

Curriculum Vitae (CV)

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BIODATA

Full Name : WAYAN SUPARTA
Place of Birth/Date : Klungkung, Bali /10 August 1967
Citizenship : Indonesian
Sex/Height/Weight : Male/170 cm/64 kg
SCOPUS/Mendeley : 24330191400 (*h*-index: 12), 165 Documents and 686 total citation in 507 documents
Web of Science (WoS) : 150 Documents, 297 total citations dan *h*-index: 8
ORCID : 0000-0002-6193-1867
Google Scholar : 20KG9sEAAA AJ (*h*-index: 16, i10-index: 32), 202 Documents and 1167 total citations
Research Gate : https://www.researchgate.net/profile/Wayan_Suparta (G-Score: 31.16), 220 Documents, and 904 total citations



SHORT SELF-DESCRIPTION

Wayan Suparta has the character of an educator and has a very long experience as a lecturer and researcher. His latest position is a principal lecturer at the Department of Electrical Engineering, Institut Teknologi Nasional Yogyakarta. He is currently an associate faculty member in the Doctor of Computer Science (DCS) Program, Bina Nusantara University (BINUS) Jakarta. Previously, principal lecturer at the Informatics Department, Universitas Pembangunan Jaya Tangerang, Indonesia. Adjunct Professor in Civil Engineering Department of the University of Technology Yogyakarta and Lecturer in the Department of Electrical Engineering, Sanata Dharma University Yogyakarta. He has spent much of his life working in Malaysia, especially at Universiti Kebangsaan Malaysia (UKM) as a lecturer and researcher ranging from Senior Lecturer to Associate Professor for 10 years. He was promoted as de facto full professor at UKM (3 months), which finally resigned on June 16, 2017. He started his career as a Physics, Electronics, and Computer teacher at Cor Jesu High School Malang, and SMUK Santo Aloysius Bandung. Became a Lecturer in Electronic Engineering at the College Legenda Group, Malaysia (4 years). After graduating from his doctorate in March 2008, he was appointed as a Post-Doctoral Fellow for a year, and then he was appointed as a senior lecturer. The subjects taught are robotics, signal processing, circuit theory, Op-Amp, digital systems, microelectronics, electromagnetics, physics, statistics, machine learning, advanced softcomputing, etc. He is a compassionate, creative, and innovative lecturer with valuable experience in classroom administration, professional development, and project planning. Extensive experience in the education environment as an academic facilitator and instructional coach. Equally effective whether performing independently or as a teaching team member. Well-versed in the technology of education, both classroom, and online systems. Likewise in the field of research, developing fundamental and applied research, actively getting grants, and productive in publications such as high-impact journals and books, building networks, organizing conferences and workshops. Proficient in Matlab, Proteus, Python, and C++ for data analysis, control, and modeling as well as smart systems development using Arduino and Raspberry including installation of GPS/GNSS technology for satellite communications and environmental applications as well as designing robotics (UAV - Dronecopter), and Internet of Things (IoT).

AREAS OF EXPERTISE

- Electrical and Informatics
- Smart Environtronics
- DIY Dronecopter/UAV
- Internet of Things (IoT)
- Advanced Softcomputing
- Climate Change Measurement
- Mentoring and Training
- Organizing Conferences
- Writing for Publication

PROFESSIONAL EXPERIENCE

- Principal Lecturer**
(6 Feb 2019 – 5 Feb 2020)
- Teaching and Researcher at the Department of Informatics, Universitas Pembangunan Jaya, South Tangerang, Indonesia
 - Director of Institute of Research and Community Service (LP2M)
- Visiting Professor**
(1 Feb 2018 – 30 Jun 2018)
- Serving as short-term as a lecturer at the Electrical Engineering Department, University of Sanata Dharma Yogyakarta, Indonesia
 - Infrastructure preparation for opening the Informatics Master Program (Data Science)

Adjunct Professor

- Teaching at the Civil Engineering Department of the University of Technology Yogyakarta, Indonesia (01 Sep 2017 - 31 Jan 2018)
- Teaching and supervising PhD students at the Doctor of Computer Science Program, Bina Nusantara University (BINUS), Jakarta, Indonesia (Sep 2015 – Now)

De Facto Full Professor
(4 April 2017 - 16 Jun 2017)

Continues work as an associate professor at the Space Science Centre (ANGKASA), Universiti Kebangsaan Malaysia (UKM), Malaysia to be promoted for full professor (3 months)

Associate Professor
(4 Apr 2012 – 3 Apr 2017)

Senior Research Fellow at the Space Science Centre (ANGKASA), UKM for five years position with the following focused job:

- Research development and management (getting grants, publication in high-impact journals, and building networks)
- Development and evaluation of courses, programs, and community
- Team leader and teaching “Research Methodology” for postgraduate students
- Advisor and supervision (Undergraduate, Masters, and PhDs)
- Coordinator of a space study program and generated funds through international conferences and workshops

Senior Lecturer
(1 Jul 2008 – 3 Apr 2012)

Research Fellow at the Institute of Space Science (ANGKASA), UKM for four years position with the following focused job:

- Teaching, research development, publication, and project evaluation
- Mentoring and supervision (Undergraduate and Masters)
- Conference organizer and community services, etc.

Post-Doctoral Fellow
(1 Oct 2007 – 30 Jun 2008)

A research associate at the Institute of Space Science (ANGKASA), UKM with the following focused job:

- Advancing the Polar Research for the university
- Building networks with higher education and industry

Research Assistant
(1 Jul 2004 – 30 Sep 2007)

Graduate Research Assistant (GRA) during PhD program at the Institute of Space Science (ANGKASA), UKM which focused on the development of atmospheric remote sensing by GNSS techniques

Lecturer
(1 Jul 2000 – 30 Jun 2004)

Four years lecturer (contract) at the Legenda College Group (collaborated with Universiti Teknologi Malaysia (UTM) at Langkawi and Seremban, Malaysia with the following job:

- Teaching subject electrical and electronics
- Development of laboratories, accreditation, and Lab Coordinators to effectively implement lab use plans to ensure order and safety
- Curriculum development, examination, and assessment of students
- Administration and service to college and community, and others

Senior High School Teacher
(Oct 1994 – Jun 2000)

- Teacher of Physics and Computer at the SMUK Santo Aloysius Bandung, Indonesia and Physics Laboratory Coordinator (Jul 1997 – Jun 2000)
- Teacher for Physics, Electronic and Computer at the SMUK Cor Jesu Malang, East Java, Indonesia, coordinator for Physics, Computer, and Electronics Laboratories, Science Advisor, and service to school and community (Oct 1994 – Jun 1997)

EDUCATION & CREDENTIALS

PhD
(Jul 2003 – Mar 2008)

Electrical, Electronic and Systems Engineering, Faculty of Engineering, The National University of Malaysia (Universiti Kebangsaan Malaysia - UKM)

MSc
(Jul 1998 – Jan 2000)

Physics Electronics (major in Semiconductor Electronics/Materials Sciences), Department of Physics, The Institute of Technology Bandung (ITB), Indonesia

Pre Master
(Jul 1997 – Jun 1998)

Department of Physics, The Institute of Technology Bandung (ITB), Indonesia

BSc (Jul 1991 – Oct 1994)	Physics Electronics (major in instrumentation Systems and Control), Department of Physics, Sanata Dharma University, Yogyakarta, Indonesia
Diploma (D3) (Jul 1988 – Jun 1991)	Physics Education, IKIP Sanata Dharma, Yogyakarta, Indonesia

COURSES & TRAINING

DQLAB (Apr - May 2020)	R Fundamental For Data Science (Multimedia University)
ProActive Education 31 Jul – 2 Aug 2019	Training Arduino (Microcontroller), Yogyakarta, Indonesia
Tesla Institute 18 – 24 Jul 2019	MATLAB Programming for Data Mining and Neural Networks, Semarang, Central Java, Indonesia
DOAJ 2 Aug 2019	DOAJ (Directory of Open Access Journals) Workshop, Pamulang University (UNPAM), South Tangerang, Banten, Indonesia
IOES, University of Malaya (27 Feb 2015)	Workshop on Extreme Weather and Flood: Preliminary Investigation on Recent Flood in the East Coast of Malaysia
Astronautic Technology Sdn. Bhd (ATSB) 28 – 29 May 2014	Understanding Space Course, Grand Bluewave Hotel Shah Alam, Selangor, Malaysia
ATSB 25-27 Apr 2012	Satellite System Engineering Course, ATSB Building, Shah Alam, Selangor, Malaysia
Lean Six Sigma 18 – 19 April 2012	Lean Six Sigma For services Training, Putrajaya, Malaysia
ANGKASA UKM 5 Jun – 31 Jul 2009	Atmospheric Physics Course “Atmospheric Probing with Radio Waves”, Institute of Space Science, Universiti Kebangsaan Malaysia
Physics, ITB Bandung 26 – 31 July 1989	Workshop on Advanced Physics and Laboratory: Technical Training and Equipment Systems

PROFESSIONAL CERTIFICATION

Geospatialist (Gs.) (21 Jun 2017 - Now)	The institution of Geospatial and Remote Sensing Malaysia (IGRSM), Kuala Lumpur, Malaysia
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AWARDS & DISTINCTIONS

1. Fellowships and Awards

Academic Award	<ol style="list-style-type: none"> Teaching Best Award (TBA) from the Doctoral Programme of Computer Science, Bina Nusantara University, Jakarta, Indonesia (1 Feb 2020) Three years the highest SINTA Score for the Universitas Pembangunan Jaya Tangerang, Indonesia (19 Sep 2019)
Visiting Scientist	NIPR Visiting Scientist Program Award for Polar Sciences from Asian Countries, Japan (27 Nov - 10 Dec 2010)
First Best Paper	<ol style="list-style-type: none"> <i>Parametric Studies of ANFIS families capability for thunderstorm prediction</i>, 2017, Kuala Lumpur, Malaysia <i>Using Multiple Linear Regression Model to Estimate Thunderstorm Activity</i>, 2016, Yogyakarta, Indonesia <i>Preliminary Development of Greenhouse Gases System Data Logger Using Microcontroller Netduino and First Best Poster UKM Meteorological Monitoring Systems for Weather Forecasting</i>, 2016, Kota Kinabalu, Sabah, Malaysia <i>The Development of PWV Index for Air Pollution Concentration Detection in Banting, Malaysia</i>, 2015, Langkawi, Malaysia

	5. <i>A proposed physical mechanism for upper-lower atmospheric coupling using Global Positioning System via Polar regions</i> , 2012, Bandar Enstek, Negeri Sembilan, Malaysia
Second Best Paper	<i>A Preliminary Study of Cold Surges and Precipitation during the Northeast Monsoon Season over Malaysia</i> , 2014, Bali, Indonesia
Silver Medal	<ol style="list-style-type: none"> 1. <i>Development of Malaysian eARly warNing of Convective System (MANCIS) for Thunderstorm Prediction and Development of Autonomous Greenhouse Gases Monitoring System for Peatlands</i> 2017, Johor Bahru, Malaysia 2. <i>The Development of Precipitable Water Vapour Monitoring System for Weather Forecasting</i>, 2015, Johor Bahru, Malaysia
Bronze Medal	<ol style="list-style-type: none"> 1. <i>GPS-based Physical Mechanism Proposed for Upper-Lower Atmospheric Coupling Studies</i>, 2011, Universiti Kebangsaan Malaysia 2. <i>Polar-Equatorial Ionospheric and Magnetic Storms Characterization for the Advancement of Space Weather Prediction (Geospace Characterization)</i>, 2005, Kuala Lumpur, Malaysia
Space Publication Award	<ol style="list-style-type: none"> 1. Original Published Book Category “<i>Remote Sensing of Solar influence on antartic terrestrial climate from a GPS perspective</i>”, 2012, MOSTI, Malaysia 2. Presentation in Conference “<i>Proposed physical mechanism for upper-lower atmospheric coupling from GPS perspective</i>”, 2012, MOSTI, Malaysia 3. Publication in magazine/journal “<i>Solar Forcing on Antarctic Terrestrial Climate by Means of GPS Observation</i>”, 2011, MOSTI, Malaysia 4. Publication in magazine/journal “<i>Observations of Antarctic precipitable water vapor and its response to the solar activity based on GPS sensing</i>”, 2009, MOSTI, Malaysia 5. Presentation in Conference “<i>A new method for correlating solar activity and terrestrial climate using GPS sensing at Antarctica</i>”, 2008, MOSTI, Malaysia
Scholarship	<ol style="list-style-type: none"> 1. Master (MSc) Awarded by BPPS Dikti Jakarta, Indonesia (<i>Aug 1988 – Jan 2000</i>) 2. Pre-Master Awarded by URGE ITB, Indonesia (<i>Aug 1987 – Jul 1988</i>) 3. BSc Awarded by SMUK Cor Jesu Malang, Indonesia (<i>Jan 1992 – Sep 1993</i>)
Excellent Student	<ol style="list-style-type: none"> 1. <i>Young Researcher Winner II of Student Research Competition Award</i>, Coopertist V, Yogyakarta, Indonesia, 1994 2. <i>Young Student Researcher</i>, First Winner, awarded by Universitas Sanata Dharma Yogyakarta, Indonesia, April 1991 3. Special Scholarship Award for ‘Excellent Student’ of IKIP Sanata Dharma Yogyakarta (<i>Jan 1989 – Dec 1990</i>)
2. Keynote and Invited Speaker	
Public Lecture	<ol style="list-style-type: none"> 1. <i>Preparing Competitive HR, Facing the Era of the Industrial Revolution 4.0</i>, Universitas Negeri Surabaya (<i>13 Sep 2019</i>) 2. <i>Challenging Task in Forecasting Thunderstorms over the Antarctic Peninsula</i>, Universiti Kebangsaan Malaysia Bangi (<i>11 May 2017</i>) 3. <i>Potential Research with Application of GPS Technology</i>, FSSA, Universiti Malaysia Sabah, Kota Kinabalu, Malaysia (<i>4 Mar 2016</i>)
Keynote Speaker	<ol style="list-style-type: none"> 1. The STIPRAM Conference On Ecotourism 2018, <i>Towards Sustainable Ecotourism By Considering The Impacts of Climate Change</i>, Yogyakarta, Indonesia (<i>22-23 Feb 2018</i>) 2. 2016 International Conference on Science and Technology Applications in Climate Change, <i>GPS TroWav and ANFIS model to support the weather forecasting</i>, Kota Kinabalu, Malaysia (<i>11-12 Aug 2016</i>)

3. The 5th International Conference on Theoretical and Applied Physics (ICTAP 2015), *Utilization of GPS tropospheric delays for climate research*, Kendari, Indonesia (23-25 Nov 2015)
4. The 1st 2014 International Conference on Science and Technology Applications in Climate Change, *Application of GNSS remote sensing for climate change studies*, Bali, Indonesia (17-18 Nov 2014)
5. BIT's 3rd Annual World MarineTech Summit-2012. Session 1201: Real-time Navigation and GPS Technology. *The use of GPS water vapor measurements for climate change detection*. Dalian, China (20-23 Sep 2012)

Invited Speaker/Talk

1. *Remote Sensing of Antarctic Atmosphere for Climate Change Mitigation*, IGRSM, Faculty of Engineering, Universiti Putra Malaysia (13 Jul 2017)
2. *Sustainability of Antarctic Research* in conjunction with IconSpace2017, National Planetarium Kuala Lumpur (5 May 2017)
3. Workshop on Space Technology, *Space Environment Information System (SPENVIS)*, National Space Agency, Malaysia (11 Mar 2015)
4. The GPS Meteorology Workshop, *Plan application of GPS for numerical weather prediction*, Kuala Lumpur, Malaysia (14 Aug 2014)
5. The ANGKASA Series Seminar 4/2012, *Electrically coupling between lower and upper atmosphere*, UKM Bangi, Malaysia (4 Dec 2012)
6. 2012 ISWI & MAGDAS School: *Sensing of upper and lower levels of the polar atmosphere using GPS*, Bandung, Indonesia (17-26 Sep 2012)

TEACHING EXPERIENCE (COURSE TAUGHT)

A. Diploma (D3) and Undergraduate Levels (U)

(1) DDK1212: Computer Skills (D3)	Jul 2000 – Sep 2000
(2) DDE1713: Physics Electronics (D3)	Jul 2000 – Jun 2004
(3) DDE1113: Circuit Theory 1 (D3)	Jul 2000 – Dec 2000
(4) DDE2222: Electronic 2 (D3)	Jul 2000 – Dec 2000
(5) DDE1312: Electronic Digital 1 (D3)	Jul 2001 – Dec 2001
(6) DDE1723: C Programming (D3)	Jan 2001 – Jun 2001
(7) DDE2422: Instrumentation (D3)	Jan 2001 – Dec 2003
(8) DDE3253: Microelectronics (D3)	Jul 2001 – Jun 2004
(9) DDE2123: Circuit Theory 2 (D3)	Jan 2002 – Dec 2002
(10) DDE1213: Electronic 1 (D3)	Jul 2002 – Dec 2002
(11) DDE1702: Workshop Electronic (D3)	Jul 2002 – Jun 2004
(12) DDE2323: Electronic Communication (D3)	Jul 2003 – Dec 2003
(13) 206104-17: Fundamentals of Physics (U)	Sep 2017 – Feb 2018
(14) 206102-17: Statistics (U)	Sep 2017 – Feb 2018
(15) STMA404: Applied Electricity and Magnetism (U)	Feb 2018 – Jul 2018
(16) STE227: Operational Amplifier (Op-Amp) (U)	Feb 2018 – Jul 2018
(17) KOMP142: Computer System Architecture (U)	Feb 2018 – Jul 2018
(18) FISK123: Electromagnetics (U)	Feb 2018 – Jul 2018
(19) INF210: Computer & Society (U)	Feb 2019 – Jun 2019
(20) INF104: Web Design (U)	Feb 2019 – Jun 2019
(21) INF202: Data Structure (U)	Feb 2019 – Jun 2019
(22) INF203: Digital System (U)	Aug 2019 – Dec 2019
(23) IFA103: Fundamental Physics (U)	Aug 2019 – Dec 2019
(24) CPS105: Fundamental Mathematical Logics (U)	Aug 2019 – Dec 2019
(25) TE12010: Mathematics Engineering (U)	Sep 2020 - Feb 2021
(26) TES0403: Signal Processing Systems (U)	Feb 2021 – Jun 2021
(27) TES0609PL: Control System for Remote and Mobile (U)	Feb 2021 – Jun 2021
(28) TES0614PL: Autonomous Robotics System (U)	Feb 2021 – Jun 2021
(29) TES0519PL: Geographic Information System (U)	Sep 2021 – Dec 2021
(30) TES0520PL: Machine Learning (U)	Sep 2021 – Dec 2021
(31) TES0108: Engineering Physics (U)	Sep 2021 – Dec 2021

B. Postgraduates Level

(1) Z1RA6014: Research Methodology (Master & PhD)	Jul 2010 – Jun 2015
(2) EESR2013: Remote Sensing Technology (PhD)	Aug 2013 - Jan 2017
(3) ZFRI6014: Research Methodology (Master & PhD)	Feb 2017 - Aug 2017
(4) RSCH9012: Research Methodology (PhD)	Feb 2015 – Feb 2021
(5) PHYS9001: Philosophy of Science (PhD)	Apr 2021 – Aug 2021
(6) COMP9022: Advanced Softcomputing (PhD)	Sep 2021 – Jan 2022

RESEARCH GRANTS

No.	Title of Project	Source	Role
1.	Design and Development of Arducopter Aircraft System for Atmospheric Water Vapor Measurement (01/04/2021 – 31/10/2021)	Institut Teknologi Nasional Yogyakarta	Leader/PI
2.	Application of ANFIS For Early Flooding Urban Detection System In Tangerang Selatan (01/05/2019 – 30/04/2020)	Universitas Pembangunan Jaya	Leader/PI
3.	Estimation of Global Lightning Activity and Observations of Atmospheric Electric Field for Sun-Earth Coupling Prediction (01/11/2014 – 31/10/2017) – RM 971,200	Ministry of Science, Technology and Innovation Malaysia (MOSTI)	Leader/PI
4.	Development of autonomous greenhouse gases system for tropical peatland monitoring (01/05/2015 – 31/10/2017) – RM 217,090	MOSTI Malaysia	Leader/PI
5.	Modeling of Mesoscale Convective Systems Over Malaysia For Space Launcher Development (01/07/2014 – 30/06/2016) – RM 75,000	MOSTI Malaysia	Leader/PI
6.	Space energetic particles analysis and its impact to Low Earth Orbit/ Near Equatorial Orbit satellites (16/12/2013 – 15/12/2015) – RM 88,000	Ministry of Higher Education of Malaysia (MOHE)	Leader/PI
7.	Investigation of precursor pollutants detection between Sumatra and Malaysia region (16/12/2013 – 15/12/2015) – RM 70,000	MOHE Malaysia	Leader/PI
8.	Solar terrestrial observations between Polar and Equatorial regions (01/08/2008 – 31/07/2015): RM 700,000	MOSTI Malaysia	Leader/PI
9.	GPS-based Physical Mechanism Development for Upper Lower Atmospheric Coupling Studies 7/12/2010 – 26/12/2012: RM 70,000	MOHE Malaysia	Leader/PI
10.	A New Technique for ENSO Atmospheric Observation via Ground-Based GPS-Receiver 27/12/2010 – 26/12/2012: RM 65,000	MOHE Malaysia	Leader/PI
11.	Satellite-based Global Lightning and Severe storm monitoring using GPS Receivers (01/07/2010 – 30/06/2012): RM 25,000	Universiti Kebangsaan Malaysia (UKM)	Leader/PI
12.	Variation of health impact of ground-level ozone in Malaysia: mitigation procedures and future policy implementation (2.5 years): RM 350,00	MOSTI Malaysia	Member
13.	The Science of Tropical Climate Change (04/07/2011 -03/10/2014): RM 1,102,500	MOHE Malaysia	Co-Leader/PI
14.	Investigation the response of Ionospheric TEC to geomagnetic storm over Malaysia region (2 years): RM 30,000	UKM	Co-Leader/PI
15.	Development of Tropospheric Scintillation Algorithm For Satellite Broadcast Applications (2 Years): RM 187,000	MOSTI Malaysia	Co-Leader/PI
16.	Polar-Equatorial Geospace Characterization for the Advancement of Space and climate Prediction (2 Years): RM 50,000	UKM	Co-Leader/PI
17.	Enhancement of space weather and communication research (1 year): RM 25,000	UKM	Co-Leader/PI
18.	Increased levels of awareness and creativity in the use of electronic communications to cope with disasters among volunteers via amateur radio (2 years): RM 25,000	UKM	Co-Leader/PI
19.	Impact studies, adaptations, vulnerabilities and mitigation of climate change and space science (1 year): RM 27,000	UKM	Co-Leader/PI
20.	Enhancement of space weather and communication research (1 year): RM 5,000	UKM	Co-Leader/PI
21.	Parameters influenced the space weather (1 year): RM 30,000	UKM	Co-Leader/PI

PUBLICATION

A. Selected Publications (10 Journals with the highest impact)

1. W. Suparta, A. Warsita, Ircham. A low-cost development of automatic weather station based on Arduino for monitoring precipitable water vapor, Indonesian Journal of Electrical Engineering and Computer Sciencethis link is disabled, 2021, 24(2): 744–753, doi: 10.11591/ijeecs.v24.i2.pp744-753.
2. Suparta, W., Abu Samah, A. Rainfall prediction by using ANFIS times series technique in South Tangerang, Indonesia. Geodesy and Geodynamics, 11(6): 411-417, doi: 10.1016/j.geog.2020.08.001.
3. David, D., Suparta, W., Trisetyarso, A., Abbas, B.S., Kang, C. Text emotion detection for Asian para games tweet in Indonesia. *ICIC Express Letters*, 13(8): 705-709, doi: 10.24507/icicel.13.08.705
4. Suparta, W., Zulkeple, S. K. Investigating space radiation environment effects on communication of Razaksat-1. *Journal of Aerospace Technology and Management* 10: e2218. doi: 10.5028/jatm.v10.815.
5. Suparta, W., Zulkeple, S. K. Simulation of major space particles toward selected materials in a near-equatorial low earth orbit. *Astrophysics and Space Science* 362: 104. doi: 10.1007/s10509-017-3082-3.
6. Suparta, W., Alhasa, K. M. Modeling of Precipitable Water Vapor using an Adaptive Neuro-Fuzzy Inference System in the Absence of the GPS Network. *Journal of Applied Meteorology and Climatology* 55(10): 2283-2300, doi: 10.1175/JAMC-D-15-0161.1.
7. Suparta, W., Alhasa, K. M. Modeling of zenith path delay over Antarctica using an adaptive neuro fuzzy inference system technique. *Expert Systems With Applications*

- 42(3): 1050-1064.
8. Suparta, W., Application of Near Field Communication Technology for Mobile Airline Ticketing. *Journal of Computer Science* 8(8): 1235-1243, doi: 10.3844/jcssp.2012.1235.1243. 2012
 9. Suparta, W., Abdul Rashid, Z. A., Mohd Ali, M. A., Yatim, B., Fraser, G. J. Analysis of GPS-sensed atmospheric water vapour variability and its response to the terrestrial winds over Antarctica. *Physics and Chemistry of the Earth, Parts A/B/C*, 34(1–2): 72-87. 2009
 10. Suparta, W., Abdul Rashid, Z. A., Mohd Ali, M. A., Yatim, B., Fraser, G. J. Observation of Antarctic precipitable water vapor and its response to the solar activity based on GPS sensing. *J. Atmos. Sol-Terr. Phys.*, 70, 1419-1447 2008

B. Published Book

1. *Advances in Urban Lifestyle and Technology (Cambridge Scholar Publishing)* 2021
2. *Urban Development and Lifestyle (Nova Science Publishers)* 2020
3. *RazakSat-1: Sebuah Analisis Kehilangan Isyarat (UKM Press)* 2018
4. *Space Science and Communication for Sustainability (Springer)* 2017
5. *Modeling of Tropospheric Delays Using ANFIS (Springer)* 2015
6. *GPS Meteorology: Concept & Application (Lambert Academic Publishing)* 2012
7. Remote Sensing of Solar Influence on Antarctic Terrestrial Climate from a GPS Perspective (*Nova Science Publishers*) 2011

PATENTS/INTELECTUAL PROPERTY

VerTEC (software/tool), No. 000173721 (EC00202000053, 2 January 2020)

PUBLIC/COMMITTEE/COMMUNITY SERVICES

A. University Management

Director Institute of Research and Community Service (*Kepala Lembaga Penelitian dan Pengabdian Masyarakat*), Universitas Pembangunan Jaya, Indonesia (1 Jul 2019 - 5 Feb 2020)

- Board Member**
1. *University Senate*, Universitas Pembangunan Jaya, Indonesia (1 Jul 2019 - 5 Feb 2020)
 2. *University Strategic Plan* of Universitas Pembangunan Jaya, Indonesia (2 May 2019 - 31 Dec 2019)

B. Faculty Member

- Chairman**
1. Subject Development "Research Methodology" for postgraduate studies of the Institute of Climate Change, Universiti Kebangsaan Malaysia (1 Aug 2016 - 16 Jun 2017)
 2. Reevaluation of the Program Studies that has been run 10 years in the Institute of Climate Change, Universiti Kebangsaan Malaysia (13 Feb 2017 - 31 Dec 2017)

- Coordinator**
1. Coordinator for President Protem of Postgraduate Association, Institute of Space Science (ANGKASA), Universiti Kebangsaan Malaysia (19 Dec 2012 - 15 Mar 2013)
 2. Space Science Program of the Institute of Space Science (ANGKASA), Universiti Kebangsaan Malaysia (5 Jun 2012 - 15 Dec 2013)

- Advisor**
1. Indonesia Student Association (PPI), UKM (1 Jan 2015 – 31 Dec 2017)
 2. Angkasa Student Association (ASA), (1 Jan 2013 – 31 Dec 2018)
 3. *Presiden Protem Persatuan Siswazah Angkasa*, 19 Dec 2012

- Member**
1. Development of Master Program (Informatics Data Science) in the University of Sanata Dharma Yogyakarta, Indonesia (1 Feb 2018 - 30 Jun 2018)
 2. Postgraduate Committee at the Institute of Climate Change (IPI), Universiti Kebangsaan Malaysia (Jan 2014 - Jun 2017)
 3. Formulation of Program Studies for Institute of Climate Change, Universiti Kebangsaan Malaysia (5 Feb 2015 - 4 Feb 2017)
 4. Postgraduate Committee at the Space Science (ANGKASA),

- Universiti Kebangsaan Malaysia (23 Aug 2011 - 15 Dec 2013)
 5. IPI Graduate Examination Committee (1 Jan 2015 – 31 Dec 2016)

C. Conference Organizer

Organizing the conference or workshop which involved as the general chair, session chair, etc.

General Chair

1. 2020 International Conference on Urban Sustainability, Environment, and Engineering (CUSME 2020), Bali, Indonesia (20-21 Jan 2020)
2. 2016 International Conference on Science and Technology Applications in Climate Change (STACLIM 2016), Kota Kinabalu, Sabah, Malaysia (11-12 Aug 2016)
3. Chair for "Tutorial on STK for Space Applications", Langkawi, Malaysia (12 Aug 2015)
4. 1st International Conference on Science and Technology Applications in Climate Change (STACLIM 2014), Bali, Indonesia (17-19 Nov 2014)
5. 1st GPS Tropospheric Water Vapor (TroWav) Workshop, Bangi, Selangor, Malaysia (2 - 4 Oct 2012)
6. ANGKASA Postgraduate Research Seminar (SPSA 2014), Pahang, Malaysia (24-26 Apr 2013)
7. 2nd GPS Tropospheric Water Vapor (TroWav) Workshop, Bangi, Selangor, Malaysia (2 - 4 Oct 2013)

TPC Chair

1. 9th IGRSM International Conference and Exhibition on Geospatial and Remote Sensing (IGRSM 2018), Kuala Lumpur, Malaysia (24-25 Apr 2018)
2. 2017 International Conference on Space Science and Communication (IconSpace2017), Kuala Lumpur (3-5 May 2017)
3. 2015 International Conference on Space Science and Communication (IconSpace2015), Langkawi (10-12 Aug 2015)

Chair for Publicity and Sponsorship

1. 2013 IEEE International Conference on Space Science and Communication (IconSpace2013), Melaka, Malaysia (1-3 Jul 2013)
2. 2011 IEEE International Conference on Space Science and Communication (IconSpace2011), Penang, Malaysia (12 - 13 Jul 2011)
3. 2009 International Conference on Space Science and Communication (IconSpace2009), Port Dickson, (26-27 Oct 2009)
4. Human Space Technology Expert Meeting, Putrajaya, Malaysia (14-18 Nov 2011)

Scientific Committee

1. 10th IGRSM International Conference and Exhibition on Geospatial and Remote Sensing (IGRSM 2020), Kuala Lumpur, Malaysia (17-18 Mar 2020)
2. Workshop on Atmospheric Chemistry and Climate Change in Asia, Kuala Lumpur, Malaysia (14-15 Jul 2014)
3. 7th IGRSM International Remote Sensing & GIS Conference and Exhibition (IGRSM 2014), Kuala Lumpur (22-23 Apr 2014)
4. 6th Malaysian International on Antarctica (MISA 6), Penang, Malaysia (8 - 11 Oct 2013)
5. 5th Malaysian International on Antarctica (MISA 5), Kuala Lumpur, Malaysia (14-15 Jun 2011)
6. 4th Malaysian International on Antarctica (MISA 4), Kuala Lumpur, Malaysia (6-8 Apr 2009)
7. 2016 International Conference on Information Technology and Digital Applications (ICITDA 2016), Yogyakarta, Indonesia (14 - 16 Nov 2016)

D. Professional Scientific Members

1. Institution of Geospatial and Remote Sensing Malaysia (IGRSM) – Geospatialist (Gs.)
2. The National Antarctic Program in Malaysian Antarctic Research Programme (MARP)

3. International Association of Computer Science and Information Technology (IACSIT)
4. Institute of Electrical and Electronics Engineers (IEEE)
5. Senior Members of Asia-Pacific Chemical, Biological & Environmental Engineering Society (APCBEEES)
6. Asia Oceania Geosciences Society (AOGS)

E. Examiner/Assessor/Reviewer

1. International reviewer for refereed Journal and Conference papers
2. Book proposal evaluator (Elsevier and Springer)
3. PhD/MSc thesis examination (external and internal)
4. Research proposal assessment in the university, country, and international levels
5. Curriculum and education program assessment
6. New staff or renew staff contract evaluation
7. Policy on climate mitigation and adaptation
8. Event organizer assessment
9. Academic program audit

F. Service at National Level and International

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|----|---|---------------------------|
| 1. | <i>Editorial Board</i> of Journal of Water and Land Development, Institute of Technology and Life Sciences | 2021 - Now |
| 2. | <i>Editor-in-Chief of Widyakala Journal</i> , Universitas Pembangunan Jaya, Indonesia | 1 Jul 2019 – 6 May 2020 |
| 3. | <i>Editorial Board of Jurnal Infotel</i> , Institut Teknologi Telkom Purwokerto, Indonesia | 10 Jan 2019 - Now |
| 4. | <i>Editorial Board</i> of <i>Geographia Technica</i> , Romania and Guest Editor for the special issue on <i>Physical and Technical Geography Issues in Urbanism</i> | 25 Feb 2019 – 30 Apr 2020 |
| 5. | <i>Member of the Inter-Agency for Implementing the Comprehensive Study on Predictability of Extreme Weather and Flood</i> , Malaysia | 2015 – 2017 |
| 6. | <i>Managing Guest Editor</i> of Journal of Atmospheric and Solar-Terrestrial Physics (JASTP), for a special issue “ <i>Space Science</i> ” | 2017 - 2018 |
| 7. | <i>Chief Editor</i> for the book “ <i>Space Science and Communication for Sustainability</i> ” published by Springer Nature | 2017 - 2018 |

G. Collaborated with the National and International Partners

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| 1. | Lightning and Thunderstorm Observations in Carlini Base of Antarctica Peninsula with Instituto Antartico Argentina (IAA): Dr. Adriana M. Gulisano | 2016 - 2018 |
| 2. | Weather Extreme in Malaysia monitored by GPS with National Space Agency of Malaysia (ANGKASA): Mhd. Fairos Asillam | 2015 - 2017 |
| 3. | Conjugacy effects between Arctic and Antarctic with National Institute of Polar Research (NIPR), Japan: Prof. Dr. Natsuo Sato and Prof. Dr. Akira Kadokura | 2008 - 2017 |
| 4. | Sharing Observation Station at Husafell of Arctic with Science Institute of University of Iceland (SIUI), Reykjavik, Iceland: Prof. Dr. Gunnlaugur Bjorsson | 2008 - 2017 |
| 5. | El Nino and La Nina Observation In South China Sea with University of Malaysia Sabah (UMS): Prof. Dr. Baba Musta | 2010 - 2017 |
| 6. | Solar Activity, Magnetospheric and Aviation Modeling with National Institute of of Aeronautics and Space (LAPAN) Indonesia, Prof. Dr. Thomas Djamaludin | 2010 - 2015 |
| 7. | Antarctica Research on Space Weather Investigation with Department of Physics and Astronomy, Canterbury University, New Zealand: Grahame J. Fraser | 2004 - 2012 |
| 8. | Scott Base Antarctica Meteorology Data with The National Institute of Water and Atmospheric Research (NIWA): Andrew R. Harper | 2004 - 2012 |

H. Journal Referee (Reviewer)

Reviewing a paper in the various reputed journals (with WoS, Scopus, DOAJ, SINTA, and other indexed databases) such as Computer & Electrical Engineering, Bulletin Electrical, Electronic and Informatics, Journal of Engineering and Technological Sciences, Journal of Computer and System Sciences, Expert System With Applications, Applied Computing and Informatics, etc.