TS. DR. MD. JAKIR HOSSEN (SMIEEE, MIET, P.TECH)

Associate Professor
Department of Robotics and Automation
Faculty of Engineering and Technology (FET)
Multimedia University (MMU)

jakir.hossen@mmu.edu.my; jhossen1973@gmail.com +606-2523425; +60169668146 (h/P,WhatsApp)
Multimedia University, Jalan Ayer Keroh Lama, 75450, Bukit Beruang, Melaka, Malaysia Melaka, Malaysia
https://mmuexpert.mmu.edu.my/jakirhossen

PERSONAL SUMMARY

- A committed lecturer with over 19 years of experience at leading Malaysian academic institutions. Teaching students from various social and cultural backgrounds and possessing excellent research, administrative roles, collaborations, and services along with constructive and effective teaching methods that promote a stimulating learning environment. Able to work in a managerial role or as part of a team and have the proven ability to successfully work to tight schedules and deadlines. Currently looking for suitable academic/research opportunities in universities or research institutions.

EDUCATION

- PhD in “Smart Technology and Robotics Engineering” Intelligent System and Robotics Laboratory Institute of Advanced Technology (ITMA) University Putra Malaysia (UPM), 43400 UPM, Serdang, Selangor, Malaysia. Result: Research with Course Work (12 credits), CGPA - 4.00/4.00 Date of Graduation: December 2012. Thesis Title: “A Framework of Modified Adaptive Neuro-Fuzzy Inference Engine”
- M.Sc. in “Communication and Network Engineering” Department of Computer and Communication system Engineering, Faculty of Engineering, University Putra Malaysia (UPM), 43400 Serdang, Selangor, Malaysia Result: Research Work (No course work) Date of Graduation: August 2003 Thesis Title: “Web-based Network Device Monitoring Tool Using Simple Network Management Protocol (SNMP)”
- Higher Diploma in Computer Science and Engineering Department of Computer Science and Engineering National Youth Development and Self-employment Academy (NYDASA) Dhaka, Bangladesh Date of Graduation: December 1999
- B.Sc. in Mechanical Engineering Department of Mechanical Engineering Dhaka University of Engineering and Technology (DUET) and its formal name was BIT Dhaka, Bangladesh Date of Graduation: August 1997
- Diploma in Automobile Engineering Department of Power (Automobile) Engineering Dinajpur Polytechnic Institute (DPI) Dinajpur, Bangladesh Date of Pass: December 1992
- School Education School Secondary Certificate (Science) Cheradangi High School, Dinajpur, Bangladesh Date of Pass: March 1988

CURRENT RESEARCH

- Core Research: Artificial Intelligence (AI), Data Analytics, Anomaly Detection, Object Detection.
- Application Sectors: Healthcare, IoT, Renewable Energy, Robotics Control.

RESEARCH IDENTIFICATION (ID) IN RESEARCH DATABASE

EXPERIENCE

- CURRENT POSITION: Associate Professor, Faculty of Engineering and Technology (FET), Department of Robotics and Automation, Multimedia University (MMU), Melaka, Malaysia (Starting from January 2009 – Onwards, 15 years plus at MMU)
- Jan 2006 – Dec 2008: Lecturer, School of Electrical and Electronic Engineering, Legenda Education Group, Batu 12, Bander University Technology Legenda, 71700 Mantin, Negeri Sembilan, Malaysia. Main Duties and Responsibilities: (1) To teach undergraduate and HND classes, (2) Mentoring work for students (3) To conduct research and publish the findings in conference and journals, (4)To supervise undergraduate final year projects (B.Eng), (5)To give academic counseling to the undergraduate and HND students, (6) To prepare and develop academic curriculum for undergraduate and HND programs, (7) To participate in the local and international workshops and conferences
- September 2003 – December 2005: Graduate Research Assistant, Pursuing PhD Degree, ITMA, University Putra Malaysia (UPM), Serdang, Selangor, Malaysia Main Duties and Responsibilities: (1) To conduct research, (2) Tutorial and demo class for undergraduates (B.Eng) (3) To publish journal papers and participate national and international conferences and (4) Completed any other assignments given by the project leader.
- June 2000-June 2003: Graduate Research Assistant, Pursuing Master’s degree, Faculty of Engineering, University Putra Malaysia, 43400 UPM, Serdang, Selangor Darul Ehsan, Malaysia. Main Duties and Responsibilities: (1) To conduct research, (2) Tutorial and demo class for undergraduate (B.Eng.) (3) To publish paper and participate national and international Conference and (4) Completed any other assignments given by the project leader.
- April ’99 – May 2000: System Engineer, Falcon Information Technology, Dhaka, Bangladesh Main Duties: Computer Trouble Shooting, Installation of Software and Assembling of Computer Hardware.
- November ’97 – September ’98: Assistant Engineer, World Trade Enterprise, Dhaka, Bangladesh Main Duties: Marketing engineering goods as Sales Promotion Officer

- SCOPUS: 57200250366 (h-index 18)
- ORCID: https://orcid.org/0000-0002-9978-7987
- GOOGLE SCHOLAR: https://scholar.google.com.my/citations?user=oKuBw2EAAAAJhl=en (h-index 23, i10-index 43)
- LinkedIn: https://www.linkedin.com/in/dr-md-jakir-hossen-67016239/
- Facebook Profile: https://www.facebook.com/jakir.hossen.
- IEEE Author Profile: https://ieeexplore.ieee.org/author/38241204000.

PUBLICATIONS SUMMARY

SELECTED PUBLICATIONS (TOP 10 PERCENT SCOPUS INDEXED JOURNALS IN SCOPUS)

1. Ali, M.F., Sheikh, M.R.I., Al Mamun, A. and Hossen, M.J., 2025. Techno-Economic, Predictive Modeling, and Demand Response Analysis of a Renewable Energy-Based Microgrid for Residential Applications. IEEE Access.
2. Alam, M., Tutul, M.J.I., Wadud, M.A.H., Hossen, M.J. and Mridha, M.F., 2025. Bilingual Bangla OCR for Rural Empowerment: Detecting Handwritten Queries and Agricultural Assistance. IEEE Open Journal of the Computer Society.
3. Rayed, M.E., Jim, J.R., Islam, M.J., Mridha, M.F., Kabir, M.M. and Hossen, M.J., 2025. MangoLeafXNet: An Explainable Deep Learning Model for Accurate Mango Leaf Disease Classification. IEEE Access.
4. Khan, M.A., Rahman, A., Mahmud, F.U., Bishnu, K.K., Nabil, H.R., Mridha, M.F. and Hossen, M.J., 2025. A Physics-Guided Bayesian Neural Network for Sensor Fault Detection in Wind Turbines. IEEE Open Journal of the Computer Society.
5. Shaker, A.S.M., Islam, M.T., Faruq, A.O., Barua, H., Rozario, U., Mridha, M.F. and Hossen, M.J., 2025. TACS-Net: Temporal-Aware Customer Segmentation Network. IEEE Open Journal of the Computer Society.
6. Uddin, M.S., Ahmed, A., Aktarujjaman, M., Moniruzzaman, M., Ahmed, M., Mridha, M.F. and Hossen, M.J., 2025. A hybrid reinforcement learning and knowledge graph framework for financial risk optimization in healthcare systems. Scientific Reports, 15(1), p.29057.
7. Hosain, M.T., Morol, M.K. and Hossen, M.J., 2025. A hybrid self attentive linearized phrase structured transformer based RNN for financial sentence analysis with sentence level explainability. Scientific Reports, 15(1), p.23893.
8. Ali, M.F., Sheikh, M.R.I., Biswas, D., Al Mamun, A. and Hossen, M.J., 2025. Optimizing Renewable Energy-Based Grid-Connected Hybrid Microgrid for Residential Applications in Bangladesh: Predictive Modeling for Renewable Energy, Grid Stability and Demand Response Analysis. Results in Engineering, p.106997.
9. Bhadra, A.B., Rime, M.H.K., Sarker, Y., Bhuiyan, E.A., Hossen, M.J. and Morol, M.K., 2025. Dual graph attention network for robust fault diagnosis in photovoltaic inverters. Scientific Reports, 15(1), p.31330.
10. Ferdous, A.I., Islam, M.S., Al Mamun, A., Reza, M.H., Hossen, M.J. and Anower, M.S., 2025. Terahertz PCF Sensor for Explosive Detection: A Machine Learning Approach to Nitroglycerine and Royal Demolition Analysis. Journal of Hazardous Materials Advances, p.100886.

- January '97-December '97: Lecturer (Part-time), Institute of Admission Center for Engineers, Dhaka, Bangladesh. Main Duties: Lecturing on Physics, Mathematics and Engineering Subjects.

TAUGHT SUBJECTS

1. Artificial Intelligence and Application (ECP3266)
2. Knowledge based Systems (ECP3126)
3. Robotics (ERT3016)
4. Robotics and Automation (EPM4066)
5. Advanced Robotics (ERT3036)
6. Control Theory (EPM2036)
7. Control Engineering (EME3206)
8. Circuit Theory (ECT1016)
9. Theory of Machine (EME2056)
10. Computer and Programming Design (ECP1016)
11. Computer Organizations
12. Advanced Computer Network and Data Communication,
13. Computer Applications and Programming.

RECOGNITION/SERVICE

- Conference Co-Chair – MECON'24, Multimedia University, 23rd – 25th July 2024.
- Conference Chair – MECON'23, Multimedia University, 26th – 28th July 2023.
- Speaker for Panel Discussions: Title: Writing and Structuring Research Article in High Impact Publications, 6th International Conference on Multi-Disciplinary Research Studies and Education (ICMDRSE-2024), 19th – 20th May 2023.
- Advisory Board Member – World Conference on Multidisciplinary Research and Innovation (WCMRI), 28th to 29th October 2022, India.
- Session Chair – ICCST2021, Sabah Malaysia, 28th – 19th August 2021.
- Advisory Board Member - Academic Research Conferences (ARC), 04/06/2021 to 31/12/2021, India.
- Invited Guest Speaker - Academic Research Conferences (ARC), 13th August 2021, India.
- Session Chair - Academic Research Conferences (ARC), 13th August 2021, India.
- Technical Program Chair – MECON21, MMU, 21-23 June 2021, Malaysia.
- Invited Speaker – Lecture on Fuzzy Logic and Its Applications, Faculty Development Program (FDP) on Artificial Intelligence and Ambient System, Hindustan Institute of Technology and Science, 20th Jan to 6th Feb 2021, India.
- Editorial Board Member – Computational Intelligence and Machine Learning Journal, ISSN: 2582-7464, 2020-onwards.

BOOK/CHAPTER/LECTURE NOTES

1. Abdullah Al Mamun, Em Poh Ping, Md Jakir Hossen, "A Review on Lane Marking Detection Using Deep Neural Network", Computational Intelligence in Pattern Recognition, ISSBN: 978-981-16-2543-5, Springer, India, 2021 (Book Chapter).
2. M. Z. H. Jesmeen, J. Hossen, Thangavel Bhuvaneswari, M. A. Hasnayeen, J. Emerson Raja, K. Tawsif., Performance Evaluation of Distributed Gain Offered by Raman Amplifier in WDM and EDFA, Intelligent Manufacturing and Mechatronics. Lecture Notes in Mechanical Engineering, Springer, ISBN: 9789811087882, Singapore, 2018 (Book Chapter).
3. "A MODIFIED ADAPTIVE NEURO-FUZZY INFERENCE ENGINE AND ITS APPLICATIONS", Lambert Academic Publishing, ISBN: 9783330044135, German, 2017 (Research Book)"

PATENT/COPYRIGHTS

1. COMPLEX EVENT PROCESSING FOR BROADBAND NETWORK FAULT PREDICTION USING MACHINE LEARNING, Copyright number: LY2023W06323, 2023
2. Hadoop-Spark Performance Optimization Using Deep Learning, Copyright number: LY2019008545, 2019
3. Automatically Cleaning Dirty Data in Data Analytical Process using Machine Learning Paradigm, Copyright number: LY2019008548, 2019

SELECTED TRAINING COURSE CERTIFICATE/WORKSHOP ATTENDED

1. "Teaching and Learning in Higher Education: Enhancing Academic Practice" (Teaching Methodology), Training COURSE in MMU, Melaka, Malaysia, 13th – 15th October 2009.
2. "Delivering High Impact Training", Training COURSE in MMU, Melaka, Malaysia, 1st – 2nd December 2010.
3. "Personal Empowerment for Organizational Excellence", Training COURSE in MMU, Melaka, Malaysia, 3rd – 4th April 2012.
4. "Teaming for Quantum Growth", Training COURSE in MMU, Melaka, Malaysia, 15th – 16th October 2012.
5. "Introduction to SCILAB: An Alternative to MATLAB", Training WORKSHOP in MMU, Melaka, Malaysia, 9th October 2013.
6. "Unzipping Your Employee Potential Through Coaching, Counselling, and Mentoring", Training COURSE in MMU, Melaka, Malaysia, 13th – 14th November 2013.
7. "Student Centered Learning", Training COURSE in MMU, Melaka, Malaysia, 16th – 17th November 2013.
8. "Outcome Based Education (OBE)" Training COURSE in MMU, Melaka, Malaysia, 21st November 2013.
9. "Publishing in Top Tier Journals", By Infinity Training and Development, Training COURSE in MMU, Melaka, Malaysia, 22nd -23rd December 2014.
10. "Artificial Intelligence with SCILAB", by TRITY Technology, Training COURSE in MMU, Melaka, Malaysia, 29 -30 January 2015.
11. "Post Graduate Supervisory Workshop" Training COURSE in MMU, Melaka, Malaysia, 8th November 2017.

- Advisory Committee Member – Virtual Conference on Ubiquitous AI and Machine Learning, 17th October 2020, India.
- Advisory Committee Member - 8th International Conference on Recent Challenges in Engineering and Technology, 30 -31st January 2020, Singapore.
- Session Chair – International Conference of Modern Research, 1-2 November 2019, Cyberjaya, MMU.
- Assessor for Program Accreditation - Bachelor of Science (Hons) in Robotics with Artificial Intelligence, MQA, COPPA, Self-Accredit, MMU, Nov 2019.
- Keynote Speaker, International conference on Computational Science and Technology, SAI RAM Engineering College, INDIA, 2017
- Visiting International Professor, Sathyabama University, INDIA, 1st Sept - 22 Sept 2017
- Keynote Speaker, International conference on Trends in Engineering and Technology, CAPE Institute of Technology, INDIA, 2016
- Member of Editorial Board, International Journal of Advanced Computer Research (IJACR), ACCENTS, INDIA, March 2015 - Onwards
- Internal Questions Moderator: Faculty of Engineering and Technology (FET), Multimedia University, Melaka, Malaysia. (2009-Onward)
- External Questions Moderator: Center for Diploma Program (CDP), Multimedia University, Melaka, Malaysia. (2012, 2013)
- Session Chair - IEEE-RAS Malaysia Chapter. International Organizing Committee, 18/10/2015 to 20/10/2015, Langkawi, Malaysia.
- Conference Editorial Board Member - IEEE International Symposium on Robotics and Intelligent Sensors (IEEE-IRIS2015), 18-20 October 2015, Langkawi, Malaysia

PROFESSIONAL MEMBERSHIPS

- Ceng - IET, UK, Application in process, 2023
- Member of IFERP (Institute for Engineering Research and Publication), India, April 2020 to onwards
- Professional Technologist (Ts.) - Mbot, Membership No. - PT20060077, Malaysia, June 2020 - onwards
- Graduate Technologist - Mbot, Malaisia, October 2019 - onwards
- Member of IET (MIET) - UK, Membership No. – 1100540127, Jan 2016 – Onwards
- Senior Member of IEEE (SMIEEE) - USA, Membership No. – 93870734, Jan 2016 – Onwards
- Member of BEM - Eng. Tech, Malaysia, 2019 -Onwards
- Member of IAENG - Hong Kong, 2019 - onwards
- Student Member IEEE - July 2002-June 2003.

12. “STEM Discovery Camp”, By National Marketing and Enrollment, Training COURSE in MMU, Melaka, Malaysia, 28 April 2018.
13. OIP-“Smart Campus Design Challenge”, Telkom Research and Development Sdn Bhd, Participate on 30th May 2018.
14. “TRAIN THE TRAINER” Training COURSE in MMU, Cyberjaya, Malaysia, 19th – 23rd March 2018 (HRDF Certified)
15. Overcoming Post-Pandemic Challenges: What Skills Do Engineering Graduate Needs, FET IILC Virtual Industry Forum, 18th Dec 2020.
16. Electric Vehicles: The Malaysia Future in Your Hands, Virtual Workshop, Organized by UPM and IEEE Malaysia Chapter on 29th April 2021.
17. Participated in the online event entitled IoT and Home Automation Forum, 21st May 2022.

PROGRAMMING SOFTWARE SKILL

- PYTHON-3, MATLAB, C, C++, Java, HTML, Photoshop, TCP/IP Protocol, SNMP Protocol.

- Member of IEB- Institution of Engineers Bangladesh (IEB), Dhaka, Bangladesh, ID-18947
- Executive Member - International Student Association (ISA), 2001/2002, UPM, Malaysia
- Founder Member - Bangladesh Social Development Academy (BSDA), NGO, Dinajpur, Bangladesh (Lifetime)

LANGUAGE PROFICIENCY

- Language skills include a good fluency in spoken and written English, an elementary level of command in Malay Language, and a native command in Bengali.

SUMMARY OF PUBLICATIONS/ COPYRIGHT/ REVIEW PAPER

Publications	Total Number	Indexed/ Quartile
Journals	150	WoS/Scopus/ Q1-Q4
Conferences	50	Scopus/ Non-Index
Books/Chapter	3	Scopus
Copyright/Patent	3	-
Reviewed Paper	50	Journal/ conference papers

ACADEMIC POSTS

Position	Duration	Department	Institution
Associate Professor	Nov 2022 - Onwards	Robotics and Automation	MMU
Senior Lecturer	Dec 2015 - Oct 2022	Robotics and Automation	MMU
Lecturer	Jan 2009 - Nov 2015	Robotics and Automation	MMU
Lecturer	Jan 2006 - Dec 2008	Electrical and Electronic	ITP, Legenda Education Group

APPOINTMENT

No.	Position	Program	Duration	Dept./Centre
1	Coordinator	Master in engineering and Embedded System (MEES)	March 2017 – February 2019	Faculty of Engineering and Technology (FET), MMU
2	LAB Supervisor	Robotic and Automation	March 2014 - Onwards	RoRobotic Lab, FET, MMU
3	Group Leader	Ubiquitous and Humanoid Robot	March 2014 - 2020	Centre for Robotics and Automation (CRA), FET
4	Group Leader	Data Analytics and AI	March 2018 -Onwards	Centre for Engineering Computational Innovation (CECI), FET
5	R and I Member	All Programs	March 2018-Feb 2023	FET, MMU

TEACHING EVALUATION

Year/Session	Programme	Subject	Academic Evaluation (out of 5)
2024-2025 (March/April)	BYOC	Artificial Intelligence Application	4.73 (Lecture)
2023-2024 (Trimester 1)	BEng (Mechanical)	Control Engineering	4.61 (Lecture)
2022-2023 (Trimester 1)	BEng (Robotics and Automation)	Advanced Robotics	4.94 (Lecture)
2022-2023 (Trimester 1)	BEng (Robotics and Automation)	Advanced Robotics	4.50 (Tutorial)
2021-2022 (Trimester 1)	BEng (Mechanical)	Theory of Machine (EME2056)	4.37 (Lecture)
2021-2022 (Trimester 1)	BEng (Mechanical)	Theory of Machine (EME2056)	4.34 (Tutorial)
2020-2021 (Trimester 2)	Diploma in IT	Computer System and Applications	4.34 (Lecture)
2020-2021 (Trimester 2)	Diploma in IT	Computer System and Applications	4.36 (Lab)
2020 – 2021 (Trimester 1)	BEng (Mechanical)	Control Engineering (EME3206)	4.58 (Lecture)
2020 – 2021 (Trimester 1)	BEng (Mechanical)	Control Engineering (EME3206)	4.63 (Tutorial)
2019-2020 (Trimester 3)	BEng (Robotics and Automation)	Control Theory (EPM2036)	4.20 (Lecture)
2019-2020 (Trimester 3)	BEng (Robotics and Automation)	Control Theory (EPM2036)	4.23 (Tutorial)
2019-2020 (Trimester 3)	BEng (Mechanical)	Robotics and Automation (EPM4066)	4.19 (Lecture)

2019-2020 (Trimester 3)	BEng (Mechanical)	Robotics and Automation (EPM4066)	4.20 (Tutorial)
2018-2019 (Trimester 3)	BEng (Robotics and Automation)	Control Theory (EPM2036)	4.25 (Lecture)
2018-2019 (Trimester 3)	BEng (Robotics and Automation)	Control Theory (EPM2036)	4.34 (Tutorial)

PROJECT GRANTS

No	Project title	Role	Funding Agency	Funding Amount (RM)	Duration (Year to Year)	Status
1	Enhancing Computing Performance and Monitoring Capabilities for Indoor AMR (Lumina)	Project Leader	TM RD	97000	July 2024 – June 2026	On going
2	Multivariate Anomaly Detection to Reduce Electricity Wastage in Smart Homes for Communities Guided by Islamic Value	Project Leader	FRDGS	25000	Jan 2025 – Dec 2025	Completed
3	IIoT-based Water Quality Monitoring System for Anomaly Detection Using Deep Learning Approaches	Project Leader	MMU - TelU Matching Grant 2024	23000	Nov 2024 – Jun 2026	On going
4	Designing Setup and Algorithm for Precise Sound Source Localization in Robotics (SOLARIS)	Project Member	GRA TM RND	97000	July 2024 – Jun 2026	On going
5	ROS Enabled AMR optimization Via Encoder Resolution and Diverse IMU Fusion (SOFI)	Project Member	GRA TM RND	97000	July 2024 – Jun 2026	On going
6	Developing the Coding Skills of Muslim Believing School Students of Melaka to support Malaysian Education 4.0	Project Member	FRDGS	22300	Dec 2024 – June 2026	On going
7	Improving Classification Accuracy of Machine learning Classifiers Using Efficient Feature Selection Technique for COVID-19 Diagnosis	Project Leader	IRF	21400	April 2022 – March 2023	On going

8	Unwanted Electricity Consumption Detection for Smart Home Energy System in Muslim Community	Project Leader	FRDGS	24,700	Sept 2021 – Aug 2022	On going
9	Development of Unsupervised Water Quality Monitoring and Forecasting System for the Well-being of Ummah.	Project Member	FRDGS	24, 875	Sept 2021 – Aug 2022	On Going
10	IoT Data Quality Control for Smart Home Systems	Project Member	TM RD	252,000	May 2019 – April 2021	Completed
11	Network Fault Prediction using Complex Event Processing tool: Real-Time Computing with Predictive Analytics	Project Member	Internal Fund	24,660	Feb 2018 – Dec2018	Completed
12	Design and Development of Solar Photovoltaic Battery Charging System for Electric Vehicles in Workplace Parking lot.	Project Member	Internal Fund	20,000	Feb 2018 – Dec2018	Completed
13	BigFuse: Robust Big Data Analytics for Network Fault Predictions	Project Member	TM RD	554,300	2016-2018	Completed
14	Fuzzy Complex Event Processing	Project Leader	TM RD	135,000	2016-2018	Completed
15	A Modified Adaptive Fuzzy Inference System for Multi-Sensors Mobile Robot	Project Leader	Internal Fund	7230	2013-2014	Completed
16	A Distributed Classification and Identification Algorithms For Large-Scale Multimodal Biometric Datasets	Project Member	FRGS	87,000	2014-2017	Completed
17	An Adaptive Fuzzy Inference Engine for Floor Cleaning Mobile Robot Navigation	Project Leader	Internal Fund	8250	2014-2015	Completed
18	Performance Analysis of Biometric Data Processing by Distributed Framework	Project Member	Internal Fund	8,000	2013-2014	Completed
19	Android based real-time tracking and controlling of Mobile Robot.	Project Member	Internal Fund	8,500	2015-2016	Completed

SUPERVISION OF POSTGRADUATE STUDENTS

No.	Student Name	Research Title	Role	Field of Study	Start Date	Status/ Completed date
1	Nafiz Farhad	Enhanced and Optimised Indoor Object Detection using YOLO Models	Main Supervisor	Masters AI in Object Detection	Mar 2024	Completed (2025)
2	Iqbal Hossain	IoT-based Water Quality Monitoring System for Anomaly Detection Using Deep Learning Approaches	Main Supervisor	IoT-based Water Quality Monitoring System for Anomaly Detection Using Deep Learning Approaches	March 2024	On going
3	Riyadul Islam	Development of Driver Drowsiness Detection Utilizing Physiological Signals	Co Supervisor	Masters AI in Transportation	March 2020	On going
4	Hemmel Akash	Temporal-Aware Vision-Language Models for Video Captioning	Co Supervisor	Masters AI in machine Vision	July 2025	On going
5	Rafiqul Islam	Precise Sound source localization and sound event detection in Robotics	Co Supervisor	Masters AI in Robotics	July 2025	On going
6	Sumayea Binte Hasan	Visual path navigation for Human interaction robots	Co Supervisor	PhD AI in Robotics	Dec 2024	On going
7	Jesmeen Mohd Zebaral Hoque	Data Quality Control for IOT Smart Home	Main Supervisor	PhD in Data Analytics with AI	Feb 2020	On going June 2024
8	Syed Nazir Hussain	Automated Rule Generation Approach for Data Cleaning in Smart Home	Co Supervisor	Master in Data Analytics with AI	Dec 2019	Completed Nov 2021
9	Abdullah Al Mamun	Lane Markings Detection using Deep Learning Techniques	Co Supervisor	Master in Dynamic Vehicle System	Nov 2019	Completed Oct 2021
10	Thirumalaimuthu Thirumalaiappan Ramanathan	Hybrid Fuzzy Method Based Secured Multi-Agent System for Medical Diagnosis	Main Supervisor	PhD in Cyber Security	Dec 2018	Completed Dec 2023
11	Ali Afzalian Mand	A Robust Real-time Stress Detection System Using ECG and Neuro-Fuzzy Classification Method	Co Supervisor	PhD in healthcare	Jan 2016	On going Dec 2024

12	Em Poh Ping	Data Fusion based Lane Departure Warning Framework Using Fuzzy Logic	Main Supervisor	PhD in Dynamic Vehicle System	Dec 2012	Completed (2020)
13	Md. Armanur Rahman	Self-Tuning Approach using Deep Learning to Improve Performance of Hadoop Spark	Main Supervisor	Master in Data Analytics and AI	Nov 2016	Completed (2019)
14	Chy. Mohammad Tawsif Khan	Application of Complex Event Processing for Broadband Network Fault Prediction using Random Forest	Main Supervisor	Master in Data Analytics and AI	Nov 2016	Completed (2019)
15	Md. Arif Hossain	A Neuro-Fuzzy Controller-based Solar Panel Tracking System	Main Supervisor	Master in Intelligent Control	Nov 2016	Completed (2019)
16	Jesmeen Mohd Zebaral Hoque	Automatic Dirty Data cleaning Approach for Data Analytics using Machine Learning Techniques	Main Supervisor	Master in Data Analytics and AI	Feb 2017	Completed (2019)
17	Alvin A/L Devadas	Tribo-Mechanical Behaviour Tribological of Kenaf particulate Reinforced Exposy Composites	Main Supervisor	Master in Material Science	March 2015	Completed (2019)

SELECTED SUPERVISION OF FINAL YEAR PROJECT (FYP)

No.	Student Name	Degree/Year	Title
1	Gao Lin	B. Eng./ 2007	Remote Access of Electrical Appliances Via Internet
2	Banu Priya	B. Eng./2007	Patient Monitoring System Over Internet
3	Li Peng	B. Eng./2007	Intelligent temperature Control
4	Mohd Akmal	HND/2008	Design and Develop a Robotic Car
5	Nur Syuhada	HND/2008	Develop an intelligent Mobile Robot
6	Leong Wen Ming	B. Eng/2010	Solar Powered Intelligent Fan
7	Ahmaed Muneer	B.Eng/2010	Robotic Arm With Gripper
8	Ahmad Khalil	B.Eng/2010	Microcontroller based Walking Stick for Blind
9	Wong Tiing Hua	B.Eng/2010	IR Tracking Robot
10	Siraj Kumar	B.Eng/2010	Vision Based Line Following Robot
11	Goh Mei Lee	B.Eng/2011	A Miniature Mobile Robot System
12	Muhamad Yusof	B.Eng/2011	Redesign and Improvement Through Analysis of Line Balancing
13	Han Chun Kwan	B.Eng/2012	Intelligent Robotic Arm Control
14	Mahesh Supramaniam	B.Eng/2012	Intelligent Robotic Arm With Different Gripper

15	Sim Jian Hui	B.Eng./2012	Mechanical Design of Wheelchair for Disabled Person
16	Mohammed Edah Saleh	B.Eng./2013	Motor Speed Controller Using Radio Frequency
17	NG EE Farn	B.Eng/2013.	Hardware Design for Automated Storage and Retrieval Warehouse System
18	Mahmoud Saleh Ewedah	B.Eng/2013	Development of Mobile Robot Controller for Complex Environment Navigation
19	Ahmed Mohamed Salih	B.Eng/2013	Development of Automatic Air Cooling System

20	Khor Jiun Yong	B.Eng/2013	Control System of Omni-Directional Mobile Robot
21	Lim Xiong Wei	B.Eng/2013	Electronic and Firmware Enhancement of Wheelchair for Disabled Personnel
22	Mahmoud Yehia Ahmed Gebril	B.Eng/2015	Design and Develop a Smart Vehicle Attendance System for Palm Oil Plantation
23	Muhammad Saad Nadim	B.Eng./2018	Design of a Smart Remote Home Light Controller
24	Muhammad Haziq Bin Mat Din	B.Eng/2019	Application of Fuzzy Logic to Bed Pressure Control in Fluidized Bed Granulator
25	GERRY WONG MING HORNG	B.Eng/2021	DEVELOPMENT OF DATA ACQUISITION SYSTEM FOR HAND DEVICE
26	MOHAMAD SYAFIQ BIN NASARUDDIN	B.Eng/2021	DESIGN OF A SMART PHONE ANDROID OPERATED ROBOT
27	ONG JING SONG	B.Eng./2022-2023	DEVELOPMENT OF AI-POWERED VISION INSPECTION SYSTEM FOR OBJECT SORTING APPLICATION

POSTGRADUATE THESIS EXAMINER

No.	Thesis Title	Name and Program	Year	Institute/ Country
1	Application of Image Processing Techniques for Classification and Detection of Lung Diseases Using Computed Tomography Images	C. Buvaneshawari (PhD)	2015	Annamalai University, India
2	A Framework to Enhance the Security of Data Transmission in Stream Control Transmission Protocol	P. Venkadesh (PhD)	2017	Noorul Islam University, India
3	Smartphone Based Context Flow Recognition for Outdoor Parking System	Md. Ismail Hossen (Master)	2019	FIST, MMU, Malaysia
4	Breast Cancer Classification and Visualization using Transposed Deep Neural Netwotk	Ting Fung Fung (PhD)	2019	FET, MMU, Malaysia
5	Design and Development of PC-Based Colour Code System	Lim Zheng You (Master)	2019	FET, MMU, Malaysia
6	Optimization of Aircraft Landing Problem Using Soft Computing Approach	Aminurafiuddin Bin Zulkifli (Master)	2020	FET, MMU, Malaysia
7	Visual Guided Vehicle on Road	Jenifer John J. (PhD)	2020	Anna University, India
8	An Accurate Medical Digital Diagnostic System Using Non-Linear Filter Based Image Quality Enhancement Techniques	Jegadeesh A. (PhD)	2020	Anna University, India

9	Hardware Development of Latex Glove Protein Estimation System with Fuzzy Logic	Tan Jin Long (Master)	2020	FET, MMU, Malaysia
10	Sentiment Analysis Using Deep Learning	Tan Kian Long (Master)	2023	FIST, MMU, Malaysia
11	HYBRID FEATURE SELECTION TECHNIQUE FOR AUTISM CLASSIFICATION USING GREEDY RIVER FORMATION DYNAMICS	S. THIRUMAL (PhD)	2023	HINDUSTAN INSTITUTE OF TECHNOLOGY AND SCIENCE
12	ENERGY EFFICIENT CLOUD RESOURCE MANAGEMENT FRAMEWORK USING MACHINE LEARNING TECHNIQUES	B. PRABHA (PhD)	2023	HINDUSTAN INSTITUTE OF TECHNOLOGY AND SCIENCE
13	Brand Mining Using Sentiment Analysis	MIKAIL BIN MUHAMMAD AZMAN BUSST	2024	FIST, MMU, Malaysia
14	LUNG CANCER DETECTION USING DEEP LEARNING TECHNIQUES	P. DEEPA	2025	Annamalai University, India
15	ADVANCED ARTIFICIAL INTELLIGENCE ARCHITECTURES AND OPTIMIZATION TECHNIQUES FOR ALZHEIMER'S DISEASE DETECTION AND CLASSIFICATION USING MRI	NISHA A V	2025	KALASALINGAM ACADEMY OF RESEARCH AND EDUCATION, INDIA

AWARD

No.	Award/ Medal	Title/Project	Event/ Place	Year
1	Best Paper Award	Indoor Object Detection Using YOLOv5s and Grad-CAM	MECON	2025
2	Gold Medal	INCREMENTAL LEARNING BASED FUZZY REASONING APPROACH FOR DIAGNOSIS OF THYROID DISEASE	iNVENTX2023, MMU,Malaysia	2025
3	Bronze Medal	OBJECT DETECTION IN INDOOR ENVIRONMENTS USING YOLOV11N: FEATURE EXTRACTION WITH RESNET18 AND GRAD-CAM++, FEATURE ENGINEERING WITH ROI, HOG, LBP, AND PCA FOR FEATURE SELECTION	iNVENTX2023, MMU, Malaysia	2025

4	Gold Medal	DESIGN OF AI BASED TOOL CONDITION MONITORING SYSTEM TO SUPPORT INDUSTRIAL REVALUATION 4.0	iNVENTX2023, MMU,Malaysia	2024
5	Gold Medal	AN EFFECTIVE PREDICTIVE MACHINE LEARNING SYSTEM FOR COVID-19 DIAGNOSIS	iNVENTX2023, MMU, Malaysia	2024
6	Gold Medal	UNWANTED ELECTRICITY CONSUMPTION DETECTION FOR SMART HOME ENERGY SYSTEM	iNVENTX2023, MMU, Malaysia	2023
8	Gold Medal	FUZZY LOGIC BASED MULTI-AGENT SYSTEM FOR MEDICAL DATA MINING	iNVENTX2023, MMU, Malaysia	2023
9	Best Researcher Award	International Scientist Awards on Engineering, Science and Medicine	Coimbatore India	2021
10	Silver Medal	COVCTX: Lung CT Scans and X-Rays Artificial Intelligence Enabled Analyzer for Covid 19 Cases	MTE2020, Malaysia	2020
11	Silver Medal	Tool Condition Monitoring Using Acoustic Emission	RICES-2018, MMU	2018
12	Nominee	Excellent Research Award at MMU	Staff Awards-2018	2018
13	Silver Medal	Fuzzy Logic Controller based Solar Tracking System	RICES-2018, MMU	2018
14	Bronze Medal	Fuzzy Complex Event Processing	RICES-2018, MMU	2018
15	Best Paper Award	Auto-CDD: Automatic Cleaning Dirty Data in Data Analytical Process Using Machine Learning Paradigm	International Conference on Electrical, Electronic, Communication and Control Engineering	2018
16	Best Research Poster (1st Runner Up, RM300)	A Novel Framework of Adaptive Neuro-Fuzzy Inference Engine and Its Application to Big Data Modelling, Infineon	Infineon-MMU Technical Poster Session, FET	2015
17	Best Research Poster (Champion, RM1000)	A Novel Adaptive Fuzzy Inference System for Mobile Robot Navigation	Infineon-MMU Technical Poster Session, FET	2014
18	Silver Medal	A Smart Context-Aware Middleware for Pervasive Computing Spaces Using Open Services Gateway Initiative (OSGi)	Pameran Reka Cipta and Penylidikan, UPM	2005

CONSULTATION/SHORT COURSE TRAINING

No	TITLE OF CONSULTANCY	CUSTOMER	Duration	Fees amount (RM)	Role	International/ National
1	Training in Artificial Intelligence	Kolej Yayasan Saad Melaka (KYSM), Form 4 Students	17th Feb 2025 to 31 Dec 2025	18000	Trainer	National

2	Training in Python Programming	Kolej Yayasan Saad Melaka (KYSM), Form 4 Students	09 Feb 2024 – 16 Feb 2025	20,000	Trainer	National
3	Training in Python Programming	Kolej Yayasan Saad Melaka (KYSM), Form 2 Students	20 March 2023 – 08 Feb 2024	12000	Trainer	National
4	Training in Python Programming	Kolej Yayasan Saad Melaka (KYSM), Form 2 Students	23 March 2022 – 16 Feb 2023	21000	Trainer	National
5	Training in C++ Programming	Kolej Yayasan Saad Melaka (KYSM), Form 4 Students	18 Jan 2021 – 12 Dec 2021	100 per hour (3 hours per week), 13,200	Trainer	National
6	ICT Consultant	Students of International School	02 Jan – 20 Nov 2018	75 per hour (6 hours per week), 21,600	Trainer	National
7	Malaysian Tecnical Cooperation Program (MTCP) Training in Mobile Apps Development Program.	Students from Different Countries (Organized by Ministry of Foreign Affairs, Malaysia)	15th Sept to 30th Sept 2018	4,600	Trainer	International
8	Malaysian Tecnical Cooperation Program (MTCP) Training in C Programming	Students from DifferentCountries (Organized by Ministry of Foreign Affairs, Malaysia)	12th Aug to 27th Aug 2017	3,000	Facilitator	International
9	SCILAB Training	MMU students	9th – 16th June, 2014	3000	Facilitator	National

PROFESSIONAL ONLINE COURSE CERTIFICATE (COURSERA)

Course name	Institute	Duration and Year
Introduction to data science	University of Michigan	4 weeks, 2020
Python Basic	University of Michigan	4 weeks, 2020
Applied Plotting, Charting and Data Representation in Python	University of Michigan	4 weeks, 2020
Applied Machine Learning in Python	University of Michigan	4 weeks, 2020

REFEREES

Referee1	Referee2
Dr. Md. Zahangir Alam Professor Department of Biotechnology Engineering, Faculty of Engineerin, International Islamic University Malaysia (IIUM) Jalan Gombak, 53100 Kuala Lumpur, Malaysia Email: zahangir@iium.edu.my, Tell: 03-20564571	Dr. Fazly Salleh Bin Abas Associate Professor Faculty of Engineering and Technology (FET), Multimedia University (MMU), Bukit Beruang, 75450, Melaka, fazly.salleh.abas@mmu.edu.my Tell:06-252-3456