

Curriculum Vitae



Dr Dini Oktarina Dwi Handayani

Senior Lecturer

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EDUCATION

PHD 2012-2017	Computer Science International Islamic University Malaysia
Master 2008 – 2011	Information Technology International Islamic University Malaysia
Bachelor 1998 – 2002	Informatics Engineering ST-INTEN, West Java, Indonesia

AREAS OF EXPERTISE

(Area)

Artificial Intelligence (Machine Learning, Deep Learning, Fuzzy logic, Data Science)
Computational Linguistic (Natural Language Processing, Sentiment Analysis)
Cognitive Science (Affective Computing, Brain Computer Interaction)

TEACHING

(Course Title),(Level of Study),(Institution),(Month/Year)

International Islamic University Malaysia (2022 - Present) Object Oriented Programming, Principle of IT Security
Taylor's University (2018 - 2021) Object Oriented Programming, Computer Vision and Natural Language Processing, Data Science Principle, Artificial Intelligence, Data Visualization, Principles of Software Engineering, Web Development Fundamental Data Science Trainer, Taylor's University, Client: CIMB Malaysia, July 2019
International Islamic University Malaysia Object Oriented Programming (2016-2017) PHP Trainer, IAT (IIUM Advances Technologies Sdn Bhd), Client: Malaysian Meteorological Department, July 2013 Web Programming (2013-2014) Multimedia (2012-2013)
Bogor Agriculture University
Database, (2003-2004)

WORKING EXPERIENCE

Jul 2011 – Dec 2011	Software Engineer CITA (Centre for IT Advancement) Project : Neti Client : CIDB e-construct
May 2007 – Jun\ 2008	Software Engineer PT Socio Komunikasi Indonesia. Project : Electronic Toyota Warranty Claim Client : Fujitsu Indonesia (Toyota Motor Thailand) Duration : Feb 2008 – June 2008 Project : Toyota ICS Client : Fujitsu Indonesia Duration : May 2007 – Feb 2008

<p>Sep 2003 – May 2007</p>	<p>Software Engineer PT Jakarta Software Komunikasi (Sigma Group), Jakarta Project : Telkomsel HRIS Client : SSI Duration : March 2007 – Mei 2007</p> <p>Project : Telkomsel 3G Client : NOKIA, Jakarta Duration : November 2006 – March 2007</p> <p>Project : OSS(Operating System Support) Client : NOKIA, Jakarta Duration : July 2006 – October 2006</p> <p>Project : SERES(Sera Report) Client : Sigma Group, Jakarta Duration : June 2005 – July 2006</p> <p>Project : LINTASWATA Client : Asuransi Wahana Tata, Jakarta Duration : January 2004 – June 2005</p> <p>Project : AEGIS(Acc Enterprise Global Information System) Client : Astra Credit Company, Jakarta Duration : September 2003 – December 2003</p>
<p>May 2003 – Sep 2003</p>	<p>Software Engineer PT Dirgantara Indonesia (SBU-IT), Bandung Project : BNS(Bumi Putera New System) Client : Bumi Putera, Jakarta Duration : May 2003 – September 2003</p>

PUBLICATIONS

(Title of publication in APA style)

BOOK CHAPTER

2018

Kamaruddin, Norhaslinda and Handayani, Dini Oktarina Dwi and Abdul Rahman, Abdul Wahab (2017) Computational visualization of customer mood using affective space model approach. In: 16th International Conference on New Trends in Intelligent Software Methodology Tools, and Techniques, SoMeT 2017, 26th-28th September 2017, Kitakyushu, Japan.

2017

Dini Handayani, Abdul Wahab, Norhaslinda Kamaruddin, Hüseyin Abut Correlation of neurophysiological measurement of anxiety and driving behavior, Vehicle Systems and Driver Modelling: DSP, Human-to-vehicle interface, Driver Behavior, and Safety, 2017 Walter de Gruyter GmbH, Berlin/Boston

ARTICLE IN JOURNALS

2021

Alaros, E., Handayani, D. O. D., Yaacob, H., & Lubis, M. (2021). EEG Neurofeedback Training Among Adult with Attention Deficit : A Review Article. IOP Conference Series: Materials Science and Engineering, 1077. <https://doi.org/10.1088/1757-899X/1077/1/012061> (SCOPUS-Indexed)

Xiaoxi, K., Handayani, D. O. D., & Yaacob, H. (2021). Comparison between Butterworth Bandpass and Stationary Wavelet Transform Filter for Electroencephalography Signal. IOP Conference Series: Materials Science and Engineering, 1077. <https://doi.org/10.1088/1757-899X/1077/1/012024> (SCOPUS-Indexed)

2020

Xiaoxi Kang, Handayani, DOD., Chong Pei Pei, Acharya U. Rajendra, (2020). Profiling of pornography addiction among children using EEG signals: a systematic literature review, 103970.

2019

Lubis, M., Sutoyo, E., Azuddin, M., & Handayani, D. (2019). User Experience in Mobile Application Design: Utility Defined Context of Use. Journal of Physics: Conference Series, 1361, 12043. <http://doi.org/10.1088/1742-6596/1361/1/012043> (SCOPUS-Indexed)

Lubis, M., Sutoyo, E., Handayani, D., & Azuddin, M. (2019). Clinic Management System: Business Process Re-engineering based on User Experience (UX). Journal of Physics: Conference Series, 1361, 12031. <http://doi.org/10.1088/1742-6596/1361/1/012031> (SCOPUS-Indexed)

Yaacob, H., Omar, H., Handayani, D., & Hassan, R. (2019). Emotional Profiling Through Supervised Machine Learning of Interrupted Eeg Interpolation. International Journal of Advanced Computer Research (IJACR), 9. Retrieved from <https://www.accentjournals.org/PaperDirectory/Journal/IJACR/2019/7/6.pdf> (SCOPUS-Indexed)

Xiaoxi, K., Handayani, D. O. D., Sukumaran, S., Hamzah, N., & Yacoob, H. (2019). Comparison of Brain Computer Interface (BCI) Devices based on Security and Privacy Implications. Scopus Index

2018

Kamaruddin N, Rahman AWA, Handayani, D. Pornography addiction detection based on neurophysiological computational approach. Indones J Electr Eng Comput Sci. 2018;10(1):138–45. (SCOPUS-Indexed)

2016

DOD Handayani, A Rahman, A Wahab, HS Yaacob Evaluation of feature extraction and classification techniques for EEG-based subject identification, 2016, Jurnal Teknologi 78 (9-3), 41-48 (SCOPUS-Indexed)

2015

Handayani, D., Sediono, W., Shah, A. Anomaly detection in vessel tracking - A Bayesian networks (BNs) approach, (2015) Transactions of the Royal Institution of Naval Architects Part A: International Journal of Maritime Engineering, 157, pp. A145-A152. (ISI-Indexed)

Handayani, D., Wahab, A., Yaacob, H. Emotion and mood recognition in response to video, (2015) Journal of Mobile Multimedia, 11 (3-4), pp. 296-312. (SCOPUS-Indexed)

Dini Handayani, Hamwira Yaacob, Abdul Wahab Abdul Rahman, Wahyu Sediono, Asadullah Shah Computational Modeling of Mood from Sequence of Emotions, Advanced Science Letters, Vol. 4, 400–407, 2015 (SCOPUS-Indexed)

Dini Handayani, Abdul Wahab, Hamwira Yaacob Recognition of Emotions in Video Clips: The Self-Assessment Manikin Validation, 2015, TELKOMNIKA (Telecommunication Computing Electronics and Control), Vol. 13, Issue 4, Pg. 1343-1351 (SCOPUS-Indexed)

D Handayani, M Kartiwi Natural Language Question and Answer System on Semantic Health Website, 2015, International Journal on Perceptive and Cognitive Computing 1 (1)

2013

Handayani, D.O.D., Sediono, W., Shah, A. Prototyping of a situation awareness system in the maritime surveillance, (2013) IOP Conference Series: Materials Science and Engineering, 53 (1), art. no. 012007 (SCOPUS-Indexed)

ARTICLE IN PROCEEDING

2019

I. M. Artha Agastya, D. O. Dwi Handayani and T. Mantoro, "A Systematic Literature Review of Deep Learning Algorithms for Personality Trait Recognition," 2019 5th International Conference on Computing Engineering and Design (ICCED), Singapore, Singapore, 2019, pp. 1-6, doi: 10.1109/ICCED46541.2019.9161107. (SCOPUS-Indexed)

2018

Handayani, D., Bakar, N. S. A. A., Yaacob, H., & Abuzaraida, M. A. (2018). Sentiment Analysis for Malay Language: Systematic Literature Review. 2018 International Conference on Information and Communication Technology for the Muslim World (ICT4M), 305–310. <http://doi.org/10.1109/ICT4M.2018.00063> (SCOPUS-Indexed)

Bakar, N. S. A. A., Yaacob, H., Handayani, D., & Abuzaraida, M. A. (2018). Malay Online Virtual Integrated Corpus (MOVIC): A Systematic Review. 2018 International Conference on Information and Communication Technology for the Muslim World (ICT4M), 243–248. <http://doi.org/10.1109/ICT4M.2018.00052> (SCOPUS-Indexed)

Rao, V. R. P., Puwakpitiyage, C. A. H., Shafiq, D. A., Islam, F., Handayani, D. O. D., Yacoob, H., & Mantoro, T. (2019). Design and development of facial recognitionbased library management system (FRLMS). Proceedings - 2018 4th International Conference on Computing, Engineering, and Design, ICCED 2018, 119–124. <http://doi.org/10.1109/ICCED.2018.00032> (SCOPUS-Indexed)

Agastya, I. M. A., Setyanto, A., Kusriani, & Handayani, D. O. D. (2018). Convolutional Neural Network for Pornographic Images Classification. Fourth International Conference on Advances in Computing, Communication & Automation (ICACCA 2018), 1–5 (SCOPUS-Indexed)

Sopheha PRUM, Dini Oktarina Dwi Handayani, Patrice Boursier Abnormal Cervical Cell Detection using HoG Descriptor and SVM Classifier, International Conference on Advances

in Computing, Communication and Authorization, 26/10/2018 to 28/12/2018, Taylor's University.

2015

Dini Handayani, Hamwira Yaacob, Abdul Wahab, Imad Fakhri Taha Alshaikli Statistical Approach for a Complex Emotion Recognition Based on EEG Features, Advanced Computer Science Applications and Technologies (ACSAT), 2015 (SCOPUS-Indexed)

Dini Handayani, Abdul Wahab, Norhaslinda Kamaruddin, Hüseyin Abut Understanding Driver Behavior Using Eeg Brain Waves And Depression Anxiety Stress Scales (Dass-21) Psychometric Analysis, The 7th Biennial Workshop on Digital Signal Processing for Vehicle Systems, October 14-16, 2015, Berkeley,CA (SCOPUS-Indexed)

Handayani, D.O.D., Sediono, W., Shah, A. Identification of vessel anomaly behavior using support vector machines and bayesian networks (2015) Proceedings - 5th International Conference on Computer and Communication Engineering: Emerging Technologies via Comp-Unication Convergence, ICCCE 2014, art. no. 7031651, pp. 258-261. (SCOPUS-Indexed)

2014

Handayani, D., Yaacob, H., Abdul Rahman, A.W., Sediono, W., Shah, A. Systematic review of computational modeling of mood and emotion, (2014) 2014 the 5th International Conference on Information and Communication Technology for the Muslim World, ICT4M 2014, art. no. 7020611 (SCOPUS-Indexed)

2013

Handayani, D.O.D., Sediono, W., Shah, A. Anomaly detection in vessel tracking using support vector machines (SVMs), (2014) Proceedings - 2013 International Conference on Advanced Computer Science Applications and Technologies, ACSAT 2013, art. no. 6836578, pp. 213-217. (SCOPUS-Indexed)

2012

Handayani, D.O.D., Sediono, W., Shah, A. Design and development of the FMCW Radar Scene Generator, (2012) ISIEA 2012 - 2012 IEEE Symposium on Industrial Electronics and Applications, art. no. 6496667, pp. 39-44. (SCOPUS-Indexed)

2010

Handayani, D., Kartiwi, M., Hakiem, S. An implementation of natural language processing on ontology-based electronic health website: A case of Female-related diseases domain, (2010) Proceeding of the 3rd International Conference on Information and Communication Technology

RESEARCH PROJECT

(Project title),(Role),(Duration),(Level)

- Extraction of Real-time Features for Mental Fatigue Detection During Virtual Learning Activities through Brain Computer Interface (BCI), **Co-researcher**, 2021 to 2022 (National)

- Profiling of Pornography Addiction among Children using Neuro-Physiological Computational Model (NCM), **Project Leader**, 2019 to 2021 (National), FRGS.
- A framework for automated cancer cells detection using computer vision and deep learning algorithms, **Co-researcher**, 2019 to 2022 (National), FRGS.
- Multi-use Illuminated Cervical Sampling Device (PapLight Pro) and Artificial Intelligence-driven Pap Smear Image Analysis, **Co-researcher**, 2019 to 2022 (National), PRGS.
- Development of a Framework for Neurofeedback Attention Training, **Project Leader**, 2018 to 2020 (Taylor's University)
- Development of Malay Online Virtual Integrated Corpus (MOVIC) for Sentiment Analysis using Web-scraping, **Co-researcher**, 2017 to 2019 (Private)

SUPERVISION

(Title of Thesis),(Name of Candidates),(Academic Level),(Role)

- KANG XIAOXI, Master by Research (Main Supervisor)
- LIM ENG LYE, PhD by Research (Main Supervisor)
- ALA AHMED YAHYA HAG, PhD by Research (Main Supervisor)
- KONG SHIEN NIE, Master by Research (Main Supervisor)
- ESHRAK ABDULQADER ALI, Master by Research (Main Supervisor)
- I MADE ARTHA AGASTYA, PhD by Research (Main Supervisor)

PRESENTATION

(Title),(Event),(Date Presented),(Organiser),(Level)

ORAL PRESENTER

A Systematic Literature Review of Deep Learning Algorithms for Personality Trait Recognition, 5th International Conference on Computing Engineering And Design, 11/04/2019 to 13/04/2019, Nusa Putra University, Indonesia (International)

Convolutional Neural Network for Pornographic Images Classification, Fourth International Conference on Advances in Computing, Communication & Automation, 26/10/2018 (International)

Design and Development of Facial Recognition based Library Management System

(FRLMS), 4th ICCED 2018 Conference, 06/09/2018 to 08/09/2018, Nusa Putra University (International)

Malay Online Virtual Integrated Corpus (MOVIC): A Systematic Review, International Conference on Information and Communication Technology for The Muslim World, ICT4M 2018, 23/07/2018 to 25/07/2018, International Islamic University Malaysia (International)

Sentiment Analysis for Malay Language: Systematic Literature Review, International Conference on Information and Communication Technology for The Muslim World, ICT4M 2018, 23/07/2018 to 25/07/2018, International Islamic University Malaysia (International)

Understanding Driver Behavior Using Eeg Brain Waves and Depression Anxiety Stress Scales (Dass-21) Psychometric Analysis, The 7th Biennial Workshop on Digital Signal Processing for Vehicle Systems, The 7th Biennial Workshop on Digital Signal Processing for Vehicle Systems, 14/10/2015 to 16/10/2015, University of Texas at Dallas (International)

Statistical Approach for a Complex Emotion Recognition Based on EEG Features, Advanced Computer Science Applications and Technologies (ACSAT), 08/10/2015 to 09/10/2015, Design for Scientific Renaissance (International)

Systematic review of computational modeling of mood and emotion, 2014 the 5th International Conference on Information and Communication Technology for the Muslim World, ICT4M 2014, 17/11/2014 to 19/11/2014, International Islamic University Malaysia (International)

Identification of vessel anomaly behavior using support vector machines and bayesian networks, International Conference on Computer and Communication Engineering: Emerging Technologies via Comp-Unication Convergence, ICCCE 2014, 23/09/2014 to 25/09/2014, International Islamic University Malaysia (International)

Anomaly detection in vessel tracking using support vector machines (SVMs), International Conference on Advanced Computer Science Applications and Technologies, 22/12/2013 to 24/12/2013, Design for Scientific Renaissance (International)

Design and development of the FMCW Radar Scene Generator, 2012 IEEE Symposium on Industrial Electronics and Applications, 23/09/2012 to 25/09/2012, University Technology MARA (International)

An implementation of natural language processing on ontology-based electronic health website: A case of Female-related diseases domain, proceeding of the 3rd International Conference on Information and Communication Technology for the Moslem World: ICT Connecting Cultures, ICT4M 2010, 13/12/2010 to 15/12/2010, International Islamic University Malaysia (International)

Critical success factors for IS project implementation in Malaysian institutions of higher learning, proceeding of the 3rd International Conference on Information and Communication Technology for the Moslem World: ICT Connecting Cultures, ICT4M 2010, 13/09/2010 to 15/09/2010, International Islamic University Malaysia (International)

AWARDS AND STEWARDSHIP

(Name of Award/Stewardship),(Award Category),(Awarding Institution),(Year Awarded),(Type of Award)

Pecipta 2019, Competition, Universiti Tun Hussein Onn (UTHM), 2019 (Co-researcher)

EXPERT LINKAGES

(Linkages Description),(Organisation),(Duration of Involvement),(Level)

- **Speaker**, Workshop, IEEE Computational Intelligence Society, 27/03/2021 to 27/03/2021 (International)
- **Speaker**, 5th International Conference on Information Technology and Digital Applications (ICITDA), University Islam Indonesia, 13/11/2020 to 14/11/2020 (International)
- **Speaker**, Webminar Series on Informatics, University Islam Indonesia, 03/10/2020 to 03/10/2020 (International)
- **Speaker**, Webminar Series, KAJIAN ONLINE MULTIDISIPLIN MUSLIMAH INDONESIA, 28/09/2020 to 28/09/2020 (International)
- **Speaker**, Webinar with Universitas Katolik Indonesia Atma Jaya, Universitas Katolik Indonesia Atma Jaya, 27/07/2020 to 27/07/2020 (University)
- Invitation to be **Speaker** at INHART's Seminar Series 2/2019, International Institute for Halal Research and Training (INHART), International Islamic University Malaysia (IIUM), 27/03/2019 to 27/03/2019 (International)

ACADEMIC/TECHNICAL CONTRIBUTION

(Activity),(Organisation),(Duration),(Role)

- E-Round Table Dialogue, UiTM, 2021 to 2021 (Expert Advisor), Jemputan ke 'e-round table dialogue (e-RTD)' bagi program ijazah sarjana muda pengurusan perkhidmatan dan sarjana pengurusan perkhidmatan, fakulti pengurusan dan perniagaan, UiTM Cawangan Sleangor, Kampus Puncak Alam
- 14th Eureka International Engineering and Computing Research Conference, SCE Taylor's University, 2020 to 2020 (Judge)

- A reviewer at the 4th International Conference on Computing Mathematics and Statistics 2019, Faculty of Computer and Mathematical Sciences Universiti Teknologi MARA Kedah, 08400 Merbok Kedah, Malaysia, 2019 to 2019 (Reviewer)
- Reviewer, eEditorial Discovery, 2019 to 2019
- Technical Program Committee, CITSM 2019, 2019 to 2019 (Committee Member)
- International Conference on Advancement in Data Science, E-Learning and Information Systems 2019 (ICADEIS 2019), Telkom University, 2019 to 2019 (Reviewer)
- 5th International Conference on Computing Engineering and Design (ICCED 2019), Nusa Putra University, Indonesia, 2019 to 2019 (Program Co-Chairs)
- The 4th International Conference on Computing, Mathematics and Statistics (ICMS 2019), UiTM, 2019 to 2019 (Technical Paper Reviewer)
- Reviewer, ICCED 2019, 5th International Conference on Computing, Engineering and Design, 2019 to 2019 (Committee Member)
- University of Sindh Journal of ICT Editor, University of Sindh, 2018 to 2019 (Reviewer)
- The 6th International Conference on Information Technology for Cyber and IT Service Management (CITSM 2018), Universitas Potensi Utama, 2018 to 2018 (Reviewer)
- International Conference on Advancement in Computing, Communication and Automation (ICACCA 2018), Taylor's University, 2018 to 2018 (Committee Member)
- International Conference on Advancement in Computing, Data Science, E-Learning and Information Systems (ICCED 2018), Nusa Putra University, 2018 to 2018 (Committee Member)
- International Conference on Information & Communication Technology for The Muslim World (ICT4M 2018), International Islamic University Malaysia, 2018 to 2018 (Reviewer)