

## CURRICULUM VITAE

### Personal Identity

<b>Full Name (with tittle)</b>	<b>Prof. Dr. Ir. Adhi Dharma Wibawa., S.T.,M.T.</b>
Staff ID Number	197605052008121003
Position	Professor of Faculty of Medicine and Health, Institut Teknologi Sepuluh Nopember
Academic Position	Professor
Office Adress	FKK Building, ITS Campus

### Education Background

	Bachelor's	Master's	Doctorate
College Name	Institut Teknologi Sepuluh Nopember	Institut Teknologi Sepuluh Nopember	University of Groningen
Field of Study	Electrical Engineering, Multimedia Telecommunication	Electrical Engineering, Intellegent Multimedia	Biomedical Engineering
Graduate Year	2000	2006 (Cum laude certificate)	2014
Thesis		Early detection of the condition of the Pancreas organ as the cause of Diabetes Mellitus by using iris image processing.	Musculoskeletal modeling of the lower limb during normal walking, One leg forward hopping, side jumping, and knee flexion activity: A Pilot study of numerical modeling to optimize ACL reconstruction program.

- Reference: Prof. G. J. Verkerke, Professor in Biomedical Engineering, University Medical Center Groningen, University of Groningen, the Netherlands, [g.j.verkerke@gmail.com](mailto:g.j.verkerke@gmail.com).
- Reference: Prof. Nico. Verdonschot, Professor in Biomechanical Engineering, University of Twente, [n.verdonschot@orthop.umcn.nl](mailto:n.verdonschot@orthop.umcn.nl)

### Profesional Experience

- BANPT Assessor
- LAM Infokom Assessor
- LPDP Scholarship Interviewer
- IISMA Scholarship Interviewer
- Pertamina Scholarship Interviewer

## Research Field

- Biomedical Engineering studies
- E-Health monitoring and Telemedicine
- Artificial Intelligence
- Musculoskeletal Modeling and Biomechanics
- Biomedical Signal Processing Analysis (EEG, EMG, ECG)

## Working Experience

- 2000-2001 : V-Team engineer in PT. Pabrik Kertas Tjiwi Kimia, Mojokerto, East Java, Indonesia. Responsibility: Establishing and Educating ISO:9000/9001.
- 2001-2007: Lecturer at the Department of Electrical Engineering, Hang Tuah University, Surabaya
- 2003-2006: Head of Technical Services Unit for Information Technology and Multimedia (UPT TIM), Hang Tuah University, Surabaya
- 2007-2008: Lecturer at the Department of Telecommunication Engineering, PENS Surabaya (PENS ITS)
- 2008-now: Lecturer at Department of Computer Engineering, Institute of Technology Sepuluh Nopember (ITS), Surabaya
- 2010-2011: Chief of Indonesian Student Association in Groningen, The Netherlands.
- Instructor for G-CIO technical training (Government-Chief Information Officer) or BIMTEK G CIO, Ministry of Communication and Information, Republic of Indonesia (for basic and advanced level)
- Instructor for Game Developer using the Open-source program: Unity
- Instructor for Image Processing Programming and Artificial Intelligence programming using Java, Matlab, Visual Basic, and Delphi
- Coordinator for Master Program in ICT Manager (CIO) in the Government and Telematics Master Program, Department of Electrical Engineering, Institut Teknologi Sepuluh Nopember (ITS), since September 2014.
- Assessor for Competency, Certified from BNSP (Badan Nasional Sertifikasi Profesi) or National Board for Profession Certification, the Republic of Indonesia (June 2015 - Now)
- LPDP Scholarship Interviewer (Lembaga Pengelola Dana Pendidikan), Ministry of Finance, Republic of Indonesia (June 2015-2017)
- Member of Focus Group Discussion (FGD), CIO (Chief Information Officer) and Indonesian National Qualification Scheme (KKNI), Ministry of Communication and Informatics, since 2013 – now • Reviewer of DIKTI-Journal Accreditation, Since November 2015
- Deputy of Partnership, ITS International Office, January-July 2016
- BAN-PT Asesor (Assessor for National Accreditation Board for Higher Education), Since 2015 – now
- Trainer for SAPTO System: (SAPTO: Online System for Higher Education Accreditation) sponsored by. National Accreditation Board of Higher Education, Ministry of Research and Technology, and Higher Education, April 2017 – now

- Instructor for SAPTO training in Bekasi, Denpasar, Surabaya, Trawas, Lombok., Since Februari 2017 for Kopertis VII East Java, Kopertis VIII Bali and Kemenkes Higher Education in Indonesia.
- Internal Auditor of Institut Teknologi Sepuluh Nopember (ITS) since August 2017 – 2019
- Member of Peer Reviewer Team of papers/publications of Faculty of Electrical Technology – ITS, (Tim reviewer PAK Fakultas Teknologi Elektro - ITS) since Juli 2017
- Trainer for Big Data Analytics and Business Intelligence Workshop in 1000 Digitalent Training Program sponsored by Ministry of Communication and Informatics, Republic of Indonesia (15 October – 4 December 2018)
- Trainer for IAPS 4.0 for BAN PT Accreditation in Kopertis XII, Banda Aceh, Aceh Darusaalam, 9-10 December 2018
- Trainer for IAPT 4.0 for Universities in Kopertis VII, East Java, 17-21 June 2019
- Certified Reviewer for National Research Proposal by Dikti, since 2017 – now
- Short Postdoc Awardee, University of Groningen, UMCG, 1st of October 2019 – 6th January 2020
- Chief of Subunit for Program Monitoring and Controlling ITS, UP3, ITS 2020 – 2021
- Deputy of Artificial Intelligence and Health Technology Research Center ITS, 2021 – 2024
- External Auditor for SPBE (Sistem Pemerintahan Berbasis Elektronik) – KemenPAN-RB, since 2020 – 2021
- LAMINFOKOM Assessor (2022-now)
- Head of Medical Technology Department, Institut Teknologi Sepuluh Nopember (2022-2024)
- Vice Dean of Faculty of Medicine and Health, Institut Teknologi Sepuluh Nopember (now – Dec 2024)

## Community Service

- Member of Majelis Syuro, Al-Kahfi Foundation, since 2002 – 2008
- Head of PPI Groningen (Persatuan Pelajar Indonesia di Groningen), the Netherlands or Indonesian Student Association in Groningen, 2010 - 2011
- Head of Sport team of PPI Groningen in Groenscup Competition, 2011-2012
- Head of Alumni for Junior High School Hang Tuah II, Surabaya, 2014 – now
- Research Reviewer for SEAMOLEC Scholarship program for Lecturers in Public University Malang, East Java, Indonesia
- Paper Reviewer for International Conferences: ISICO 2015 and ISITIA 2015
- Research Proposal Reviewer for LPPM ITS (Research and Community Development Board of ITS) since 2015 - now
- Leader of KKNi Multimedia section team during FGD (Focused Group Discussion), sponsored by The Center of Research and Development, Ministry of Communication and Informatics, Republic of Indonesia, 2015-now
- Trainer for Workshop: "Get the scholarships abroad" for Lecturers, Staff and students of ITS who plan to apply LPDP scholarship program, March 2016
- Member of drafting team for CPNS entrance test, sponsored by Ministry of Education and Culture (Kemendikbud), Republic of Indonesia
- Trainer for Workshop: "Survival tips for studying abroad and success getting LPDP scholarship"., Universitas Widya Kartika, Surabaya, April 2016

- Trainer for Workshop: "Virtual reality update and modeling"., University of Wijaya Kusuma, Surabaya, 3 May 2016
- Trainer for e-Government BIMTEK for Chief Information Officer (CIO), Staff of Kementerian Komunikasi dan Informatika, Pemprov Jatim, Surabaya, Mei 2016, Kantor Kominfo Jatim Surabaya.
- Interviewer for Pertamina Scholarship, 2016 Scholarship Program, ITS Campus, Sukolilo, Surabaya, November 2016
- Neighbourhood Head (Ketua RT 08/RW05), Kelurahan Keputran, Kecamatan Tegalsari, Surabaya for 2016-2019. (70 families)
- Trainer for Writing a scientific paper for lecturers in UKI Toraja, 3-5 October 2017
- Guest Lecturer: Stadium General "Challenges in Convergence era", in STMM (Sekolah Tinggi Multimedia), Yogyakarta, 6 March 2018
- Trainer for Document Preparation for Universities and Study Program Accreditation in East Java Province (BAN-PT Accreditation), sponsored by Kopertis VII East Java, Indonesia, 21 – 29 March 2018
- BAN-PT Supto Trainer for Private Universities in East Java Province (Kopertis VII), 20-22 March 2018 and 27-29 March 2018, Tretes, East Java., sponsored by Kopertis VII Jatim.
- BAN-PT Supto Trainer for Institution Accreditation, 19-21 April 2018, Trawas, Mojokerto, East Java. Sponsored by Kopertis VII Jatim
- Technical Program Committee Chair (TPC-Chair) of Joint Conference between CENIM International Conference and 11th RCCIE AUN/SEED.Net 2018. 26-27 November 2018, Hotel J.W. Marriot, Surabaya, Indonesia. (cenim.its.ac.id)
- • Member of IIoT (Industrial IoT) FGD, organized by the Ministry of Communication and Informatika, Jakarta, Indonesia, and attending Workshop Industrial of IoT in Tsinghua University, Beijing, China.
- Member of Special Task Force for Covid-19 Mitigation ITS, 2020-2022
- Member of Special FGD for Covid-19 Mitigation for Small Business and Small Farming, 2020
- Trainer for CommTech Training ITS on e-Health Systems, ITS, January 2022
- IISMA scholarship interviewer 2023
- LPDP Scholarship Interviewer 2023
- Team Leader for the Faculty of Medicine and Health Preparation, ITS (2022)

### Scientific Writing in Journal

The Netherlands: Amsterdam, Den Haag, Groningen, Eindhoven, Enschede, Rotterdam; Belgium: Brussel, France: Paris, Portugal: Lisbon, USA: Philadelphia, and Salt Lake City; Germany: Aachen, Bremen, and Berlin, Turkey: Istambul, Italy: Rome, Pisa, Venezia, and Milan; Japan: Tokushima and Tokyo, South Korea: Seoul and Suwon, Denmark: Aalborg, Singapore, Kuala Lumpur, Penang and Malacca, Budapest-Hungary, Vienna-Austria, Prague Czechoslovakia, Taiwan: Kaoshiung, Chia-Yi, Taipei, Taichung, Hsinchu, China: Beijing, Hongkong, Bangkok, Thailand.

Book	
Year	Tittle
2022	MENYIAPKAN RENCANA RISET PADA PROGRAM MAGISTER DAN DOKTORAL
2021	MEMAHAMI AI DAN PENERAPANNYA

No.	Year	Subject	Journal Name
1.	2023	Leveraging text-mining techniques on electronic medical records to analyze national drug-insured medication use	
2.	2023	Leveraging Text-Mining Techniques On Electronic Medical Records to Analyze National Drug-insured Medication Use	
3.	2023	EEG Time-Frequency Domain Analysis for Describing Healthy Subjects and Stroke Patients during Stroke Rehabilitation Motion Tasks	
4.	2022	Rules Extraction of Relevance Vector Machine for Predicting Negative Emotions from EEG Signals	
5.	2022	Electronic medical record data analysis and prediction of stroke disease using explainable artificial intelligence	
6.	2022	Performance Evaluation of 198 Village Governments using Fuzzy TOPSIS And Intuitionistic Fuzzy TOPSIS	
7.	2022	Text Mining for Employee Candidates Automatic Profiling Based on Application Documents	
8.	2022	Data Analytics on Indonesia Industries Economic Resilience Based on Poverty Rate Growth During Covid19 Pandemic	
9.	2022	Rule-based Disease Classification using Text Mining on Symptoms Extraction from Electronic Medical Records in Indonesian	
10.	2022	Rule-based disease classification using text mining on symptoms extraction from electronic medical records in Indonesian	
11.	2022	Rule-based disease classification using text mining on symptoms extraction from electronic medical records in Indonesian	
12.	2020	Multi-scale entropy and multiclass fisher's linear discriminant for emotion recognition based on multimodal signal	
13.	2019	Improving the accuracy of EEG emotion recognition by combining valence lateralization and ensemble learning with tuning parameters	
14.	2019	Indonesian Sign Language Classification Based on EMG using Time Domain Features Extraction	
15.	2019	Soccer Players Detection Using GDLS Optimization and Spatial Bitwise Operation Filter	
16.	2018	Peningkatan Akurasi Pengenalan Emosi pada Sinyal Electroencephalography Menggunakan Multiclass Fisher Discriminant Analysis	
17.	2016	Physiological Pattern of Human Emotion State based on SPO2 sensor	

18.	2016	Musculoskeletal modeling of human lower limb during normal walking, one-legged forward hopping and side jumping: Comparison of measured EMG and predicted muscle activity patterns	
19.	2016	A Trap Motion in Validating Muscle Activity Prediction from Musculoskeletal model using EMG	
20.	2016	PHYSIOLOGICAL PATTERN OF HUMAN STATE EMOTION BASED ON ECG AND PULSE SENSOR	
21.	2016	CLASSIFICATION OF IRIS IMAGE OF PATIENT CHRONIC RENAL FAILUR (CRF) USING WATERSHED ALGORITHM AND SUPPORT VECTOR MACHINE (SVM)	
22.	2016	Microblogging Analysis for Determining Public Policy Priority based on Public Opinion using Naïve Bayes and Analytical Hierarchy Process Algorithm	
23.	2016	Microblogging Analysis for Determining Public Policy Priority based on Public Opinion using Naïve Bayes and Analytical Hierarchy Process Algorithm	
24.	2013	DETERMINING THE ABNORMALITY OF BULL SPERM TAIL MORPHOLOGY USING SUPPORT VECTOR	
	2012	VALIDATING NUMERICAL SIMULATION OF LOWER LIMB MUSCLE ACTIVITY DURING NORMAL WALKING AND SIDE JUMPING	

#### Scientific Publication on Seminar

No.	Seminar	Subject	Year
1		Statistical Analysis to Reveal Factors Affecting Cryptocurrency Prices in Commodity Futures Trading and Stock Market	2023
2		Analysis of Attraction Response on Product Packaging Based on EEG Signal: (A preliminary study of Neuromarketing on Packaging)	2023
3		Investigation of Human Brain Waves (EEG) to Recognize Familiar and Unfamiliar Objects Based on Power Spectral Density Features	2023
4		Data Analytics Between Regional Minimum Wage and Poverty Rate Per Province in Indonesia	2023
5		Classification of Sweet and Sour Taste Using Electroencephalography (EEG)	2023
6		Development of Low-Cost Prosthetic Using Circular Economy Approach for Disability in Indonesia	2023
7		Classification of Emotions (Positive-Negative) Based on EEG Statistical Features using RNN, LSTM, and Bi-LSTM Algorithms	2023