-Level Residual Network VGGNet for Fish Species Classification, Journal of King Saud University-Computer and Information Sciences, 2021.
	3. Ana Alimatus Zaqiah, Diana Purwitasari, **Chastine Fatichah**, "Text Generation with Content and Structure-Based Preprocessing in Imbalanced Data of Product Review," International Journal of Intelligent Engineering and Systems, Vol.14, No.1, pp. 516-527, 2021.
	4. **Chastine Fatichah**, Wildan F. Lazuardi, Dini A. Navastara, Nanik Suciati, Abdul Munif, "A Content Filtering from Spam Posts on Social Media using Weighted Multimodal Approach," Journal of Computer Science, 17(1), pp. 55–66, 2021.
	5. Yudhi Purwananto, **Chastine Fatichah**, Waskitho Wibisono, Ary M. Shiddiqi, Bagus J. Santoso, Nurlita D. Fatmawati, "Collision Avoidance Modelling in Airline Traffic Based on the Change of Airplane Movements and Dynamic Clouds," Journal of Computer Science, 17(1), pp. 33–43, 2021.
	6. Aziz Fajar, Riyanarto Sarno, **Chastine Fatichah**, "Reconstructing and resizing 3D images from DICOM files," Journal of King Saud University-Computer and Information Sciences, 2020.
	7. Avin Maulana, **Chastine Fatichah,** Nanik Suciati, "Facial Inpainting Using Generative Adversarial Network with Feature Reconstruction and Landmark Loss to Preserve Spatial Consistency in Unaligned Face Images," International Journal of Intelligent Engineering and Systems, Vol. 13, No. 6, pp. 218-228, 2020.
	8. Ahmad Afiif Naufal, **Chastine Fatichah,** Nanik Suciati, "Preprocessed Mask RCNN for Parking Space Detection in Smart Parking Systems," International Journal of Intelligent Engineering and Systems, Vol. 13, No. 6, pp. 255-265, 2020.
	9. Rizka Sholikah, Agus Zainal Arifin, **Chastine Fatichah**, Ayu Purwarianti, "Multitask Learning with General Vector Space for Cross-Lingual Semantic Relation Detection," Journal of King Saud University-Computer and Information Sciences, 2020.
	10. Riyanarto Sarno, Shoffi Izza Sabilla, Dedy Rahman Wijaya, Dwi Sunaryono, **Chastine Fatichah**, "Electronic nose dataset for pork adulteration in beef," Data in Brief 32, 106139, Elsevier, 2020
	11. Bilqis Amaliah, **Chastine Fatichah**, Erma Suryani, "A new heuristic method of finding the initial basic feasible solution to solve the transportation problem," Journal of King Saud University-Computer and Information Sciences, 2020
	12. Yohanes Setiawan, **Chastine Fatichah**, Riyanarto Sarno, "A New Local Gaussian Variational Level Set for Globus Pallidus Segmentation," International Journal of Intelligent Engineering and Systems, Vol. 13, No. 5, pp. 317-326, 2020.
	13. Khairiyah Nur Aisyah, **Chastine Fatichah**, Riyanarto Sarno,

"Multilevel thresholding and Morphological Relationship Approach for Automatic Detection of Anterior and Posterior Commissure in Mid-sagittal Brain MRI," International Journal of Intelligent Engineering and Systems, Vol. 13, No. 5, pp. 368-378, 2020.

14. Rizka Wakhidatus Sholikah, Agus Zainal Arifin, **Chastine Fatichah**, Ayu Purwarianti, "Semantic Relation Detection based on Multi-task Learning and Cross-Lingual-View Embedding," International Journal of Intelligent Engineering and Systems, Vo. 13, No. 3, 2020.

15. Agung Wiratmo, **Chastine Fatichah**, "Indonesian Short Essay Scoring Using Transfer Learning Dependency Tree LSTM," International Journal of Intelligent Engineering and Systems, Vo. 13, No. 2, 2020.

16. Fika Hastarita Rahman, Riyanarto Sarno, **Chastine Fatichah**, "Hybrid Approach of Structural Lyric and Audio Segments for Detecting Song Emotion," International Journal of Intelligent Engineering and Systems, Vo. 13, No. 1, 2020.

17. Bagus Setya Rintyarna, Riyanarto Sarno, **Chastine Fatichah**, "Enhancing the performance of sentiment analysis task on product reviews by handling both local and global context," International Journal of Information and Decision Sciences, Inderscience, Vol. 12, No. 1, 2020.

18. Bagus Setya Rintyarna, Riyanarto Sarno, **Chastine Fatichah**, "Evaluating the performance of sentence level features and domain sensitive features of product reviews on supervised sentiment analysis tasks," Journal of Big Data, Springer, Vo. 6, No. 1, 2019.

19. Tora Fahrudin, Joko Lianto Buliali, **Chastine Fatichah**, "Ina-BWR: Indonesian bigram word rule for multi-label student complaints," Egyptian Informatics Journal, Elsevier, Vol. 20, No. 3, pp. 151-161, November 2019.

20. Ahmad Saikhu, Agus Zainal Arifin, **Chastine Fatichah**, "Correlation and Symmetrical Uncertainty-Based Feature Selection for Multivariate Time Series Classification," International Journal of Intelligent Engineering and Systems, Vo. 12, No. 3, June 2019.

21. Tora Fahrudin, Joko Lianto Buliali, *Chastine Fatichah*, "Enhancing the Performance of Smote Algorithm by Using Attribute Weighting Scheme and New Selective Sampling Method for Imbalanced Data Set," International Journal of Innovative Computing Information and Control, Vol. 15, No. 2, pp. 423-444, 2019.

22. Bilqis Amaliah, **Chastine Fatichah**, Erma Suryani, "Total opportunity cost matrix – Minimal total: A new approach to determine initial basic feasible solution of a transportation problem," Egyptian Informatics Journal, Elsevier, Vol. 20, No.2, pp. 131-141, 2019.

23. Bagus Setya Rintyarna, Riyanarto Sarno, **Chastine Fatichah**, "Enhancing the performance of sentiment analysis task on product reviews by handling both local and global context," International Journal of Information and Decision Sciences, Inderscience, 2019.

24. Bagus Setya Rintyarna, Riyanarto Sarno, **Chastine Fatichah**, Semantic Features for Optimizing Supervised Approach of Sentiment Analysis on Product Reviews, Computers 8 (3), MDPI, 2019.

25. Fika Hastarita Rahman, Riyanarto Sarno, **Chastine Fatichah**, "Music Emotion Classification based on Lyrics-Audio using Corpus Based Emotion," International Journal of Electrical and Computer Engineering, Vol. 8, No. 3, June, 2018.

26. Nenden Siti Fatonah, Handyani Tjandrasa, **Chastine Fatichah**, "Automatic Leukemia Cell Counting using Iterative Distance Transform for Convex Sets," *International Journal of Electrical and Computer Engineering, Vol. 8, No. 3, June, 2018.*

27. Abdullah M. Iliyasu, *Chastine Fatichah*, "A Quantum Hybrid PSO Combined with Fuzzy k-NN Approach to Feature Selection and Cell Classification in Cervical Cancer Detection", Sensors, 17, 2935, 2017.
28. Joko Lianto B, **Chastine Fatichah** "Vehicle Detection on Images from Satellite using Oriented Fast and Rotated Brief", Journal of Engineering and Applied Sciences, Vol. 12, No. 17, pp. 4500-4503, 2017.
29. Hardika Khusnuliawati, **Chastine Fatichah,** Rully Soelaiman, "Multi-feature Fusion Using SIFT and LEBP for Finger Vein Recognition", Telecommunication Computing Electronics and Control, Vol. 15, No. 1, 2017.
30. Tora Fahrudin, Joko Lianto Buliali, **Chastine Fatichah, "**RANDSHUFF: An Algorithm to Handle Imbalance Class for Qualitative Data," International Review on Computers and Software (IRECOS), Vol. 11, No. 12, pp. 1093-1104, 2016.
31. Abdullah M. Iliyasu, **Chastine Fatichah**, Khaled A. Abuhasel, "Evidence Accumulation Clustering with Possibilitic Fuzzy C-Means base clustering approach to disease diagnosis," Automatika Journal for Control, Measurement, Electronics, Computing and Communications, Vol. 57, No. 3, pp. 822-835, 2016.
32. **Chastine Fatichah**, Joko Lianto, Ahmad Saikhu, "A Hybrid Fuzzy Morphology and Connected Components Labeling Methods for Vehicle Detection and Counting System," International Journal on Smart Sensing and Intelligent Systems, Vol. 9, No. 2, pp. 765-779, June 2016.
33. Abdullah M. Iliyasu, **Chastine Fatichah**, A Bi-Stage Technique for Segmenting Cervical Smear Images Using Possibilistic Fuzzy C-Means and Mathematical Morphology, Journal of Medical Imaging and Health Informatics, Vol. 6, No. 7, pp. 1663-1669, 2016.
34. **Chastine Fatichah**, Martin L. Tangel, Fei Yan, Janet P Betancourt, M. Rahmat Widyanto, Fangyan Dong, Kaoru Hirota, "Fuzzy feature representation for white blood cell differential counting in acute leukemia diagnosis," International Journal of Control, Automation and Systems, Springer Vol. 13, No. 3, pp.742-752, 2015.
35. Khaled A. Abuhasel, Abdullah M. Iliyasu, **Chastine Fatichah**, "A combined AdaBoost and NEWFM technique for medical data classification", Information Science and Applications, Lecture Notes in Electrical Engineering, Springer, Vol. 339, pp. 801-809, 2015.
36. Khaled A. Abuhasel, Abdullah M. Iliyasu, **Chastine Fatichah**, "A Hybrid Particle Swarm Optimization and Neural Network with Fuzzy Membership Function Technique for Epileptic Seizure Classification," Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII), Vol. 19, No. 3, pp. 447-455, 2015.

Activities in specialist bodies over the last 5 years	**TAUGHT COURSES:** 2015 - Odd Semester: Computational Intelligence 2016 - Odd Semester: Computational Intelligence - Even Semester: Artificial Intelligence, Analysis Social Media, Advanced Topics in Computer Vision. 2017 - Odd Semester: Advanced Topics in Data Mining, Seminar 1, Biomedical Computing, Computational Intelligence. - Even Semester: Seminar 2, Artificial Intelligence, Data Mining

	2018
	- Odd Semester: Advanced Topics in Data Mining, Computational Intelligence, Biomedical Computing, Computational Intelligence
	- Even Semester: Deep Learning, Data Mining, Seminar 2, Artificial Intelligence
	2019
	- Odd Semester: Advanced Topics in Data Mining, Seminar 1, Biomedical Computing
	- Even Semester: Seminar 2, Deep Learning, Computational Intelligence, Artificial Intelligence
	2020
	- Odd Semester: Computational Intelligence, Artificial Intelligence
	- Even Semester: Artificial Intelligence, Deep Learning
	REVIEWER OF INTERNATIONAL JOURNALS:
	- IEEE Access, 2019-2021
	- Journal of Biomedical Signal Processing and Control, Elsevier, 2016-2021
	- Journal of King Saud University - Computer and Information Sciences, Elsevier, 2019-2021
	- IEEE Transactions on Neural Networks and Learning Systems, 2019-2020
	- IEEE Transactions on Industrial Informatics, 2018-2020
	- MethodsX, Elsevier, 2020
	- Computers in Biology and Medicine, Elsevier, 2017-2019
	- Journal of E-Biomedicine, Elsevier, 2016
	- Journal of Applied Computing and Informatics, Elsevier, 2015
	- International Journal of Advancements in Computing Technology, Korea, 2015
	- Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII), Fujipress, Japan, 2014-2015

Name	**Dr. Eng. Nanik Suciati, S.Kom., M.Kom.**
Position	Associate Professor
Academic career	- Bachelor's degree (Computer Engineering), Institut Teknologi Sepuluh Nopember, 1994.
	- Master's degree (Computer Science), Universitas Indonesia, 1998.
	- Doctoral degree (Information Engineering), Hiroshima University, 2010.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. 2021 – 2021: Principal Investigator, Research project: Development of an Integrated Application for Face Recognition, Temperature Measurement and Mask Wear Detection Using Deep Learning
	2. 2021 – 2022: Principal Investigator, Research project: Preservation and Retrieval of Balinese Carvings Based on Relation of Motifs and Deep Learning
	3. 2021 – 2022: Principal Investigator, Research project: Balinese Script Translator in Ancient Lontar Manuscripts Based on Character Pair Rules and Deep Learning
	4. 2021 – 2022: Principal Investigator, Research project: Deep Learning for Detecting Fish's Species and Freshness

	5. 2020 – 2021: Principal Investigator, Research project: Reconstruction of Three-Dimensional Objects from Two-Dimensional Image Data Based-on Learning
	6. 2020 – 2020: Principal Investigator, Research project: Measurement of student enthusiasm in lectures using the results of facial expression recognition in a video-based lecture monitoring system
	7. 2019 – 2019: Principal Investigator, Research project: Development of Character Recognition System for Handwritten Document Image
	8. 2019 – 2019: Principal Investigator, Research project: Traditional Fabric Image Recognition Through Smartphone Cameras Using Features Invariant to Rotation, Scale, and Exposure
	9. 2019 – 2019: Principal Investigator, Research project: Development of 3D Learning Tools for Blind Students at SMPLB YPAB Surabaya
	10. 2018 – 2018: Principal Investigator, Research project: Development of Photo Data Conversion Applications to 3D Sculptures for Object Recognition for Blind People
	11. 2018 – 2018: Principal Investigator, Research project: Face Recognition on Video Data for Room Surveillance
	12. 2017 – 2017: Principal Investigator, Research project: Deep Learning for Retrieval of Large Amounts of Image Data
	13. 2016 – 2016: Principal Investigator, Research project: Exploration of Texture Features of Iris Image Using Wavelet Transform for Personal Identification
	14. 2015 – 2016: Principal Investigator, Research project: Application Development for Classification of Indonesian Traditional Fabric Motifs
Industry collaborations over the last 5 years	None
Patents and proprietary rights	1. Incident Report: Application of Incident Detection in Urban through Crowdsourcing Social Media Data, EC00201991701, 20 December 2019
	2. Hybrid Program ANFIS-PSOGA, EC00202134367, 22 Juli 2021
Important publications over the last 5 years	1. Anny Yuniarti, Agus Zainal Arifin, Nanik Suciati, A 3D template-based point generation network for 3D reconstruction from single images, Applied Soft Computing, vol. 111, pp. 1-9, 2021.
	2. Eko Prasetyo, Nanik Suciati, Chastine Fatichah, Multi-Level Residual Network VGGNet for Fish Species Classification, Journal of King Saud University-Computer and Information Sciences, 2021.
	3. Ni Putu Sutramiani, Nanik Suciati, Daniel Oranova Siahaan, MAT-AGCA: Multi Augmentation Technique on small dataset for Balinese character recognition using Convolutional Neural Network, ICT Express, 2021.
	4. Chastine Fatichah, Wildan F. Lazuardi, Dini A. Navastara, Nanik Suciati, Abdul Munif, "A Content Filtering from Spam Posts on Social Media using Weighted Multimodal Approach," Journal of Computer Science, 17(1), pp. 55–66, 2021.
	5. Fajar Astuti Hermawati, Handayani Tjandrasa, Nanik Suciati, Phase-based thresholding schemes for segmentation of fetal thigh cross-sectional region in ultrasound images, Journal of King Saud University-Computer and Information Sciences, 2021.
	6. Novrindah Alvi Hasanah, Nanik Suciati, Diana Purwitasari, Identifying Degree-of-Concern on COVID-19 topics with text classification of Twitters, Register, Vol. 7, No. 1, pp. 50-62, 2021.
	7. Avin Maulana, Chastine Fatichah, Nanik Suciati, "Facial Inpainting Using Generative Adversarial Network with Feature Reconstruction and Landmark Loss to Preserve Spatial Consistency in Unaligned Face

Images," International Journal of Intelligent Engineering and Systems, Vol. 13, No. 6, pp. 218-228, 2020.

8. Ahmad Afiif Naufal, Chastine Fatichah, Nanik Suciati, "Preprocessed Mask RCNN for Parking Space Detection in Smart Parking Systems," International Journal of Intelligent Engineering and Systems, Vol. 13, No. 6, pp. 255-265, 2020.

9. Ricky Eka Putra, Handayani Tjandrasa, Nanik Suciati, Severity classification of non-proliferative diabetic retinopathy using convolutional support vector machine, International Journal of Intelligent Engineering and Systems, Vol. 13, No. 4, pp. 156-170, 2020.

10. Nuning Septiana, Nanik Suciati, Combination of fast hybrid classification and k value optimization in k-nn for video face recognition, Register, Vol. 1, No. 6, pp. 65-73, 2020.

11. Ahmad Wahyu Rosyadi, Nanik Suciati, Image segmentation using transition region and k-means clustering, IAENG International Journal of Computer Science, Vol. 47, No. 1, pp. 47-55, 2020

12. I Wayan Agus Surya Darma, Nanik Suciati, Daniel Siahaan, Neural Style Transfer and Geometric Transformations for Data Augmentation on Balinese Carving Recognition using MobileNet, International Journal of Intelligent Engineering and Systems, Vol. 13, No. 6, pp. 349-363, 2020.

13. Eko Prasetyo, Raden Dimas Adityo, Nanik Suciati, Chastine Fatichah, Partial Centroid Contour Distance (PCCD) in Mango Leaf Classification, International Journal on Advanced Science, Engineering and Information Technology, Vol. 10, No. 5, pp. 2020.

14. W Nurul Khotimah, Tiara Anggita, Nanik Suciati, "Indonesian sign language recognition using kinect and dynamic time warping, Indonesian Journal of Electrical Engineering and Computer Science, Vo. 15, No. 1, pp. 495-503, 2019.

15. Rarasmaya Indraswari, Takio Kurita, Agus Zainal Arifin, Nanik Suciati, Eha Renwi Astuti, "Multi-projection deep learning network for segmentation of 3D medical images," Pattern Recognition Letters, Vo. 125, pp.791-797, 2019.

16. Rarasmaya Indraswari, Agus Zainal Arifin, Nanik Suciati, Eha Renwi Astuti, Takio Kurita, Automatic segmentation of mandibular cortical bone on cone-beam CT images based on histogram thresholding and polynomial fitting, International Journal of Intelligent Engineering and Systems, Vol. 12, No. 4, 2019.

17. Eko Prasetyo, R Dimas Adityo, Nanik Suciati, Chastine Fatichah, Multi-class K-support vector nearest neighbor for mango leaf classification, Telkomnika, Vol. 16, No. 4, 2019.

18. Fajar Astuti Hermawati, Handayani Tjandrasa, Nanik Suciati, Hybrid Speckle Noise Reduction Method for Abdominal Circumference Segmentation of Fetal Ultrasound Images, International Journal of Electrical & Computer Engineering, Vol. 8, No. 3, 2018.

19. Agus Eko Minarno, Ayu Septya Maulani, Arrie Kurniawardhani, Fitri Bimantoro, Nanik Suciati, Comparison of Methods for Batik Classification using Multi Texton Histogram, Telkomnika, Vol. 16, No. 63, 2018.

20. Fajar Astuti Hermawati, Handayani Tjandrasa, Nanik Suciati, Combination of aggregated channel features (ACF) detector and faster R-CNN to improve object detection performance in fetal ultrasound images, International Journal of Intelligent Engineering and Systems, Vo. 11, No. 6, June 2018.

Activities in specialist bodies over the last 5 years	**TEACHING** 2015 - Odd Semester: Topic in Human Computer Interaction, Computer Vision, Computer Graphics - Even Semester: Topic in Computer Graphics, Artificial Intelligence. 2016 - Odd Semester: Computer Vision, Computer Graphics, Computational Intelligence, Topic in Human Computer Interaction. - Even Semester: Topic in Computer Graphics, Topic in Digital Image Processing, 3D Modelling and Computer Animation, Artificial Intelligence. 2017 - Odd Semester: Computer Vision, Computer Graphics, Computational Intelligence, Topic in Human Computer Interaction. - Even Semester: Topic in Computer Graphics, 3D Modelling and Computer Animation, Artificial Intelligence. 2018 - Odd Semester: Computer Vision, Computer Graphics, Computational Intelligence. - Even Semester: Topic in Computer Graphics, 3D Modelling and Computer Animation, Topic in Computer Vision, Artificial Intelligence. 2019 - Odd Semester: Computer Vision, Seminar 1, Computational Intelligence. - Even Semester: Seminar 2, 3D Modelling and Computer Animation, Topic in Computer Vision, Artificial Intelligence. 2020 - Odd Semester: Computer Vision, Computational Intelligence, Computer Vision, Artificial Intelligence. - Even Semester: Computational Intelligence, Topic in Computer Vision, Artificial Intelligence, Seminar 2. **REVIEWER OF INTERNATIONAL JOURNALS:** - Journal of King Saud University - Computer and Information Sciences, Elsevier, 2020-2021 - Computer and Electronics in Agriculture, 2020

Area of Expertise: Network-Based Computing

Name	**Prof. Tohari Ahmad S.Kom., MIT, Ph.D.**
Position	Professor
Academic career	- Bachelor's degree, Institut Teknologi Sepuluh Nopember, Indonesia, 2000. - Master's degree, Monash University, Australia, 2007. - Doctoral Degree, Royal Melbourne Institute of Technology, Australia, 2012
Employment	Lecturer, Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Reversible Data Hiding with Segmented Secrets and Smoothed Samples in Various Audio Genres, 2020 2. Evaluating the Performance of Fibbing Architecture in the Hybrid Software Defined Network, 2020 3. A New Approach of Botnet Activity Detection Model based on Time Periodic Analysis, 2020 4. Anomaly-based Intrusion Detection Approach for IoT Networks Using Machine Learning, 2020 5. Reversible Data Hiding Scheme based on General Difference Expansion Cluster, 2020 6. Path Selection in Software Defined Network Data Plane using Least Loaded Path, 2020 7. Cancellable Fingerprint Generation by Projection-based Transformation and Quantization, 2020 8. Reducing Computational Cost of Pair-Polar Coordinate-based Cancelable Fingerprint Template Matching, 2020 9. Feature Importance Ranking for Increasing Performance of Intrusion Detection System, 2020 10. Development of Load Balancing Mechanisms in SDN Data Plane Fat Tree using Modified Dijkstra's Algorithm, 2020 11. Improving the Capacity of Data Hiding by Modifying the Interpolation of Audio Samples, 2020 12. Improving the Performance of Histogram-based Data Hiding Method in the Video Environment, 2020 13. Hiding Data in Audio Files: A Smoothing-Based Approach to Improve the Quality of the Stego Audio, 2020 14. Improving Intrusion Detection System by Estimating Parameters of Random Forest in Boruta, 2020 15. Pearson Correlation Attribute Evaluation-based Feature Selection for Intrusion Detection System, 2020 16. B-Corr Model for Bot Group Activity Detection based on Network Flows Traffic Analysis, 2020 17. A Node Density-based Approach for Energy-Efficient Data Gathering Protocol in Wireless Sensor Network Environments, 2020 18. Improving the Performance of Data Hiding by Designing Three Samples-based Smoothing in Audio, 2020 19. Analyzing the Performance of Intrusion Detection Model using Weighted One-Against-One Support Vector Machine and Feature Selection for Imbalanced Classes, 2020 20. Improving the Capability of Reduced Difference Expansion based Digital Image Data Hiding, 2019 21. An Energy-Aware Computation Offloading Framework for a Mobile Crowdsensing Cluster using DMIPS Approach, 2019 22. Protecting Secret Data using RDE and Fuzzy Logic to Specify the Embedding Level, 2019

	23. Histogram-based Multilayer Reversible Data Hiding Method for Securing Secret Data, 2019
	24. Reversible Data Hiding Method by Extending Reduced Difference Expansion, 2019
	25. Multiple Embedding Process for Increasing the Capacity of the Embedded Secret Message, 2019
	26. A New Data Hiding Method for Protecting Bigger Secret Data, 2019
	27. Hiding Secret Data in Grayscale Images by Improving the Method of Reduced Difference Expansion, 2019
	28. A Grid-Based Clustering with Dynamic Forwarding Path for Energy-Efficient Data Gathering in Wireless Sensor Network Environments, 2019
	29. Data Preprocessing and Feature Selection for Machine Learning Intrusion Detection Systems, 2019
	30. Assessing Centroid-Based Classification Models for Intrusion Detection System Using Composite Indicators, 2019
	31. Developing Audio Data Hiding Scheme using Random Sample Bits with Logical Operators, 2019
	32. Cluster Analysis-Based Approach Features Selection on Machine Learning for Detecting Intrusion, 2019
	33. Increasing Accuracy and Completeness of Intrusion Detection Model using Fusion of Normalization, Feature Selection Method and Support Vector Machine, 2019
	34. Reversible Data Hiding in Audio Based on Discrete Cosine Transform and Location Maps, 2019
	35. Analyzing The Effect of Block Size on the Quality of the Stego Audio, 2019
	36. An Improved Secret Message Capacity using Modulus Function Based Color Image Data Hiding, 2018
	37. Audio Data Hiding using Octal Modulus Function based Unsigned Integer Sample Values, 2018
	38. Continuous Top-k Dominating Query of Incomplete Data over Data Streams, 2018
	39. Data Refinement Approach for Answering Why-Not Problem Over K-Most Promising Product (K-MPP) Queries, 2018
	40. Analyzing the Performance of Machine Learning Algorithms in Anomaly Network Intrusion Detection Systems, 2018
	41. Position-based Scheme for Multi-Hop Routing Protocol in Cluster-Based Wireless Sensor Networks, 2018
	42. Enhancement Of Pixel Value Ordering based Data Hiding by Row Block Partition, 2018
	43. SCFT: Sector-based Cancelable Fingerprint Template, 2017
	44. A Mobile Crowdsensing Framework for Integrating Smartphone and IoT Devices to Cloud Computing Services, 2017
	45. Enhanced Pixel Value Modification based on Modulus Function for RGB Image Steganography, 2017
	46. Edit Distance Weighting Modification using Phonetic and Typographic Letter Grouping over Homomorphic Encrypted Data, 2017
	47. A Data Hiding Approach using Enhanced-RDE in Grayscale Images, 2017
	48. Reversible Audio Steganography using Reduced Difference Expansion Method and Sample Value Modification, 2017
	49. Increasing Performance of IDS by Selecting and Transforming Features using Quality Threshold Distance to Detect Intrusion in TCP/IP network, 2016
	50. Overlapped Scheme for Neighboring Similarity Method in Video-

	Based Data Hiding, 2016 51. Hiding Secret Data by using Modulo Function in Quad Difference Expansion, 2016 52. Adaptive Image Compression USING Adaptive Huffman and LZW, 2016 53. Reversible Video Steganografi using Improved Reduced Difference Expansion and Gray Level Co-occurrence Matrix Analysis, 2016 54. Difference Expansion-Based Data Hiding Method by Changing Expansion Media, 2016 55. Development of File Security Methods Using Graph Coloring, 2016 56. An Improved Neighbouring Similarity Method for Video Steganography, 2016 57. Enhancing DE-based Data Hiding Method by Controlling the Expansion, 2016
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. High Quality PVM Based Reversible Data Hiding Method for Digital Images, 2019 2. Detecting Malicious Activities in a Computer Cluster for Developing Dynamic Honeypot, 2018 3. Enhancing the Capability of Data Hiding Method based on Reduced Difference Expansion, 2018 4. Adaptive Pixel Value Grouping for Protecting Secret Data in Public Computer Networks, 2018 5. Enhancing the Performance of Audio Data Hiding Method by Smoothing Interpolated Samples, 2018 6. Improving Prediction Error Expansion based Data Hiding Method for Securing Confidential Data, 2018 7. Securing Secret Data by Enhancing the Controlling Expansion Method, 2018 8. Protecting Data by Improving Quality of Stego Image based on Enhanced Reduced Difference Expansion, 2018 9. Information Hiding Scheme for Digital Images using Difference Expansion and Modulus Function, 2018 10. Medical Record Protection with Improved Grade Data Hiding Method on Audio Files, 2017 11. L-SCANN: Logarithmic Subcentroid and Nearest Neighbor, 2016 12. Audio Data Hiding Based on Sample Value Modification using Modulus Function, 2016 13. Increasing Accuracy of Process-based Fraud Detection using a Behavior Model, 2016
Activities in specialist bodies over the last 5 years	2016 - Odd Semester: Special Topics in Net Centric Computing, Digital System, Net Centric Computing, Advance topics in Multimedia Network, Seminar 2 - Even Semester: Computer Network, Advance Topics in Network Security, Digital System, Information and Network Security 2017 - Odd Semester: Special Topics in Net Centric Computing, Information System and Technology, Digital System, Seminar 1, Advance topics in Multimedia Network - Even Semester: Advance Topics in Network Security, Seminar 2, Information and Network Security, Computer Network

	2018
	- Odd Semester: Computer Network, Undergraduate Pre-Thesis, Dissertation Writing, Information and Network Security, Net Centric Computing
	- Even Semester: Advance Topics in Network Security, Research Methodology, Digital System, Dissertation Writing
	2019
	- Odd Semester: Information and Network Security, Digital System, Advance Topics in Multimedia Network, Dissertation Writing
	- Even Semester: Advance Topics in Network Security, Digital System
	2020
	- Odd Semester: Computer Network, Digital System, Advance Topics in Multimedia Network, Research Dissertation I, Dissertation Writing

Name	**Ary Mazharuddin Shiddiqi, S.Kom., M.Comp.Sc., Ph.D.**
Position	Associate Professor, Secretary of Academic Affairs
Academic career	- Bachelor's degree, Institut Teknologi Sepuluh Nopember, Indonesia, 2004. - Master's degree, Monash University, Australia, 2010. - Doctoral Degree, University of Western Australia, Australia, 2019.
Employment	Lecturer, Secretary of Academic Affairs, Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Monitoring Computer Networks Using the Internet of Things based on Wemos D1 ESP6288, 2020 2. Optimization of Current Sensor Placement for Corrosion Detection in Water Pipelines, 2020 3. Micro-Climate Mapping and Modeling Based on 3D City Model to Support Land Use Structure, 2020 4. An Advanced Sensor Placement Strategy for Small Leaks Quantification Using Lean Graphs, 2020 5. Internet of Things Based User Oriented Wi-Fi Quality Analyzer, 2020 6. The Development of Blackhole Attack in AODV Routing Protocol, 2020 7. Applied Machine Learning in Load Balancing, 2020 8. GCRFP-Page Replacement for Solid State Drive Using Ghost-Cache, 2020 9. Increasing The Robustness of Classification Algorithms to Quantify Leaks Through Optimization, 2020 10. Development of Offloading Computing Mechanisms to Improve Performance and Resource Efficiency on Mobile Devices in Wireless Environments, 2019 11. An Enhanced Sensor Placement Strategy to Quantify Small Leaks in Water Distribution Networks using Weighted Lean Graphs, 2019 12. Sensor energy preservation for leak quantification using Distance-Based feature selection method, 2019 13. An Effective Sensor Placement Strategy to Quantify Multiple Small Leaks in Water Distribution Networks using Lean Graphs, 2018 14. Sensing-based leak quantification techniques in water distribution systems, 2018 15. Sensor placement strategy for locating leaks using lean graphs, 2017
Industry collaborations over the last 5 years	None

Patents and proprietary rights	None
Important publications over the last 5 years	**Books** Shiddiqi, Ary & Cardell-Oliver, Rachel & Datta, Amitava. (2018). Sensing-Based Leak Quantification Techniques in Water Distribution Systems. 10.1201/b21948-5. **International Journal Papers** 1. Shiddiqi, A.M., Cardell-Oliver, R., Datta, A. An Advanced Sensor Placement Strategy for Small Leaks Quantification Using Lean Graphs. Water 2020, 12, 3439. https://doi.org/10.3390/w12123439 **Domestic Journal Papers** 1. Junaidi, Wibowo, P., Yuniasri, D., Damayanti, P., Shiddiqi, A.M., Pratomo, B.A., "Applied Machine Learning in Load Balancing," Jurnal Ilmiah Teknologi Informasi, 2020, vol 18, no 2, pp. 76-84, doi: http://dx.doi.org/10.12962/j24068535.v18i2.a940 2. Suadi, W., Djanali, S., Wibisono, W., Anggoro, R., Shiddiqi, A.M., "Replacement for Solid State Drive Using Ghost-Cache," Jurnal Ilmiah Teknologi Informasi, 2020, vol 18, no 2, pp. 94-101, doi: http://dx.doi.org/10.12962/j24068535.v18i2.a986 3. Shiddiqi, A.M., "Increasing the Robustness of Classification Algorithms to Quantify Leaks Through Optimization," Jurnal Ilmiah Teknologi Informasi, 2020, vol 18, no 1, pp. 1-8, doi: ttp://dx.doi.org/10.12962/j24068535.v18i1.a841 **Conference Papers** 1. N. G. Razafindrobelina, R. Anggoro and A. M. Shiddiqi, "The development of a routing protocol based on Reverse-AODV by considering an energy threshold in VANET," 2021 IEEE International IOT, Electronics, and Mechatronics Conference, 2021, pp. 1-7. 2. Bantoso, B. J., A. M. Shiddiqi, Kusuma, R, "A Heuristic Load Balancing Algorithm for Cloud Computing in Heterogeneous Resource Environment", The 5th International Conference on Information Technology and Digital Applications, 13th-14th November 2020, Yogyakarta, Indonesia, Vol. 1077, no. 1, pp. 12-16, IOP Publshing. 3. A. M. Shiddiqi, R. M. Ijtihadie and M. I. I. Haq, "Internet of Things Based User Oriented Wi-Fi Quality Analyzer," 2020 International Conference on Computer Engineering, Network, and Intelligent Multimedia (CENIM), 2020, pp. 292-296. 4. R. Anggoro, W. Suadi, A. M. Shiddiqi, R. Ijtihadie, S. Lili and D. W. L. Pamungkas, "The Development of Blackhole Attack in AODV Routing Protocol," 2020 International Conference on Computer Engineering, Network, and Intelligent Multimedia, 2020, pp. 309-314.
Activities in specialist bodies over the last 5 years	2019 - Odd Semester: Computer Organization, Net Centric Computing - Even Semester: Knowledge Engineering, Web Programming, Digital Forensics, Software Design, Operating System, Computer Algorithms and Programming 2020 - Odd Semester: Computer Network, Computer Organization, Net Centric Computing

Name	**Hudan Studiawan S.Kom., M.Kom., Ph.D.**
Position	Assistant Professor
Academic career	- Bachelor's degree, Institut Teknologi Sepuluh Nopember, Indonesia, 2009. - Master's degree, Institut Teknologi Sepuluh Nopember, Indonesia, 2012. - PhD degree, Murdoch University, Australia, 2021.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	Forensic Investigation of Event Logs by Automatic Anomaly Detection
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. Anomaly Detection in Operating System Logs with Deep Learning-based Sentiment Analysis, 2020 2. Sentiment Analysis in a Forensic Timeline with Deep Learning, 2020 3. Automatic event log abstraction to support forensic investigation, 2020 4. A survey on forensic investigation of operating system logs, 2019 5. Graph clustering and anomaly detection of access control log for forensic purposes, 2017 6. Automatic log parser to support forensic analysis, 2017
Activities in specialist bodies over the last 5 years	Journal Reviewer 1. Computers & Security 2. IEEE Internet of Things Journal 3. Future Generation Computer Systems 4. Wiley Interdisciplinary Reviews series (WIREs) Forensic Science

Name	**Bagus Jati Santoso, S.Kom., Ph.D.**
Position	Assistant Professor
Academic career	- Bachelor's degree, Institut Teknologi Sepuluh Nopember, Indonesia, 2008. - Doctoral Degree, National Taiwan University of Science and Technology, Taiwan, 2016
Employment	Lecturer, Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Cloud-based middleware for supporting batch and stream access over smart healthcare wearable device, 2020 2. A Heuristic Approach for Multi-Objective Aircraft Conflict Detection and Resolution, 2019 3. Docker-based Network Functions Virtualization as a Learning Tool in Computer Network Course, 2019 4. A grid-based approach in answering Top-k dominating queries on groups, 2019 5. Answering Why-Not Questions on Reverse Skyline Queries Over Incomplete Data, 2019 6. Continuous Top-k Dominating Query of Incomplete Data over Data Streams, 2018 7. Data Refinement Approach for Answering Why-Not Problem Over K-Most Promising Product (K-Mpp) Queries, 2018 8. Efficient Skyline-based Web Service Composition with QoS-awareness and Budget Constraint, 2018

	9. Multi criteria decision system for distribution provisioning and resource optimization using analytical hierarchy process, 2017 10. Resource elasticity controller for docker-based web applications, 2017 11. Designing Efficient Schemes for Answering Dominance-Based Queries, 2016
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	None
Activities in specialist bodies over the last 5 years	**2017** - Odd Semester: Net Centric Computing, Operating System, Network Programming, Security Design of System and Network - Even Semester: Information and Network Security, Internetworking Technology, Computer Network **2018** - Odd Semester: Computer Network, Information and Network Security, Internetworking Technology, Network Programming, Operating System - Even Semester: Network Programming, Operating System **2019** - Odd Semester: Information and Network Security, Internetworking Technology, Computer Algorithms and Programming - Even Semester: Network Programming, Operating System **2020** - Odd Semester: Advanced Spreadsheet, Data and Information Management, Fundamental Programming, Computer Network

Name	**Dr. Baskoro Adi Pratomo S.Kom., M.Kom.**
Position	Assistant Professor
Academic career	- Bachelor's degree, Institut Teknologi Sepuluh Nopember, Indonesia, 2008. - Master's degree, Institut Teknologi Sepuluh Nopember, Indonesia, 2011. - PhD degree, Cardiff University, United Kingdom, 2021.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. BLATTA: Early Exploit Detection on Network Traffic with Recurrent Neural Networks, 2020 2. Applied Machine Learning in Load Balancing, 2020 3. Vote Identification and Integrity of Ballot in Paper-Based E-Voting System, 2018 4. Unsupervised Approach for Detecting Low-Rate Attacks on Network Traffic with Autoencoder, 2018 5. Clustering of SSH Brute-force Attack Logs using K-Clique Percolation, 2016 6. Design and Development of Voting Data Security for Electronic Voting (E-Voting), 2016
Industry collaborations over the last 5 years	- Ministry of Social Affairs Republic of Indonesia (2021) - National Cyber Security Centre, United Kingdom (2020-2021)

Patents and proprietary rights	None
Important publications over the last 5 years	1. BLATTA: Early Exploit Detection on Network Traffic with Recurrent Neural Networks, 2020 2. Unsupervised Approach for Detecting Low-Rate Attacks on Network Traffic with Autoencoder, 2018

Activities in specialist bodies over the last 5 years	2020:
	Even Semester:
	  - Network and System Security Design
	  - Network Programming
	  - Network-centric Computing

Area of Expertise: Programming Algorithm

Name	Dr. Yudhi Purwananto, S.Kom., M.Kom.
Position	Associate Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 1995. - Master's degree (Computer Science), Universitas Indonesia, Indonesia, 2002. - Doctoral degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2021.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	A Heuristic Approach for Multi-Objective Aircraft Conflict Detection and Resolution, 2019
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	Yudhi Purwananto, Chastine Fatichah, Waskitho Wibisono, Ary M. Shiddiqi, Bagus J. Santoso, Nurlita D. Fatmawati, "Collision Avoidance Modelling in Airline Traffic Based on the Change of Airplane Movements and Dynamic Clouds," Journal of Computer Science, 17(1), pp. 33–43, 2021
Activities in specialist bodies over the last 5 years	2018 - Even Semester: Probability and Statistics 2019 - Odd Semester: Operations Research, Linear Algebra - Even Semester: Numerical Computing, Probability and Statistics 2020 - Odd Semester: Operations Research, Linear Algebra

Name	Dr. Diana Purwitasari, S.Kom., M.Sc.
Position	Associate Professor (2001-...)
Academic career	- (Dr.) Department of Electrical Engineering, Institut Teknologi Sepuluh Nopember, Indonesia, March 2020 (Dissertation: "Modeling Scholar Profile in Expert Recommendation based on Multi-Layered Bibliographic Graph") Advisor: Prof. Mauridhi Hery Purnomo, Dr. Surya Sumpeno, Dr.Eng. Chastine Fatichah - (M.Sc.) Graduate School of Science and Engineering, Saga University, Japan, March 2009 (Thesis: "Adaptive Content-based Navigation Generating System for Web-based Learning Applications") Advisor: Prof. Kenzi Watanabe, Dr. Yasuhisa Okazaki - (S.Kom.) Department of Informatics Engineering, Institut Teknologi Sepuluh Nopember, Indonesia, September 2001, Minored in Software Engineering
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology - Algorithm and Programming Laboratory (IF184101 Programming Fundamental; IF184202 Data Structure) - Intelligent Computing and Vision Laboratory (IF184955 Information Retrieval; IF184957 Social Network Analysis)

Research and development projects over the last 5 years	1. (2020) Deep learning in generating spam data for product reviews with topic-based vector expansion (IDR 20M) 2. (2021) Social media recommendation system for supporting productivities based on working-age group behaviour with ego-centric network analysis to overcome COVID-19 movement restrictions (IDR 80M) 3. (2021) Fuzzy approaches for supporting decisions in controlling dengue infectious disease (IDR 20M) 4. (2021) Multi attentions based deep learning for translating Indonesian-Arabic texts (IDR 50M) 5. (2021) Credibility measure of Twitter accounts for understanding public concerns in COVID-19 era (IDR 50M)
Industry collaborations over the last 5 years	1. Developing student admission system, State Office of Education, East Java Province, Indonesia (2020) 2. Developing Skill Passport Application, Direktorat Kemitraan dan Penyelarasan Dunia Usaha dan Dunia Industri, Direktorat Jenderal Pendidikan Vokasi, Kemdikbud, Indonesia (2020) 3. SIWALAN – Sistem Informasi Warga Layanan Antar, Diskominfo, Tuban Regency, East Java Province, Indonesia (2020) 4. IEEE-Sights (#20-COV-30) Web-based Application for Tracing COVID-19 in East Java Province, Indonesia (2020)
Patents and proprietary rights	1. (2021) Program Komputer "MyITS.online TKA-EFL" Web-based application for online test on subjects of Academic Aptitude Test (tes kemampuan akademik) and english as foreign language at Institut Teknologi Sepuluh Nopember (ITS) 2. (2021) Program Komputer "ItsBehavex-Collab" Deep-learning based application to help researchers in finding collaborators with similar topic interests.
Important publications over the last 5 years	1. B.A. Sanjoyo, D. Purwitasari, M. Hariadi, K. Tsukasa, and M.H. Purnomo. "Shallow Water Models for Efficiently Visualizing Fluid Flow in Complex Topography Areas", IAENG International Journal of Applied Mathematics 51 (1): IJAM_51_1_04, 2021 2. N.A. Hasanah, N. Suciati, and D. Purwitasari. "Identifying Degree-of-Concern on COVID-19 topics with text classification of Twitters", Register: Jurnal Ilmiah Teknologi Sistem Informasi 7 (1): 50-62, 2021 3. A. Setiyoutami, D. Purwitasari, W. Anggraeni, E.M. Yuniarno, and M.H. Purnomo. "Modelling Dengue Spread as Dynamic Networks of Time and Location Changes", International Journal of Intelligent Engineering and Systems, 14 (3): 346-358, March 2021 4. A.A. Zaqiyah, D. Purwitasari, and C. Fatichah. "Text Generation with Content and Structure-Based Preprocessing in Imbalanced Data of Product Review", International Journal of Intelligent Engineering and Systems, 14 (1): 516-527, December 2020 5. N. Rijati, D. Purwitasari, S. Sumpeno, and M.H. Purnomo. "A Decision Making and Clustering Method Integration based on the Theory of Planned Behavior for Student Entrepreneurial Potential Mapping in Indonesia", International Journal of Intelligent Engineering and Systems, 13 (4): 129-144, August 2020 6. D. Purwitasari, C. Fatichah, S. Sumpeno, C. Steglich and M.H. Purnomo. "Identifying collaboration dynamics of bipartite author-topic networks with the influences of interest changes", Scientometrics 122: 1407–1443, 2020

Activities in specialist bodies over the last 5 years	2016
	  - Odd Semester: Data Structure, Information Retrieval, Computational Intelligence, Desain and Analysis Algorithms, Programming Fundamental
	
	2019
	  - Even Semester: Social Network Analysis, Artificial Intelligence
	
	2020
	  - Odd Semester: Information Retrieval, Computational Intelligence, Desain and Analysis Algorithms, Programming Fundamental
	
	1. IEEE Indonesia Section Humanitarian Technology and Community Activities (activity committee, 2021)
	2. Indonesian Artificial Intelligence Society (IAIS) Chapter Jatim (2020-2021)
	3. Pusat Unggulan IPTEKS Artificial Intelligence for Healthcare and Society (AIHeS) (vice chair, 2020-2021)
	4. Industrial Electronics Society (IES) Chapter Indonesia Section (Treasurer, 2020-2021)
	5. Penyusun Strategi Nasional Kecerdasan Artifisial Indonesia Tahun 2020-2045, Kelompok Kerja IV Riset dan Inovasi Industri (Maret-Agustus 2020)

Name	**Agus Budi Raharjo, S.Kom., M.Kom., Ph.D.**
Position	Lecturer
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2013. - Master's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2014. - Doctoral degree (Computer Science), Universite D aix Marseille III, Prancis, 2020.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. Analysis of Case Clusters and Epidemic Curves with the Development of the East Java COVID-19 Tracing System, 2020 2. Adaptive Modeling of Time Series Data with Regression-Based Ensemble Learning: A Case Study of the Number of Confirmed COVID-19 Patients, 2020 3. Reliability in Ensemble Learning and Learning from Crowds, 2019 4. Dynamic Reliable Voting in Ensemble Learning, 2019 5. Decision Combinations in Crowds when Number of Reliable Annotators is Rare, 2017 6. Multi-Label Classification Merger Decision, 2015
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	None

Activities in specialist bodies over the last 5 years	2019
	- Even Semester: Data Structure, Operating System
	2020
	- Odd Semester: Object Oriented Programming, Computer Networking, Algorithm Design and Analysis

Area of Expertise: Software Engineering

Name	**Dr. Ir. Siti Rochimah, M.T.**
Position	Associate Professor
Academic career	- Bachelor's degree, Institut Teknologi Bandung, Indonesia, 1992. - Master's degree (Computer Engineering), Institut Teknologi Bandung, Indonesia, 1997. - Doctoral degree, Universiti Teknologi Malaysia, Malaysia, 2011.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. Design and Build a PPDB Ranking Module for East Java State High Schools / Vocational High Schools 2020 2. Development of Game-Based English Grammar Learning Applications, 2020 3. Security Characteristic Evaluation of New Students Admission Information System Based on ISO/IEC 25010 Quality Standard, 2020 4. Quality in use of Digital Wallet based on ISO/IEC 25022, 2020 5. How Agile Software Development Affect Software Reusability (Study Case: New Student Admissions Portal in East Java Province), 2020 6. Functional Suitability Measurement Based on ISO/IEC 25010 for e-Commerce Website, 2020 7. Maintainability Measurement and Evaluation of myITS Mobile Application using ISO 25010 Quality Standard, 2020 8. Portability Characteristics Evaluation of MyITS Mobile using ISO/IEC 25010 Quality Standard, 2020 9. Performance Efficiency Evaluation Frameworks Based on ISO 25010, 2020 10. Requirements Traceability for Detecting Defects in Agile Software Development, 2020 11. Measuring Scalable Business Process Model Complexity based on Basic Control Structure, 2020 12. A Serious Game for Measuring and Displaying Mathematics Competencies of Disabled Students, 2019 13. Use Case Diagram Similarity Measurement: A New Approach, 2019 14. A Development of Quality Model for Online Games Based on ISO/IEC 25010, 2019 15. Assessment of Academic Information System Quality from Two Perspectives: Product Quality and Quality in Use, 2019 16. Security Characteristic Evaluation Based on ISO/IEC 25023 Quality Model, Case Study: Laboratory Management Information System, 2018 17. Analyzing the Effect of Design Patterns on Software Maintainability: A Case Study, 2018 18. Measuring Performance Efficiency of Application Applying Design Patterns and Refactoring Method, 2018 19. Process Mining in Supply Chains: A Systematic Literature Review, 2018 20. Application of Design Patterns and Quality Measurement on Academic Information Systems, 2017 21. Mobile Application for Guidance and Provision of Toddler's Nutrition to Support e-PKK, 2016 22. PKK-man: A System to Manage PKK Activities in Indonesia, 2016
Industry collaborations over the last 5 years	None.

Patents and proprietary rights	None.
Important publications over the last 5 years	1. Siti Rochimah "Behavioral analysis for detecting code clones", 2018 2. Riyanarto Sarno, Siti Rochimah, Daniel Oranova Siahaan,, Adhatus Solichah Ahmadiyah "Accuracy improvement of the estimations effort in constructive cost model II based on logic model of fuzzy", 2017 3. Siti Rochimah, Sarwosri "The improvement of software quality model for academic websites based on multi-perspective approach", 2016 4. Siti Rochimah, Umi Laili Yuhana, "Classification of non-functional requirements using Semantic-FSKNN based ISO/IEC 9126", 2015 5. Siti Rochimah "Non-source code refactoring: A systematic literature review", 2015
Activities in specialist bodies over the last 5 years	**2015** - Odd Semester: Software Engineering, Software Evolution, Topics in Software Evolution. **2016** - Odd Semester: Software Engineering, Dissertation Writing, Software Evolution, Topics in Software Evolution. - Even Semester: Topics in Software Quality Assurance, Software Quality Assurance, Software Process Improvement, Research Methodology. **2017** - Odd Semester: Topics in Software Evolution, Dissertation Writing, Software Evolution. - Even Semester: Topics in Software Quality Assurance, Dissertation Writing, Software Project Management, Software Quality Assurance. **2018** - Odd Semester: Software Engineering, Seminar 1, Analysis and Design of Information Systems, Software Evolution. - Even Semester: Information System Analysis and Design, Software Quality Assurance, Seminar 2, Topics in Software Quality Assurance. **2019** - Odd Semester: Topics in Software Evolution, Software Evolution, Software Project Management. - Even Semester: Topics in Software Quality Assurance, Information System Analysis and Design, Software Quality Assurance. **2020** - Odd Semester: Software Project Management, Software Evolution, Seminar 1, Topics in Software Evolution

Name	**Daniel O. Siahaan, S.Kom., M.Sc., PD.Eng.**
Position	Associate Professor
Academic career	- Bachelor's degree (Computer Engineering), Institut Teknologi Sepuluh Nopember, 1999. - Master's degree (Science), Technische Universiteit Delft, Netherlands, 2002. - Doctoralal degree (Software Engineering), Technische Universiteit Eindhoven, Netherlands, 2004.

Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 3 years	1. Calculation of the Similarity of Two State Diagrams using Deterministic Methods, Basic Research (Ristek BRIN), 2021 2. Software Design Similarity Calculation Methods based on UML Diagrams Using Natural Language Processing and Artificial Intelligent, Doctoral Dissertation Research (RistekBRIN), 2019-2020. 3. Software Design Similarity Calculation Methods based on UML Diagrams Using Natural Language Processing and Artificial Intelligent, Doctoral Dissertation Research (RistekBRIN), 2019-2020. 4. Automated Method of Generating Questions based on Bloom Taxonomy based on Pattern Recognition and Deep Learning as the Basis for Standardizing the Level of Difficulty of Questions, Doctoral Dissertation Research (RistekBRIN), 2019-2020. 5. Extraction of User Stories from Natural Language for Identification of Software Requirements in Public Sector Applications Using Web Mining, Doctoral Dissertation Research (RistekBRIN), 2019-2020.
Industry collaborations over the last 5 years	None.
Patents and proprietary rights	**Aplikasi Sistem Informasi Akademik (SIA) Generik** ID: EC00201859725 Kategori: hak cipta | Tahun Permohonan :2018 Patent Holder: LPPM - ITS.
Important publications over the last 5 years	1. **Information security vulnerability prediction based on business process model using machine learning approach** Hariyanti, E., Djunaidy, A., Siahaan, D. *Computers and Security, 2021, 110, 102422* 2. **User Stories and Natural Language Processing: A Systematic Literature Review** Raharjana, I.K., Siahaan, D., Fatichah, C. IEEE Access, 2021, 9, pp. 53811–53826, 9393933 3. **Automated Class Diagram Assessment using Semantic and Structural Similarities** Fauzan, R., Siahaan, D., Rochimah, S., Triandini, E. International Journal of Intelligent Engineering and Systems, 2021, 14(2), pp. 52–66 4. **MAT-AGCA: Multi Augmentation Technique on small dataset for Balinese character recognition using Convolutional Neural Network** Sutramiani, N.P., Suciati, N., Siahaan, D. ICT Express, 2021 5. **A Different Approach on Automated Use Case Diagram Semantic Assessment** Fauzan, R., Siahaan, D., Rochimah, S., Triandini, E. International Journal of Intelligent Engineering and Systems, 2021, 14(1), pp. 496–505 6. **A maturity model for e-commerce adoption by small and medium enterprises in Indonesia** Triandini, E., Djunaidy, A., Siahaan, D. Journal of Electronic Commerce in Organizations, 2017, 15(1), pp. 44-58 7. **Game design document format for video games with passive dynamic difficulty adjustment** Atmaja, P.W., Siahaan, D.O., Kuswardayan, D.I. Register: Jurnal Ilmiah Teknologi Sistem Informasi, 2016, 2(2), pp. 86-97

Activities in specialist bodies over the last 5 years	2020 - Present
	  - Head of Center for Scientific Publicaation, Resarch and Community Service Directorate, Institut Teknologi Sepuluh Nopember.
	
	2012 - 2016
	  - Member of National Journal Accreditation (Arjuna) Development Team, Ministry of Research, Technology, and Higher Education.
	
	2014 - 2018
	  - Trainer for Series of Electronic Journal Management System Workshops, Ministry \of Research, Technology, and Higher Education.
	
	2006 - Present
	  - Member of IEEE Computer Society.
	
	2020
	  - Reviewer for number of journals: (1) Knowledge Based System, (2) Expert Systems with Applications, (3) Automation in Construction.
	  - (Chief) Editor for number of journals: (1) IPTEK The Journal for Technology and Science, (2) Sewagati, (3) Informal: Informatics Journal.

Name	**Dr. Umi Laili Yuhana, S.Kom., M.Sc.**
Position	Associate Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, 2002. - Master's degree (Science), National Taiwan University, Taiwan, 2008. - Doctor's degree (Electrical Engineering), Institut Teknologi Sepuluh Nopember, Indonesia, 2019.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent Electrical and Informatics Technology
Research and development projects over the last 5 years	1. GeMAR: Geometry Augmented Reality Application for Elementary School Students, 2020 2. AUGGO: Augmented Reality and Marker-based Application for Learning Geometry in Elementary Schools, 2020 3. Sifte-Math, A Sifteo based Mathematics Assessment Serious Game for Deaf Children, 2020 4. Analysis of Students Ability Assessment Based on Bloom's Taxonomy Using Fuzzy Signatures, 2019 5. A Serious Game for Measuring and Displaying Mathematics Competencies of Disabled Students, 2019 6. Parsing the Semantic Structure of Math Story Problems in Indonesian using a Recursive Neural Network, 2019 7. Parsing the Semantic Structure of Indonesian Math Word Problems using the Recursive Neural Network 2019 8. HEIRDOM: Multiple Ending Scenario Game for Mathematics Learning Using Rule-Based System, 2018 9. Classifying the Complexity of Competency in Elementary School based on Supervised Learners, 2018 10. Making Standard Operating Procedures for the Development of Management Information Systems: Case Study of DPTSI ITS, 2018

	11. Preparation and Testing of Operability Metrics for Academic Information Systems Based on ISO 25010, 2017
	12. Security Quality Measurement Framework for Academic Information System (AIS) based on ISO/IEC 25010 Quality Model, 2017
	13. MathBharata: A Serious Game for Motivating Disabled Students to Study Mathematics, 2017
	14. Predicting Math Performance of Children with Special Needs based on Serious Game, 2017
	15. Exploring the Cluster-Based Ability Pattern of Exam Participants for Determining the Rules of the Scoring System, 2017
	16. Property Aspects of Usability in Academic Information Systems from the Perspective of Technology Acceptance Model (TAM), 2016
	17. Iot and Machine Learning Implementation in Elementary Level Mathematics Learning Education through Serious Game, 2016
	18. Application Development for Recognizing Type of Infant's Cry Sound, 2016
	19. Design and Build a Web-Based Modular Academic Information System Framework with a Model-View-Controller Hierarchical Architecture Pattern, 2016
	20. PDITS: An Integrated Database Application to Support the Integration of Multi-Information Systems in the Institut Teknologi Sepuluh Nopember, 2016
	21. Generating Cultural Heritage Metadata as Linked Open Data, 2015
	22. Automatic Indonesia's Questions Classification based on Bloom's Taxonomy using Natural Language Processing a Preliminary Study, 2015
	23. Portability Characteristic Evaluation Academic Information System Assessment Module using AIS Quality Instrument, 2015
	24. Systematic Mapping of Software Quality Metrics, 2015
	25. Software Quality Measurement according to ISO/IEC 25000: Systematic Mapping, 2015
	26. Website Quality Measurement Based on ISO 9126: Systematic Mapping, 2015
	27. Usability Characteristic Evaluation on Administration Module of Academic Information System using ISO/IEC 9126 quality model, 2015
Industry collaborations over the last 5 years	None.
Patents and proprietary rights	None.
Important publications over the last 5 years	1. Eko Mulyanto Yuniarno, Umi Laili Yuhana, "A rule-based expert system for automatic question classification in mathematics adaptive assessment on indonesian elementary school environment", 2019 2. Siti Rochimah, Umi Laili Yuhana,, "Classification of non-functional requirements using Semantic-FSKNN based ISO/IEC 9126", 2015
Activities in specialist bodies over the last 5 years	2015 - Odd Semester: Information Systems and Technology, Software Design. 2019 - Odd Semester: Software Design, Software Engineering, Data and Information Management. - Semester Even: Requirements Engineering.

	2020
	- Odd Semester: Database Systems, Information Systems and Technology, Data and Information Management, Software Engineering, Seminar 1.

Area of Expertise: Graphics, Interaction, and Game

Name	**Dr.Eng.Darlis Herumurti S.Kom., M.Kom.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2001. - Master's degree (Computer Science), Institut Teknologi Sepuluh Nopember, Indonesia, 2010. - Doctoral degree (Engineering), Kumamoto University, Japan, 2014.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Early Detection Application of Bone Fractures using Image Analysis of Dental Panoramic Radiographs, 2015 2. Summary of Indonesian News Multi Documents Based on Twitter Data Trending Issues with Non-Trivial Event Detection as Keyword Selection, 2015 3. Software for Classification of Indonesian Traditional Fabric Motifs, 2015 4. Game Development of Insect Phobia Therapy using Augmented Reality Technology on Android Devices, 2016 5. Multi Document Summary of Indonesian News Based on Twitter Data Trending Issues with Non-Trivial Event Detection as Keyword Selection, 2016 6. Software for Classification of Indonesian Traditional Fabric Motifs, 2016 7. Design And Implementation of "Termo": Intelligent Devices based on The Internet of Things (IoT) As Effort to Save Electricity in the Environment of ITS Information Engineering Department, 2017 8. Road Damage Detection System through Photo Images for Mobile-Based Road Infrastructure Repair Information, 2018 9. Design and Implementation of "Termo" Internet-Based Smart Devices as an Effort to Save Electric Power in the ITS Informatics Department, 2018 10. Utilization of Virtual Reality, Augmented Reality and Game Technology to Support Phobia Education and Therapy, 2018 11. Intelligent Decision-Making System to Determine Answers to Text Questions in Educational Game Applications Using the Human Experience Learning Method Approach and Natural Language Processing, 2019 12. Recognition of Traditional Fabric Imagery Through Smartphone Cameras Using Features Invariant to Rotation, Scale, and Exposure, 2019 13. Utilization of Virtual Reality, Augmented Reality and Game Technology to Support Phobia Education and Therapy, 2019 14. The Effect of Point of View on Virtual Reality Experiences: Tethered View vs. First-person View, 2019 15. Implementation of User Centered Design in the "Halal Check" Application to Support Automatic Identification of Halal Products Using OCR (Optical Character Recognition) Technology, 2019 16. Development of Data Collection Information Systems for Supporting Research at LPPM ITS, 2019 17. Information System for Archiving Document Reporting Research and Community Service at DRPM ITS, 2020

	18. Communication Protocol for Geolocation-based Market Workshop Generation and Data Mining for Mitigation of the Spread of COVID-19, 2020
	19. SiNinja Development: Organizational and Official Performance Monitoring System in ITS Environment for Business Intelligence-Based Program Management and Control, 2020
	20. Intelligent Decision-Making System to Determine Answers to Text Questions in Educational Game Applications Using the Human Experience Learning Method Approach and Natural Language Processing, 2020
Industry collaborations over the last 5 years	None
Patents and proprietary rights	None
Important publications over the last 5 years	1. Vehicle detection on images from satellite using oriented fast and rotated brief, 2017 2. Robot motion control using the emotiv EPOC EEG system, 2018 3. Local binary pattern method and feature shape extraction for detecting butterfly image, 2018
Activities in specialist bodies over the last 5 years	**2015** - Odd Semester: Virtual Reality and Augmentation, Topics in Game Development, Topics in Data Mining, Topics in Human-Computer Interaction **2016** - Odd Semester: Topics in Game Development, Digital Image Processing, Virtual Reality and Augmentation - Even Semester: Programming Fundamentals, Computational Intelligence, Artificial Intelligence, Topics in Virtual Reality and Augmentation **2017** - Odd Semester: Virtual Reality and Augmentation, Topics in Data Mining, Data Structures - Even Semester: Computer Graphics, Artificial Intelligence **2018** - Odd Semester: Topic in Data Mining, Seminar 1, Topic in Human and Computer Interaction - Even Semester: Smart Game, Seminar 2, Artificial Intelligence **2019** - Odd Semester: Topics in Human and Computer Interaction, Computer Graphics, Computational Intelligence - Even Semester: Smart Games, Topics in Game Development, Virtual Reality, and Augmented Reality, Seminar 2, Artificial Intelligence **2020** - Odd Semester: Computer Graphics, Topics in Human-Computer Interaction

Name	**Hadziq Fabroyir, S.Kom., Ph.D.**
Position	Assistant Professor
Academic career	- Bachelor's degree (Informatics), Institut Teknologi Sepuluh Nopember, Indonesia, 2008. - Doctoral degree (Computer Science and Information Engineering), National Taiwan University of Science and Technology, Taiwan, 2018.
Employment	Lecturer, Department of Informatics, Faculty of Intelligent and Informatics Technology, Institut Teknologi Sepuluh Nopember
Research and development projects over the last 5 years	1. Development of myITS Research MBKM as a Facility to Support Kampus Merdeka Program, 2021 2. Development of Immersive Media as an Experiment Innovation in Waste Treatment Virtually, 2021 3. Development of Information System to Manage Incentives for Supervising Undergraduate Thesis to Improve Academic Article Outcome in ITS, 2021 4. Communication Protocol to Generate Geolocation- and Data-mining-based Marketplaces to Mitigate the Spreadth of COVID-19, 2020 5. Design of User Interface and Experience for Marketplace System during Pandemic Based on Messaging's Upload Data, 2020 6. AR-Geometry: Application for Learning Geometry Based on Markerless Augmented Reality to Optimize Lesson Absorption According to Student Learning Style, 2020 7. Information System for Archiving Reports of Research and Community Services in ITS, 2020 8. Informatic Open Library Systems: Design and Development of Integrated Library Information System at Department of Informatics, 2019 9. The Effect of Point of View on Virtual Reality Experience: Tethered View vs. First-person View, 2019
Industry collaborations over the last 5 years	None
Patents and proprietary rights	1. myITS WorkTime: Application to Track ITS Staff's Working Time and Location 2. myITS Single Sign-On (SSO): Application for Identity Access Management (IAM) to Provide Authentication and Authorization Services for Users in ITS
Important publications over the last 5 years	1. Mixed Reality Application Prototype to Explore the Real World in Real Time Through Third Person Point of View *Published in International Conference on Computer Engineering, Network, and Intelligent Multimedia (CENIM) on November 17, 2020* 2. Real-time Landscape Generation in Games Using Parallel Procedural Content *Published in International Conference on Computer Engineering, Network, and Intelligent Multimedia (CENIM) on November 17, 2020* 3. Tachyon: Multiplatform Rhythm Game with Automatic Beatmap Generation *Published in International Conference on Computer Engineering, Network, and Intelligent Multimedia (CENIM) on November 17, 2020* 4. AUGGO: Augmented Reality and Marker-based Application for Learning Geometry in Elementary Schools *Published in International Conference on Computer Engineering, Network, and Intelligent Multimedia (CENIM) on November 17, 2020* 5. Augmented Reality for 3D House Design Visualization from Floorplan Image *Published in Proceedings of the 6th International Conference on*

	Electrical Engineering and Informatics (ICEEI) on October 27, 2020 6. Multitouch Interface is not Good for Spatial Navigation in Virtual Reality *Published in Proceedings of International Conference on Information & Communication Technology and System (ICTS) in 2019* 7. Navigation in virtual environments using head-mounted displays: Allocentric vs. egocentric behaviors *Published in Computers in Human Behavior in March 2018*
Activities in specialist bodies over the last 5 years	2018 - Even Semester: Linear Algebra, Numerical Method, Programming Basics 2019 - Odd Semester: Computer Graphics, Topics on Games, VR, AR. - Even Semester: Human-Computer Interaction, Computer Graphics 2020 - Odd Semester: Human-Computer Interaction, Computer Graphics, Augmented and Virtual Realities - Even Semester: Human-Computer Interaction 2021 - Special Program: AWS Cloud Foundation, Azure Cloud Infrastructure