CURRICULUM VITAE 2025

NOORITAWATI MD TAHIR (PhD, SMIEEE, CEng)

Professor, Faculty of Electrical Engineering
Universiti Teknologi MARA (UiTM)
40450 Shah Alam, Selangor Darul Ehsan
Malaysia.

noori425@uitm.edu.my

6012-7020441 (HP)

RESEARCH INFORMATION

- **Areas of Research:** Image Analysis, Signal Processing, Pattern Recognition & Artificial Intelligence
- **SCOPUS Author ID**: 56168849900; *h-Index* = 24; https://www.scopus.com/authid/detail.uri?authorId=56168849900
- Web of Science Researchers ID: AAM-3454-2021; https://publons.com/researcher/4402337/nooritawati-md-tahir/
- **ORCID iD**: https://orcid.org/0000-0002-3082-8963
- **LinkedIn**: https://my.linkedin.com/in/nooritawati-md-tahir-b7858131

PERSONAL INFORMATION

Date of Birth: 6 March 1964.
Status: Married with four children (All above 18 years old)
Health Status: Excellent
Height: 162cm
Weight: 60 kg.

ACADEMIC QUALIFICATIONS

- PhD in Electrical Engineering, Major in Image Analysis and Classification, Universiti Kebangsaan Malaysia (UKM) in 2009 – Rank #138 in QS WUR 2025. https://www.topuniversities.com/universities/universiti-kebangsaan-malaysia-ukm
- Master of Science (Engineering); Major in Microelectronics & Telecommunications, University of Liverpool, UK in 1991 - Rank #165 in QS WUR 2025. https://www.topuniversities.com/universities/university-liverpool
- Advanced Diploma in Electrical Engineering (Bachelor Degree); Major in Electronics, Institut Teknologi MARA (ITM), Selangor, Malaysia in 1988 now known as Universiti Teknologi MARA (UiTM) – Rank #587 in QS WUR 2025. https://www.topuniversities.com/universities/universiti-teknologi-mara-uitm

UNIVERSITY MANAGEMENT & PROFESSIONAL EXPERIENCE

- Professor (Honorary), Faculty of Electrical Engineering, UiTM Shah Alam, Malayisa – April 2023 till present (Official Retirement in March 2022)
- Director of Research Nexus UiTM (ReNeU), Office of Deputy Vice Chancellor (Research & Innovation), UiTM Shah Alam (June 2020 – Mac 2023)
- Chairman and Director of Advance Computing & Communication (ACC),Communities of Research (CoRe), Office of Deputy Vice Chancellor (Research & Innovation), UiTM Shah Alam. (Oct 2019 – May 2020)
- Promotion to the rank of Full Professor on the 16 July 2016.
- Director of Research Innovation Business Unit (RIBU), UiTM the Tech Transfer Office, Office of Deputy Vice Chancellor (Research & Innovation), Shah Alam,Selangor (Jan 2014 – Sept 2019)
- Head of ICT Support Division, Research Management Institute (RMI), Office of Deputy Vice Chancellor (Research & Innovation), U iTM,Shah Alam, Selangor (June 2010 – Dec 2013)
- Head of Quality Unit, Faculty of Electrical Engineering, UiTM, Shah Alam,Selangor (2008 - 2010)
- Promotion to the rank of Associate Professor on Oct 2003.
- Coordinator of Franchise Program, Electrical Engineering Program, UiTM-KYPM, UiTM, Shah Alam Selangor (Jan 2002- June 2004).
- Lecturer, Faculty of Electrical Engineering, UiTM, Shah Alam Selangor. (June2001 – Dec 2001).
- Head of Department, Department of Electrical Engineering, UiTM, Pulau Pinang (July 1997- May 2001).
- Lecturer, Faculty of Electrical Engineering, UiTM, Shah Alam Selangor. (Jan1990 – June 1997).
- Lecturer, Federal Institute Technology (FIT), Kuala Lumpur. (Jan 1989 – Dec1989).

PROFESSIONAL CERTIFICATION

- Chartered Engineer (CEng) – Institution of Engineering and Technology, IET, UK since 2011.
- Stanford Faculty Fellow, Stanford Technology Ventures Program, Stanford University, US (Feb & April 2015).
- Certified Trainer for 'Postgraduate Training in Innovation and Entrepreneurship' awarded by TCD-UCD Dublin, Ireland in April 2014.
- Design Thinking Innovation Ambassador for Malaysia, awarded by Genovasi Malaysia in June 2018.

PROFESSIONAL & ACADEMIC MEMBERSHIP/ASSOCIATION/INVOLVEMENT

- Ministry of Higher Education (MOHE), Malaysia KKP Taskforce and Panel - 2020 till present.
- Ministry of Higher Education (MOHE), Malaysia HICoE Taskforce and Panel - 2020 till present.
- Matching Expert Panel for Public Private Research Network (PPRN), Ministry of HigherEducation (MOHE), Malaysia- 2015 till present.
- Ministry of Higher Education (MOHE), Malaysia Committee Member & Grant Evaluator Panel -FRGS, PRGS, TRGS & LRGS – 2015 till present.
- Founder of UiTM Innovation Sdn Bhd (UISB) in Nov 2015 as business arm for commercialization of UiTM technology/product/IP.
- Technical Assessor for Department of Standards Malaysia, Skim Akreditasi Makmal Malaysia (SAMM) – 2015 till present.
- Member – IET UK.
- Senior Member (SMIEEE) - Institution of Electrical, Electronic Engineer, IEEE, USA.
- Member - IEM Malaysia.
- Chair – IEEE Control System Society Malaysia Chapter – Jan 2021 till present;
- Chair – IEEE Industrial Applications/Industrial Electronics Society, Malaysia Chapter –2015 – Jan 2021;
- Treasurer – IEEE Control System Society, Malaysia Chapter – 2015 – Jan 2021.

LIST OF PUBLICATIONS AS IN SCOPUS & WoS (Last 3 years – 2022 onwards)

1) Pretrained Convolutional Neural Network for Fruit Classification Analysis of Pineapple Plantation Images, Engineering, Technology and Applied Science, 15 (2), pp 20819 – 20826, April 2025
2) Optimizing drone-assisted victim localization and identification in mass-disaster management: a study on feasible flying patterns and technical specifications, International Journal of Electrical and Computer Engineering, 2024, 14(4), pp. 4097–4109s
3) Short-term Gini coefficient estimation using nonlinear autoregressive multilayer perceptron model, Heliyon, 2024, 10(4), e26438
4) Deep Learning-Based Audio-Visual Speech Recognition for Bosnian Digits, Jurnal Kejuruteraan, 36 (1) , pp.147-154, 2024
5) Predictive Modelling Insights with Interpretable NARX - LIME for Geomagnetic Disturbance-Storm-Time Index, 14th IEEE Symposium on Computer Applications and Industrial Electronics, ISCAIE 2024, 2024, pp. 221–226
6) Nonlinear Auto-Regressive with Exogenous Inputs (NARX) Modelling of Hydroponics Water pH Level in response to Acid and Alkaline Solutions, TEM Journal, 2023, 12(3), pp. 1260–1267
7) Snatch Theft Detection Using Deep Learning Models, Lecture Notes in Networks and Systems, 2023, 559 LNNS, pp. 260–274.
8) 2D-Face Alignment with Cyclegan Face Aging Image-to-Image Translation, ASEAN Engineering Journal, 2022, 12(4), pp. 95–103.
9) Modelling the Dynamic Response of Root Diameter Changes in Orchid to Temperature and Humidity using NARX Neural Network, TEM Journal, 2022, 11(4), pp. 1553–1562.
10) Linear Differential Driven Wheel Mobile Robot Based on MPU9250 and Optical Encoder, TEM Journal, 2022, 11(1), pp. 30–36.
11) Big Data and Business Intelligence - A Data Driven Strategy for Business in Bosnia Herzegovina, 2022 IEEE 10th Conference on Systems, Process and Control, ICSPC 2022 - Proceedings, 2022, pp. 226–230.
12) Diagnosis of Cardiovascular Diseases Using Classification Algorithms, IEEE Symposium on Wireless Technology and Applications, ISWTA, 2022, 2022-August, pp. 57–61.
13) Real Time Drowsy Driver Detection Using Image Processing on Python, ICCSCE 2022 - Proceedings: 2022 12th IEEE International Conference on Control System, Computing and Engineering, 2022, pp. 131–136.
14) Liver Tumour Segmentation based on ResNet Technique, ICCSCE 2022 - Proceedings: 2022 12th IEEE International Conference on Control System, Computing and Engineering, 2022, pp. 203–208.
15) Design and Analysis of a Wideband Microstrip 3 dB Power Divider, 2022 IEEE Symposium on Industrial Electronics and Applications, ISIEA 2022.
16) Intrapartum cardiotocography trace pattern pre-processing, features extraction and fetal health condition diagnoses based on RCOG guideline, PeerJ Computer Science, 2022, 8 (1), 1050.
17) A Study of Database Connection Pool in Microservice Architecture, International Journal on Informatics Visualization, 2022, 6(2), pp. 566–571.
18) Backward Wave Microstrip Coupler for Long Term Evolution Applications, 2022 IEEE 13th Control and System Graduate Research Colloquium, ICSGRC 2022 - Conference Proceedings, 2022, pp. 221–224
19) Detection of Criminal Behavior at the Residential Unit based on Deep Convolutional Neural Network, International Journal of Advanced Computer Science and Applications, 2022, 13(2), pp. 804–813.
20) Detection of Criminal Behavior at the Residential Unit based on Deep Convolutional Neural Network, International Journal of Advanced Computer Science and Applications, 13(2), 804-813, 2022.
21) Arabic Handwriting Classification using Deep Transfer Learning Techniques, Pertanika Journal of Science and Technology, 30 (1), 641-654, 2022.
22) Missing data imputation of MAGDAS-9's ground electromagnetism with supervised machine learning and conventional statistical analysis models, Alexandria Engineering Journal, 61(1), 937-947, 2022.

APPOINTMENT AS CONSULTANT

- Development of a Social Innovation Policy for Ministry of Science, Technology and Innovation, Malaysia (MOSTI), Malaysia, RM 99,999.98 – Completed (2022- 2024)
- Operational Monitoring Dashboard for Oil and Gas Platform Using Dynamic Predictive Analytics: Automated Drier Bed Adsorption Capacity for PETRONAS, Malaysia - RM 764,556.80 – Completed (2020 -2023)
- Study on the National Security Index for National Disaster Management Agency (NADMA), Malaysia M 499,999.88 – Completed (2020-2022)

RESEARCH GRANTS (exclude University Grants) - as PI*

- Fundamental Research Grant Scheme (FRGS), 'Novel deep-sliced-pixel networks (DSPN) framework to improve the crops scene segmentation, recognition and classification towards decarbonized processing efficacy', Duration: Oct 2023 – Sept 2025, RM76100.
- Fundamental Research Grant Scheme (FRGS), 'A Formulation on Optimum Resnet-CNN Layer Architecture Based on Dilated Method for Dysgraphia Severity Classification', Duration: Oct 2023 – Dec 2024, RM71300 – Completed.
- Long Term Research Grant Scheme (LRGS) 'e-Suripreneur: Business Readiness Modeling and Data Structuring of B40 Women Entrepreneur Economic Wellbeing in Digital Economy Ecosystem', Duration: Dec 2020 – May 2024, RM512600.00 – Completed.
- Fundamental Research Grant Scheme (FRGS), 'Deep Learning-Based Prediction and Detection (DLPD) Model for Prediction and Detection of Criminal Patterns', Duration: 2019-2022, RM84,400* Completed.
- Trans-disciplinary Research Grant Scheme – 'Drone- Assisted Victim Localization and Identification in Mass – Disaster Management from a Forensic Perspective'; Duration 2019 – 2023, RM634,250*. Completed.
- Trans-disciplinary Research Grant Scheme – 'Hierarchical Deep Networks Technique for Swift Drone-Assisted Mass Disaster Victim Localization and Identification'; Duration: 2019 -2023, RM304,200*. Completed
- RACER – FRGS, 'NARX Wheel Mobile Robot Path Prediction Algorithm by consideringthe Effect of Wheel Slip / Skid', Duration: 2019-2022, RM54,000. Completed.
- Fundamental Research Grant Scheme (FRGS), 'Formulation of Crop Yield Density Modelto Enhance Delineation Detection Based on Modified Semantic-Segmentation Approach Under Variant Illumination', Duration: 2019-2021, RM62,500. Completed.
- Fundamental Research Grant Scheme (FRGS), 'Enhanced LSTM-ENKF Based Predictive Model in Geomagnetic Storms Effect Towards Ground Electromagnetism at Equatorial, Duration: 2019-2021, RM67,000 Completed.
- Fundamental Research Grant Scheme (FRGS), 'Multimodal Deep-Learning–Based Robotic Therapy (MDLRT) of Children with Autism Spectrum Disorder, Duration: 2019- 2021, RM80,400. Completed.
- Fundamental Research Grant Scheme (FRGS), 'A Low Complexity Convergence and Non-Convergence Output Detection Algorithms and Early Termination Criterion for Big Data in Iterative Decoding, Duration 2017 – 2019, RM50,880 – Completed.
- Fundamental Research Grant Scheme (FRGS), 'Formulation of A Robust Image Segmentation Framework for Micro Bleeds Detection in MRI Images of Cerebrovascular Diseases, Duration: 2017-2019, RM75,260 – Completed.
- Fundamental Research Grant Scheme (FRGS), 'Artificial Bee Colony Structure Selection of Nonlinear Auto-Regressive Moving Average with Exogenous Inputs (NARMAX) and Its Derivates, Duration: 2016 -2018, RM70,000 – Completed.
- Fundamental Research Grant Scheme (FRGS), 'New ROI-Based Features Extraction Method Based on White Matter Lesions from MRI Images of Small Vessel Stroke Predisposition, Duration: 2015-2017, RM97,500 – Completed.
- Fundamental Research Grant Scheme (FRGS), 'Hemispheric Brainwave Characterisation in Human Learning, Duration 2015-2017, RM63,900 – Completed.
- Fundamental Research Grant Scheme (FRGS), 'Novel Optimized Element Algorithm for Sizing DNA Sequence Alignment, Duration: 2015-2017, RM88,200 – Completed.
- Fundamental Research Grant Scheme (FRGS), 'Big Data Analytics of Large-Scale Botnet Detection in Heterogeneous BYOD Environments, Duration: 2015-2017, RM100,000 – Completed.
- Fundamental Research Grant Scheme (FRGS), Flow Characterization Through Acoustic Signal Processing in a Ranque- Hilsch Vortex Tube, Duration: 2014-2016, RM97,200 – Completed.
- Niche Research Grant Scheme (NRGS): 'Neuromuscular Impairment in Function of Gait Asymmetries', Duration 2013 – 2018; RM343,000* – Completed.
- Prototype Research Grant Scheme (PRGS); 'DSP Development Prototype for Anomaly Gait Detection', Duration: 2012 – 2014; RM80,000*– Completed.
- Exploratory Research Grant Scheme (ERGS); 'Reducing DNA Optimal Path Trace Back Complexity using Parallel Genetic Algorithm Comparator'; Duration: 2012 – 2014; RM80,000** – Completed.
- Fundamental Research Grant Scheme (FRGS); 'Effects of Aquaculture Pollutants on Fish Flesh Dielectric Properties'; Duration: 2012 – 2014; RM85,200 – Completed.
- E-Science (MOSTI); 'High Sensitivity Optimal Path Trace Back System Development Based on Veterbi Algorithm for DNA Sequences Alignment Accelerator Application'; Duration: 2012 – 2014; RM177,000 – Completed.
- Exploratory Research Grant Scheme (ERGS; 'Image Characteristics of Halal Gallus Domesticus Meat'; Duration: 2011 – 2013; RM70,000 – Completed.
- Fundamental Research Grant Scheme (FRGS); 'Stem Diameter Variations to Detect Sympodial Orchids Water Stress'; Duration: 2010 – 2012; RM65,000 – Completed.
- E-Science (MOSTI), 'Abnormal Gait Analysis and Classification Based on Machine Learning Approach': Oct 2009 – Sept 2012- RM141,000* – Completed.

POSTGRADUATE SUPERVISION

10 PhD (Completed as Main Supervisor);

- Mohammad Farid Saaid, College of Engineering, UiTM Shah Alam, Thesis Title: 'Modelling Water pH Neutralization Behaviour in a Small-Scale Hydroponic System using the NARX-PSO Model', Oct 2022.
- Nur Khalidah Zakaria; Faculty of Electrical Engineering, UiTM Shah Alam, Thesis Title: 'Anomaly Gait Detection in Children with Autism Spectrum Disorder based on Markerless-Model Approach' (GOT), Convocation June 2021.
- Hana' Binti Abd Razak; Faculty of Electrical Engineering, UiTM Shah Alam, Thesis Title 'Forensic Language of Property Theft Genre Based on Mathematical Formulae and Machine Learning Algorithms', Convocation Nov 2020.
- Azlee Zabidi; Faculty of Electrical Engineering, UiTM Shah Alam, Thesis Title 'Binary Artificial Bee Colony (BABC) and Binary Particle Swarm Optimization (BPSO) forStructure Selection of Polynomial NARX, Narma and Narmax Model' (GOT), Oct 2019.
- Hasliza Abu Hassan; Faculty of Electrical Engineering, UiTM Shah Alam, Thesis title 'Visualization of Exudates Fundus Images using Radar Chart and Colour Auto Correlogram Technique for Early Detection of Diabetic Retinopathy', Oct 2019.
- Rohilah Sahak; Faculty of Electrical Engineering, UiTM Shah Alam, Thesis Title 'Kinetic-Based Human Gait Recognition using Support Vector Machine with Orthogonal Least Square and Locally Linear Embedded', April 2019.
- Ahmad Puad Ismail; Faculty of Electrical Engineering, UiTM Shah Alam, Thesis title 'Gait Analysis and Classification Using Front View Markerless Model' Oct 2018.
- Syed Abdul Mutalib Al Junid, Faculty of Electrical Engineering, UiTM, Shah Alam, Thesis Title: 'Design and Development of High Performance SWA Cell Design for Local DNA Sequence Alignment', Oct 2017.
- Musab A M Ali, Faculty of Electrical Engineering, UiTM, Shah Alam, Thesis title 'Iris Recognition for Biometric identification', Oct 2016.
- Muhammad Asraf Hairudin, Faculty of Electrical Engineering, UiTM, Shah Alam, Thesis Title 'Automated Vision Recognition for Classifying Nutrient Deficiencies Based of Elaeis Guineensis Leaf', April 2014.

10 PhD (Completed as Co-Supervisor);

- Nabilah Hamzah, Dept of Electrical Engineering, College of Engineering, UiTM, Shah Alam. Thesis title: Hierarchical Convolutional Neural Network (CNN) for Post-Mortem Face Identification, April 2025.
- Mohd Khairi Nordin, Dept of Electrical Engineering, College of Engineering, UiTM, Shah Alam, Thesis title: 'Modelling the Dynamic Response of Root and Stem Diameter Changes in Dendrobium and Vanda Orchid to Temperature and Humidity Using Narx Neural Networks, Dec 2024.
- Che Zawiyah Che Hasan; Faculty of Electrical Engineering, UiTM, Shah Alam, Thesis title 'Identification of Autism Spectrum Disorder Gait Patterns based on Three-Dimensional Gait Analysis'; Oct 2019.
- Kamarulazhar Daud; Faculty of Electrical Engineering, UiTM, Shah Alam, Thesis title: 'Power Quality Diagnosis Technique using Continuous 5-Transform based Analysis of Variance and Support Vector Machine'; Oct 2019.
- Iza Sazanita Isa; Faculty of Electrical Engineering, UiTM, Shah Alam, Thesis Title 'An Automated Multimodal White Matter Hyperintensities Identification in MRI Brain ImagesUsing Image Processing'(GOT); Apr 2018.
- Megat Syahirul Amin bin Megat Ali; Faculty of Electrical Engineering, UiTM, Shah Alam, Thesis Title 'Intelligent Learning Style Classification Model and Cross-Relational Study with Intelligence Quotient', Apr 2018.
- Meisam Eslahi, Faculty of Electrical Engineering, UiTM, Shah Alam, Thesis Title 'Cooperative Network Behavior Analysis Model for Mobile HTTP Botnet Detection' (GOT), Oct 2017.
- Mohammed Saleh Mohamed, Faculty of Electrical Engineering, UiTM, Shah Alam, Thesis Title 'Efficient Selective Encryption Schemes to Secure Video Data and Moving Objects Information for HEVC/H.265 using Advanced Encryption Standard', Oct 2016.
- Aisyah Hartini Binti Jahidin, Faculty of Electrical Engineering, UiTM, Shah Alam, Thesis title 'System Identification for in Situ Intelligence Quotient Assessment', Oct 2016.
- Ali Abd AlMisreb, Faculty of Electrical Engineering, UiTM, Shah Alam, Thesis Title: 'Consonants Recognition and Noise Reduction for Arabic Phonemes based Malay Speakers' (GOT), Oct 2016.

6 Masters by Research (Completed as Main Supervisor)

- Siti Muniroh Abdullah, Faculty of Electrical Engineering, UiTM, Shah Alam, Thesis title: 'Comparison Between Particle Swarm Optimization and Orthogonal Least Squared Method for Solution of the Linear Least Squares System Identification Problem', April 2014.
- Suryani Ilias, Faculty of Electrical Engineering, UiTM, Shah Alam, Thesis title: ''Gait Analysis and Classification in Autism Children', Oct 2014.
- Hany Hazfiza Manap, Faculty of Electrical Engineering, UiTM, Shah Alam, Thesis title: 'Parkinson Disease Abnormal Gait Classification Based on Machine Learning Approach', April 2013.
- Nurhakimah Abd Aziz, Faculty of Electrical Engineering, UiTM, Shah Alam, Thesis title 'Artificial Neural Network Based Post-Processing Algorithm for Chemically Sensitive Field-effect Transistor (Chemfet) Sensor Selectivity', Nov 2012.
- Mohd Khairi Nordin, Faculty of Electrical Engineering, UiTM, Shah Alam, Thesis title: 'Detection of Sympodial Orchid Water Stress Through Stem Measurement Using Pic Based Sensors', April 2012.
- Siti Salwa Md Noor, Faculty of Electrical Engineering, UiTM, Shah Alam, Thesis title: 'Intelligent Parking with Car Plate and Face Recognition Using Artificial Neural Network Approach', Nov 2010.

- **2 PhD & 1 Masters by Research Supervision (On-going)**

- **Supervised numerous Final Year Degree and Diploma projects, averaging at least six projects annually over the past 28 years.**

- **Supervised numerous Final Year Masters of Science in telecommunication and Information Engineering (Taught Course) averaging at least two projects annually over the past 8 years.**

COURSES TAUGHT

Bachelor Degree Level

- Circuit Theory
- Basic Electronics
- Electronics Engineering
- Digital Logic Systems
- Microprocessor Design
- Signals and Systems
- Communication Theory
- Electrical and Electronic Measurements
- Digital Communications
- Digital Image Processing
- Engineering in Society
- Technology Entrepreneurship
- Programming Language MATLAB, C++, Python

Masters & PhD Level

- Speech, Video and Image Coding (Masters by Taught Course)
- Research Methodology (Masters and PhD by Research)

ACADEMIC EXAMINER/REVIEWER & PROMOTION ASSESSOR

- External Assessor to UMPSA staff promotion to Assoc Professor (August 2023)
- External Assessor to Gulf University, Bahrain staff for promotion to Assoc Professor(Feb 2021)
- External Assessor to UUM staff for promotion to Assoc Professor (August 2020).
- External Assessor to UNIMAP staff for promotion to Assoc Professor (Jun 2022, July 2021 and July 2019).
- External Assessor to UKM staff for promotion to Assoc Professor (Jan 2025, May 2024, Feb 2021, Jan 2020 &March 2019).
- Appointed as PhD external examiner by AEU, Malaysia (May 2025, Mac 2024, Nov 2022)
- Appointed as PhD external examiner by UTM MJIIT & UTM (July 2018, Oct 2019, Nov 2020, Jan 2021, Nov

2021, Mac 2023).

- Appointed as PhD external examiner by Universiti Kebangsaan Malaysia (Jan 2025, Mac 2016, August 2017, April 2019 & Jan 2021).
- Appointed as PhD external examiner by Universiti Tun Hussein Onn Malaysia (UTHM) (Nov 2020, Jan 2022).
- Appointed as PhD external examiner by Universiti Malaysia Pahang (May 2015, Mac2017, April 2020 and May 2021, Feb 2022, Feb 2025).
- Appointed as PhD external examiner by B.S. Abdur Rahman University, India (July 2014).
- Appointed as PhD external examiner by Charles Sturt University, NSW 2678, Australia,(May 2018).
- Appointed as PhD external examiner by Universiti Malaysia Perlis (UniMaP) (August 2017, Jan 2018, Dec 2018, June 2019 and Sept 2020 and Dec 2021).
- Appointed as MSc external examiner (Research) by University of Malaya (Dec 2020).
- Appointed as MSc external examiner (Research) by Universiti Tenaga Malaysia (August2013 & March 2015).
- Appointed as MSc external examiner (Research) by Universiti Kebangsaan Malaysia(April 2014 & May 2015).
- Appointed as MSc external examiner (Research) by Universiti Teknologi Petronas (Feb 2015).
- Appointed as MSc external examiner (Research) by International Islamic UniversityMalaysia (June 2013 and April 2012).
- Appointed as Internal examiner Viva for M Phil (8 students) and PhD (12 students) inUiTM (2009 – 2020).
- Academic Advisory Panel for Politeknik Shah Alam, Malaysia (2012 till present)
- Academic Advisory Panel to Medinah International University in Malaysia (since 2010 till present).
- External Evaluator Diploma Program for German Malaysia Institute (2009 - 2018).

AWARDS RECEIVED

- 2021 Malaysia Technology Expo (MTE) Special Awards
- 2020 UiTM Excellence Service Award
- 2019 & 2018 - International Invention, Innovation & Technology Exhibition (ITEX) Gold Medal Award
- 2018 MTE Silver Medal Award
- 2018 ITEX 2018 Bronze Award
- 2017 International Conference and Exposition on Inventions by Institutions of Higher Learning (PECIPTA) Gold Award
- 2017 ITEX Silver Medal Award
- 2017 MTE Silver Medal Award
- 2016 ITEX Silver Award Medal
- 2013 Gold Award/Special Award Leading to Innovation – PECIPTA 2013
- 2011 MTE Silver Award Medal
- 2010 Brussels INNOVA 2010 – Bronze Medal
- 2009 UiTM Excellence Service Award
- 2005 Outstanding Scientist, Ministry of Higher Education, Malaysia.
- 2004 Gold Medal, "Drive Safe Drive Alert", SEOUL International Invention Fair 2004.

REFEREES

1) Professor Ir Dr Ahmad Farid Abidin
Dean Faculty of Electrical Engineering
Universiti Teknologi MARA
40450, Shah Alam, Selangor
Email: ahmad924@uitm.edu.my
Tel (O): 603-5543 5091

2) Professor Dato' Ir Dr Norashidah Md Din
Institute of Energy Infrastructure (HICoE)
Universiti Tenaga Nasional (UNITEN)
43000, Kajang, Selangor DE.
Email: norashidah@uniten.edu.my
Tel (O): 603-8921 7302

3) Professor Ts. Dr. Norazah Abd Rahman
Deputy Vice Chancellor (Research & Innovation)
Level 5, Tuanku Syed Sirajuddin Chancellor Building
Universiti Teknologi MARA (UiTM)
40450 Shah Alam, Selangor, Malaysia.
Email: noraz695@uitm.edu.my
Tel (O): 603 - 5544 2004