

SIVA KUMAR SUBRAMANIAM

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SUMMARY

I have worked in a total of 6 organisations of different industrial nature throughout my professional career. I had gained and polished my teamwork qualities as well as my leadership throughout my stint at these places. As such, I am a very dependent, sociable person and professional in my work, enabling me to undertake any challenging task with the least supervision.

EDUCATION

Brunel University London, United Kingdom	December 2013 – August 2017
Doctor of Philosophy in Electrical Engineering and Electronics Research (PhD)	

Universiti Teknikal Malaysia Melaka, Malaysia	August 2006 – May 2009
Masters of Sciences in Electronic Engineering (M.Sc) (by research)	

Kolej Universiti Teknikal Kebangsaan Malaysia, Malaysia	June 2003 – June 2006
Bachelor of Electronics Engineering (Industrial Electronics) with Honours (B.Eng)	

Politeknik Ungku Omar, Malaysia	January 2000 – November 2002
Diploma in Electronics Engineering	

PROFESSIONAL CERTIFICATION/QUALIFICATION/MEMBERSHIP

- **Chartered Engineer (Registration number 671920)** of the United Kingdom Engineering Council in membership of the Institution of Engineering and Technology (IET) (**Membership No. 1100218506**).
- **European Engineer (EUR ING)** of the FEANI (Fédération Européenne d'Associations Nationales d'Ingénieurs) (**Membership No. 34609**).
- Graduate Engineer (**Membership No. 52302A**) of The Board of Engineers Malaysia (BEM).
- Graduate member (**Membership No. 25717**) of The Institution of Engineers, Malaysia (IEM).
- **Associate Fellow of Higher Education Academy (AFHEA: PR090813)** UK Professional Standards Framework for teaching and learning support in higher education.
- The International Association of Engineers (IAENG) (**Membership No. 106680**).
- **Train the Trainer (TTT) (Certificate number: TTT/2635)** certified by The Human Resources Development Fund Malaysia.
- **Lean Six Sigma – Green Belt Certification (RHL-202104GB-1-6)** accredited by The Council For Six Sigma Certification, USA.
- **Assessor for Green Building (Melaka Green Seal) (PTHM-PPMHM-017)** accredited by Green Technology Corporation Melaka (Perbadanan Teknologi Hijau Melaka).
- **Certified IPC Trainer IPC-A-610 revision E (Certificate number: 610-T 34002151)** - Acceptability of Electronics Assemblies Training and Certification Program.
- **Internal Auditor for ISO 9001:2015 (ECT 2021/2423)** Quality Management System.
- Construction Industry Development Board Construction Personnel Registration Card (**CIDB Green Card**) (**Registration No. 1810716PR1900660081**)
- **SAP TERP10 Certification Course: SAP ERP Integration of Business Processes.**
- **Train-The-Trainer (TTT)** Agilent Electronics Instrumentation, Measurement & Test (EIMT) Teaching Solution for Universities.

EMPLOYMENT HISTORY

Universiti Teknikal Malaysia Melaka, Malaysia | Faculty of Electronics and Computer Engineering

Position: **Senior Lecturer (12 Dec 2012 – Present) | Lecturer (20 May 2009 – 11 Dec 2012) | Tutor (14 Dec 2006 – 19 May 2009)**

Responsibilities:

- To teach, conduct tutorial and lab sessions in electronics at postgraduate, undergraduate and Diploma levels.
- To supervise and co-supervise integrated design project (IDP), final year project diploma, undergraduate, Master by taught (MEng), Master by research (MSc) and PhD students.

Other responsibilities as an academician:

- Participate in the administration of the department's programmes and other activities, significantly contributing to developing, planning, and implementing a high-quality curriculum.
- To assist in developing learning materials, preparing schemes of work, maintaining records to monitor student progress, attendance, exam invigilation, marking of exams and other assessments.
- My primary responsibilities as the subject coordinator for 9 years are to prepare the subject file, assessment file, subject reports, plan and develop teaching, and other related documents according to MS ISO 9001:2008 set by the organisation. As a subject coordinator, I have to lead my team to implement Outcome-Based Education (OBE) and Problem Based Learning (PBL) that is used to develop the student's problem-solving skills as well as to improve their leadership skills.
- I have to comply with the teaching content and assessment to meet the course recognition requirements by the Malaysian Qualifications Agency (MQA) and Engineering Accreditation Council Malaysia (EAC) with the current industry demand.
- As an academic advisor for 9 years, my responsibilities are to provide academic advising in curriculum and non-curriculum activities for the students under me. I have also to ensure that they can graduate on time (GOT).
- To carry out research and produce publications or other research outputs (intellectual property, industrial collaboration, seeking funding, and exhibition) in line with universities yearly objectives. To participate in faculty seminars to share research outcomes and build interdisciplinary collaboration, especially with professional engineering bodies.

Position: **Head of the Fundamental Electronics Laboratory 1 (2017 - 2019)**

Responsibilities:

- My core responsibilities are to plan the laboratory usage, equipment repairs, equipment replacement, in laboratory consumables and discard of damaged equipment's every semester with the Head of Department, laboratory coordinator and the assistant engineers, conduct tutorial and lab sessions in areas of electronics at postgraduate, undergraduate and Diploma level.

Universiti Teknikal Malaysia Melaka, Malaysia | Office of Assistant Vice-Chancellor (Industry and Community Network)

Position: **Deputy Director of Community Development and I-CoE Centre (19 August 2019 – 30 April 2021)**

Responsibilities:

- To preserve the higher education ecosystem through I-CoE and the Community to build the potential of individuals to meet the University's aspirations.
- To coordinate and implement the Electrical and Electronics Cluster I-CoE programs.
- To coordinate and implement high impact community activities.
- To attend the Center of responsibility/Ministry of Education Malaysia meeting that addresses the importance of the Office/University for smooth administration of administration.

Position: **Project development and IoT prototypes fellow (1 September 2018 – 18 August 2019)**

Responsibilities:

- To contribute ideas to the development of IoT-related projects.
- To organise IoT prototype exhibitions in the event of external visits to the Samsung IoT Academy.
- To coordinate Samsung IoT Academy to organise development programs related to IoT projects.

Brunel University London, United Kingdom | College of Engineering, Design and Physical Sciences

Position: **Undergraduate lab demonstrator (5 Jan – 31 Mar 2015, 4 Jan – 30 Apr 2016 & 2 Jan - 25 April 2017)**

Responsibilities:

- Engaged in supporting laboratory work for undergraduate students. My role is to support the laboratory work, teaching/lab demonstrator, assessments and give feedback to students for the experiments they are involved in. This job requires technical knowledge on handling lab equipment, software, and a strong understanding of the subject material (theory).

Position: **Final exam script checker and exam invigilator (2015 - 2017)**

Responsibilities:

- As a final exam script checker, I need to familiarise myself with the rubric for the exam. For each examination script, I must ensure that all pages have been marked, that all additions are correct, that the candidate's marks have been appropriately allocated in the light of the examination rubric and that all totals have been correctly transferred to the cover of the examination book as well as the excel sheet provided by the lecturer.

- As an exam invigilator, I need to ensure the proper conduct of a particular examination in accordance with the exam regulations. I must watch the examination candidates prevent cheating during the examination and ensure that all the exams are carried out according to the rules set out by the exam board, allowing each candidate to sit for the examination under equal conditions as in any higher learning institution.

Oriental Summit Industries Manufacturing Sdn. Bhd. Tanjung Malim, Malaysia | Maintenance Department

Position: **Worked as a Trainee Electronic Engineer (1 Nov 2004 – 25 Mar 2005)**

Responsibilities:

- Responsible for service, installation, repair and maintenance of electrical equipment's, pneumatics system, the mechanical system for machinery using troubleshooting techniques and test equipment.
- Tasks at work include support of senior technicians in the troubleshooting, operation, projects, improvements and maintenance of various machines and equipment.

Sri Tenaga Sedayu Sdn. Bhd. Tanjung Malim, Malaysia

Position: **Worked as a Trainee Electrical Technician (16 Jul 2001 – 30 Nov 2001)**

Responsibilities:

- Involved in single and three-phase wiring systems (concealed wiring, PVC conduit, metal conduit, surface wiring and trunking).
- Electrical wiring and distribution board installation for both industry and domestic purposes.

PROFESSIONAL APPOINTMENT

ILOTSME Sdn. Bhd. Melaka, Malaysia (Private limited company)

Position: **Director/Technical and Project Manager (2 February 2021 – Present)**

Responsibilities:

- Responsible for providing project planning and management for established initiatives within a company.
- They ensure that projects are completed to specification within an established time frame and budget.
- The lead subject matter expert within the company regarding technology concerns.
- Involved in hiring and training additional support members in a business's technology department based on industry expertise to improve all aspects of project planning and resource management.

Vellore Institute of Technology (VIT), Tamil Nadu, India

Position: **Adjunct Professor (Second appointment: 19 December 2022 – Present) (First appointment: 12 December 2019 – 18 December 2022)**

Responsibilities:

- To offer specialised courses, research sharing or presentation, guest lecturers, training, supervision and subject lectures in the field of expertise.

Kolej Komuniti Segamat 2, Johor, Malaysia

Position: **Advisory committee member on Electrical Technology Certificate program (Second appointment: 25 January 2022 – 24 January 2024) (First appointment: 30 September 2019 – 29 September 2021)**

Responsibilities:

- To provide feedback on the electrical and electronic certificate and diploma programs. Contribute ideas for program improvement over time in line with the industrial demand and technology growth.

Unit Perancang Ekonomi Negeri Melaka (Melaka State Economic Planning Unit), Melaka, Malaysia

Position: **Panel member of the Smart economy cluster – state level (November 2019 – May 2020)**

Responsibilities:

- The role and responsibility of a panel member is to assist the cluster leader to realize the strategies that have been formulated and to ensure all core targets that have been implemented can be successfully achieved.

Position: **Panel member of the Smart city advisory council – state level (November 2019 – May 2020)**

Responsibilities:

- The role and responsibility of a panel member is to assist the cluster leader to realize the strategies that have been formulated and to ensure all core targets that have been implemented can be successfully achieved.

Position: **Panel member of the Smart management system special cluster – state level (November 2019 – May 2020)**

Responsibilities:

- The role and responsibility of a panel member is to assist the cluster leader to realize the strategies that have been formulated and to ensure all core targets that have been implemented can be successfully achieved.

Position: **Consultant for Melaka smart river – state level (November 2019 – May 2020)**

Responsibilities:

- To provide expert guidance to the cluster leader to realize the strategies that have been formulated and to ensure all core targets that have been implemented can be successfully achieved.

SUPERVISION

Level	Research Degree	Final year project	Integrated design project	Industrial training
	Main supervisor/Co-supervisor	Main supervisor	Main supervisor	Main Supervisor
PhD	1 student	-	-	-
Masters	10 students	1 student	-	-
Degree	-	44 students	6 groups	64 students
Diploma	-	11 students	-	7 students

EXTERNAL EXAMINER

PhD	Student name: Talha Akhtar Thesis title: Investigation on the traffic burden of Incoming and Outgoing data by Amalgamation of Swarm intelligence and Graph Theory Degree: PhD in Computer Science & Information Technology Date: 14 March 2022 University: NED University of Engineering & Technology, Karachi, Pakistan.
PhD	Student name: Azmi Shawkat Abdulbaqi Thesis title: Hybrid Method for Ecg Signal Compression based on DWT and PCA Degree: PhD in artificial intelligence Date: 21 January 2020 University: Universiti Pendidikan Sultan Idris, Tanjung Malim, Perak, Malaysia.
Master	Student name: Arun Kumar A/L Ramasamy Thesis title: Intelligent Real-Time Prediction for Energy and Sensing Applications Degree: Master of Philosophy Date: 12 August 2020 University: University of Nottingham Malaysia, Semenyih, Selangor, Malaysia.

TEACHING AND TRAINING EXPERIENCE

PhD/Master	Advanced Power Electronics, Quality System Management.
Degree	Electrical and Electronic principle, Fundamental of Electronics Engineering, Analog Electronics, Engineering Ethics, Advance System Electronics, Engineering Workshop, Industrial Pneumatics, System Electronics, Manufacturing Automation, Industrial Robotics, Engineering Practices, Electronic Fundamental Laboratory 1, Electronic Engineering Laboratory 1, Electronic Fundamental Laboratory 2, Electronic Fundamental Laboratory 4, Electronic Engineering Workshop, Industrial Control, Principles of Instrumentation and Measurement, Engineer and Society.
Diploma	Basic Electronics & Microprocessor, Electronic Instrumentation, Electrical Technology, Industrial Electronics.
Training	Certified trainer for Acceptability of Electronic Assemblies (IPC-A-610), MultiSim, Protues, Programmable Logic Controller, Industrial Control system.

RESEARCH AWARDS

Level	Awards							
	Special award		Gold		Silver		Bronze	
International/National Competition	7	Malaysia, Belgium, Switzerland	27	Malaysia, Belgium, Switzerland, Kuwait, United Kingdom, South Korea	21	Malaysia, South Korea	11	Malaysia, Germany, South Korea

PATENTS, COPYRIGHTS AND TRADEMARKS

Intellectual property	Title	IP number	Year
Patents	A multiplex switching system (Granted)	MY-176363-A	4 August 2020
	Electro Mechanical Locking System (Granted)	MY-153050-A	30 December 2014
	An electricity consumption tracking meter	PI2014001332	7 May 2014
	An energy saving device	PI2013003601	10 October 2013
	A mobile phone usage alert system	PI2013001589	3 May 2013

	Efirexit: A smart route decision making system to emergency exit	UI2013001590	3 May 2013
	Self routing traffic light controller for cross junction	PI2012004163	21 September 2012
	A flood warning system	PI2012003041	4 July 2012
	Single display solar traffic signal with separable display circuit board	PI2011002219	18 May 2011
	Traffic light electrical & mechanical fault alert system (Wi-Traffic Light)	PI2010005339	12 November 2010
	Distribution board alert system (DbAS)	PI2010005340	12 November 2010
	Electro-mechanical locking system	PI2010003765	10 August 2010
	A self monitored flood observatory system	PI20094488	26 October 2009
	An occupancy system for automatic electrical appliances switching	PI20094280	13 October 2009
Copyright	IoT flood observatory system	CRLY00026776	8 December 2020
	Smart Hydrobike for river cleaning	LY2020001881	12 June 2020
	Smart Hydrobike monitoring system	LY2020001885	12 June 2020
	Abduction notification and tracking	CRLY00001009	17 February 2014
	Mobile-based fall alert system (MOBIFALL) – A system to support independent living of elderly in Malaysia	CRLY00001015	17 February 2014
	Smart In-house fall detection and notification system for fast emergency response (E-SAFE)	CRLY00001016	17 February 2014
	Intelligent crash notification system via smartphone (I-NOTIFY) - A system to support two wheeler on road	CRLY00001017	17 February 2014
	Presetable attendant request terminal (PART)	CRLY00000769	25 September 2013
	Real-time vehicle speed detection system using motion vector technique	CRLY00000559	3 May 2013
	Remote-controlled time based solar fish feeding system integrating environment sensors	CRLY00000560	3 May 2013
	Implementation of network communication for utility pole maintenance	CRLY00000561	3 May 2013
	Responsive attendance system based on thumb scanning	CRLY00000558	2 May 2013
	Computer interface for mobile phone usage alert system at petrol station	CRLY00000382	2 May 2013
	Emerging pedestrians warning system in public buses to the road users	CRLY00000383	2 May 2013
	Total manufacturing E-Platform for failure mode error analysis	CRLY00000386	2 May 2013
	Traffic light electrical & mechanical fault alert management system (E-TRAFFIC LIGHT)	CRLY00000387	2 May 2013
	Computer interface for real-time public shuttle monitoring system	CRLY00000388	2 May 2013
	An educational training kit for studying integration of high power solar and grid distribution network	CRLY00000389	2 May 2013
	An automatic accident notification system via smartphone	CRLY00000151	18 March 2013
	Automated safety wireless traffic light system for road construction sites	CRLY00000156	18 March 2013
	Multiplex switching system for single phase electrical appliances	CRLY00000157	18 March 2013
	Energy tracker system (ETS)	CRLY00000176	19 March 2013
	Flood detection and real time warning system	CRLY00000180	19 March 2013
Trademark	IoT flood observatory system	TM2020011874	25 November 2020
	Smart Hydrobike for river cleaning	TM2020011863	3 July 2020
	Revolution switching	TM2013006426	6 May 2013

PUBLICATION

Level	Published/awards				
	Journal	Proceeding	Best paper	Best poster	Best presenter
International/national Publications	35	63	1	1	1

Paper	Publication type	Indexed
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Subramaniam S.K., Feroz F.S., Ibrahim A.F.T., Panessai I.Y. & Sujatha R., (2022), Active High Transmitter-receiver energy model for heterogeneous energy optimisation in a pipeline network, <i>Journal of Physics: Conference Series</i> , Volume 2312, Issue 1, pp. 1-11.	Journal	Scopus
Wong W.M., Subramaniam S.K., Feroz F.S. Subramaniam I.D. & Lew I. F., (2022), Short-term Water Level Forecast Using ANN Hybrid Gaussian-Nonlinear Autoregressive Neural Network, <i>International Journal of Integrated Engineering</i> , Volume 14, Issue 4, pp. 425 - 437.	Journal	Scopus
Lee M.Y., Azman A.S., Subramaniam S.K., Feroz F.S. & Sujatha R. (2022), Network Performance Optimization Using Odd and Even Dual Interleaving Routing Algorithm for Oil and Gas Pipeline Network, <i>Journal of Theoretical and Applied Information Technology</i> , Volume-100, Issue-8, pp. 2371 - 2382.	Journal	Scopus
Lee, M.Y., Azman, A. S., Subramaniam, S. K. & Feroz, F.S. (2022), Network Performance Optimisation Using Triple Interleaving Routing Algorithm for Oil and Gas Pipeline Network. <i>International Journal of Communication Network and Distributed System</i> , Volume 28, Issue 2, pp. 147-170.	Journal	Scopus
Subramaniam S.K., Azman A.S., Lee M.Y. & Feroz F.S. (2021), Designated path routing algorithm for dense wireless sensor network, <i>Indonesian Journal of Electrical Engineering and Computer Science</i> , Vol. 23, No. 3, September 2021, pp. 1520-1526.	Journal	Scopus
Azman A.S., Lee M.Y., Subramaniam S.K. & Feroz F.S. (2021), Dual designated path routing algorithm for congestion control in high-density network, <i>Journal of Theoretical and Applied Information Technology</i> , Volume-99, Issue-7, pp. 1608 - 1620.	Journal	Scopus
Azman A.S., Lee M.Y., Subramaniam S.K. & Feroz F.S. (2021), Novel Wireless Sensor Network Routing Protocol Performance Evaluation using Diverse Packet Size for Agriculture Application, <i>International Journal of Integrated Engineering</i> , Volume-13, Issue-4, pp. 16 - 28.	Journal	Scopus
Panessai, I. Y., Lakulu, M. M., Rahman, M. H. A., Noor, N. A. Z. M., Iksan, N., Rasli, R. M., Husin, M. R., Ahmad, H., Ariffin, S. A., Alias, A., Subramaniam, S. K., Majid, S., Bora, M. A., Bilong, A. A., & Mazli, N. M. (2021). Predicting Students' Academic Performance: A Review for the Attribute Used. <i>International Journal of Academic Research in Business and Social Sciences</i> , 11(4), pp. 595-603.	Journal	Scopus
Ramlee R.A., Subramaniam S.K., Yaakob S.B., Rahman A.S.F. & Saad N.M. (2020), Corneal arcus classification for hyperlipidemia detection using gray level co-occurrence matrix features, <i>Journal of Physics: Conference Series</i> , Volume 1432, pp. 1-15.	Journal	Scopus
Feroz F.S., Subramaniam I.D. & Subramaniam S.K. (2020), Undergraduates' Increased Acceptance and Positive Attitude toward Gamification: Its Relation to Increased Engagement, <i>The International Journal of Science, Mathematics, and Technology Learning</i> , Volume-27, Issue-2, pp. 13-24.	Journal	Scopus
Rajamanickam S., Andrea Z., Subramaniam S.K., & Ghani Z., (2020), Spread spectrum modulation investigation using MATLAB developed tool on automotive DC-DC converter, <i>International Journal of Advanced Trends in Computer Science and Engineering</i> , Volume-9, Issue-4, pp. 6631 - 6639.	Journal	Scopus
Wong W.M., Subramaniam S.K., Feroz F.S. Subramaniam I.D. & Lew I. F., (2020), Flood Prediction using ARIMA Model in Sungai Melaka, Malaysia, <i>International Journal of Advanced Trends in Computer Science and Engineering</i> , Volume-9, Issue-4, pp. 5287 - 5295.	Journal	Scopus
Azman A.S., Lee M.Y., Subramaniam S.K. & Feroz F.S. (2020), Performance Evaluation of Grid Wireless Sensor Network with Different Packet Size for Pipeline in Downstream of Oil and Gas Industry, <i>IOP Conference Series: Materials Science and Engineering</i> , Volume 765, pp. 1-9.	Journal	Scopus
S. K. Subramaniam, I. Y. Panessai, R. A. Ramlee, R. Sujatha & N. Rajagopal (2019), TcP Performance and Throughput Fairness Optimization in a Multi-Hop Pipeline Network, <i>International Journal of Recent Technology and Engineering (IJRTE)</i> , Volume-8, Issue-3S2, pp. 499 - 505.	Journal	Scopus
Ridza Azri Ramlee, Eric Law Chee Yong, Siva Kumar Subramaniam, Asem Khmag & Ahmad Shukri Fazil Rahman (2019), Home Switching using IoT System via Telegram and Web User Interface, <i>International Journal of Recent Technology and Engineering (IJRTE)</i> , Volume-8, Issue-2S6, pp. 814 - 819.	Journal	Scopus
Ismail Yusuf Panessai, Muhammad Modi bin Lakulu, Siva Kumar Subramaniam, Ahmad Fadli Saad, Muhd Ibrahim Muhamad Damanhuri & Nur Iksan Yusuf (2019), Developing a Prototype for Sun Tracker System Based on IoT: Controlled by Mobile App and Online Database Monitoring, <i>American Journal of Applied Sciences</i> , 16 (1): 11.25, pp. 11-25.	Journal	-
Subramaniam, S. K., Khan, S. M., & Nilavalan, R. (2018), Static network performance optimisation using dual interleaving routing algorithm, <i>IJUM Engineering Journal</i> , 19(1), pp. 129 - 143.	Journal	WOS/Scopus

Azman A.S., Lee M.Y., Subramaniam S.K. & Feroz F.S. (2019), Performance Evaluation of Grid Wireless Sensor Network with Different Packet Size for Pipeline in Downstream of Oil and Gas Industry, The 1st International Conference on Electromechanical Engineering & its Applications (ICEMEA-2019), pp. 456-465.	Proceeding	Scopus
Lee M.Y., Azman A.S., Subramaniam S.K. & Feroz F.S. (2019), Performance Analysis of Linear Topology Wireless Sensor Network in Oil and Gas Industry, The 1st International Conference on Electromechanical Engineering & its Applications (ICEMEA-2019), pp. 466-474.	Proceeding	Scopus
Sivanyanam Rajamanickam, Siva Kumar Subramaniam & Zamre Abd Ghani (2019), Study of EMI reduction techniques in the automotive DC-DC converter, Proceedings of Mechanical Engineering Research Day 2019, pp. 113-115.	Proceeding	WOS
Ismail Yusuf Panessai, Muhammad Modi bin Lakulu, Siva Kumar Subramaniam, Asmara binti Alias, Hafizul Fahri bin Hanafi & Husni Naparin (2018), Increasing the Performance of Genetic Algorithm by Using Different Selection: Vehicle Routing Problem Cases, Proceedings of the World Congress on Engineering and Computer Science, Volume 1.	Proceeding	-
S.K Subramaniam, M. Esro & N. Azman (2018), Development of a Data Acquisition System for Blood Bank, Proceedings of the Innovative Research and Industrial Dialogue 2018, pp. 80-81.	Proceeding	WOS
S.K Subramaniam, M. Esro & N.D. Mohd Hamidi (2018), Analysis and Development of a Self-Dimming Module for Road Traffic Signal, Proceedings of the Innovative Research and Industrial Dialogue 2018, pp. 82-83.	Proceeding	WOS
S.K Subramaniam, M. Esro & H.F. Hairanil Firdaus (2018), Beacon technology implementation for Human Tracking system in Oil and Gas Environment, Proceedings of the Innovative Research and Industrial Dialogue 2018, pp. 84-85.	Proceeding	WOS
S.K Subramaniam, M. Esro & M.Y. Lee (2018), Modelling and implementation of IoT based Flood Observatory System (FOS), Proceedings of the Innovative Research and Industrial Dialogue 2018, pp. 96-97.	Proceeding	WOS
Mazran Esro, Siva Kumar Subramaniam, Nur Alia Batrisyia Iskandar Md Zainal Abidin & Khairuddin Osman (2018), Wheatstone Bridge Configuration Of Strain Gauge As A Soil Movement Sensor For IoT Based Landslide Detection, Proceedings of the Innovative Research and Industrial Dialogue 2018, pp. 86-87.	Proceeding	WOS
Mazran Esro, Siva Kumar Subramaniam & Forolan Millon (2018), LPG gas sensor detection using IoT, Proceedings of the Innovative Research and Industrial Dialogue 2018, pp. 94-95.	Proceeding	WOS
Azman A.S., Lee M.Y., Subramaniam S.K. & Feroz F.S. (2019), Mesh WSN in midstream and downstream of oil and gas industry, Intelligent Manufacturing and Mechatronics (SymposIMM 2019), Lecture Notes in Mechanical Engineering, Springer, Singapore, pp. 456-465.	Book chapter	Scopus
Lee M.Y., Azman A.S., Subramaniam S.K. & Feroz F.S. (2019), Wireless sensor networks in midstream and downstream in oil and gas industry, Intelligent Manufacturing and Mechatronics (SymposIMM 2019), Lecture Notes in Mechanical Engineering, Springer, Singapore, pp. 466-474.	Book chapter	Scopus

REVIEWER/KEYNOTE SPEAKER

Journal:

- NED University Journal of Research (2018).
- Mehran University Research Journal of Engineering & Technology (2018).
- International Journal of Advanced Computer Science and Applications (IJACSA).

Conference:

- 3rd International Conference on Innovations in Computer Science & Software Engineering (ICONICS-2022).
- The 2nd International Conference on Applied Photonics and Electronics (InCAPE 2019).
- The Advanced Sensors& Embedded Control Symposium (ASECS) 2018.
- 2nd International Conference on Innovations in Computer Science & Software Engineering (ICONICS-2018).
- 2017 Postgraduate Research Conference (PReCON 2017).

Keynote and Inaugural speaker:

- Smart Melaka International Conference 2022 (SMIC 2022), Malaysia 6-7 December 2022.
- 2nd International Conference on Advances in Materials Science, Communication and Microelectronics (ICAMCM-2022), India 17-18 June 2022.
- The Second International Virtual Conference on Artificial Intelligence for IoT (AllIoT 2022), India 8 April 2022.
- The International Virtual Conference on Artificial Intelligence for IoT (AllIoT 2019), India 4 December 2019.
- The Advanced Sensors& Embedded Control Symposium (ASECS), Malaysia 12 December 2018.
- 2nd International Conference on Innovations in Computer Science & Software Engineering (ICONICS-2018), Pakistan 6 December 2018.

Guest/Public lecture speaker:

- University of Baghdad, Iraq 4 May 2023.
- Bolgatanga Technical University, Ghana 6 August 2021.
- Vellore Institute of Technology (VIT), Tamil Nadu, India 28 March 2019.
- The Institution of Engineers (IEM), Malaysia Melaka Branch, 11 March 2019.
- Water Malaysia 2013, Malaysia 23-25 April 2013.
- Youth Satellite Event of the World Innovation Forum – Kuala Lumpur 2013, Malaysia 12 November 2013.

CONSULTANCY/PROJECTS**System integration for indoor display panel with S2K Solutions Ltd. United Kingdom.**

- Consultancy for system integration for indoor display panel (2022).

Indoor vehicle speed detection system with S2K Solutions Ltd. United Kingdom.

- Consultancy for signal controlled numerical display system (2022).

Production monitoring system with Province Industrial System Sdn. Bhd.

- Design and development of a production monitoring system for data collection (2022).

Indoor vehicle speed detection system with Marat Technology Sdn. Bhd.

- Design and development of an indoor vehicle speed detection system (2022).

IoT based pump condition monitoring system

- Three units of booster pump condition monitoring system development and on-site installation at Lesung Batu, Melaka for Syarikat Air Melaka Berhad (30 September 2019 – 30 November 2020).

IoT based flood observatory system (iFOS)

- Flood monitoring system design, development and on-site installation at Sungai Melaka for Perbadanan Pembangunan Sungai dan Pantai Melaka (1 September 2019 –present).

Man tracker system with Marat Technology Sdn. Bhd.

- Design and development of a wireless man tracker system (2016-2018).

Building water tank telemetry system

- Two units of water tank telemetry system design and development for Melaka ICT Holdings Sdn. Bhd. (2012).

Traffic light system with Industronics Bhd.

- Design and development of a single display traffic light system (2011-2013).
- Design and development of a remote traffic light fault detection system (2011-2013).
- Design and development of a self-routing traffic light controller (2012-2014).

Blood donor scale with real-time optimiser system with Pathology Department, Melaka General Hospital

- Design and development of a portable blood donor scale (2011-2013).

Real-time production monitoring system with AI Automation Sdn. Bhd.

- Design and development of a real-time production monitoring system for semi-automated and manual production work-stations. (2007 – 2009).

SKILL AND STRENGTH**Soft skills**

- Well-developed leadership, management and influencing skills to a range of audiences.
- Ability to work collaboratively and harmoniously with colleagues/students of all cultures and backgrounds as part of a team.
- Enthusiastic and very dependent on a "can do" attitude which makes me flexible in completing various tasks (at short notice) with the least supervision.

Communication and interpersonal

- Gained experience in communication with students and staff at all levels in organisations/universities including meetings, discussion, teaching, mentoring, via telephone, e-mail and social networks.
- Presented my research works/project findings at both National/International conferences, competitions and exhibitions.
- Ability to tailor verbal communications to the needs of individuals and groups.
- Present complex information effectively to a range of audiences.

Time management

- As an academician, I had to work closely with the department members to achieve yearly KPI. My core task of teaching, project supervision, conducting lab sessions, and many other management tasks I was responsible for promptly has helped polish my time management skills.

Programming skills

- Proficient user of Microsoft Office: Word, Powerpoint, Excel and Outlook for preparing reports, data processing with customised formulas, creating forms, various database documents, records creating, presentation slides etc.

- Proficient user of NS2: C++, Object TCL, awk and Bash for wireless and network simulation.
- Proficient user of ladder diagram and functional block diagram: Schneider Telemecanique, Omron, Keyence and Super relay in many automation systems that includes a short messaging system.
- Proficient user of MultiSim and Proteus for circuit design, analysis and PCB work.

VOLUNTARY AND SOCIAL WORK

- **Invited panel:** International Innovative Design Expo 2023, 16-24 March 2023.
- **Invited panel:** Final year project (Viva) for Diploma in Electronic Engineering (Internet Of Things), 16 November 2022.
- **Invited judge:** AI Innovation Challenge 2022, 22 September 2022– National level.
- **Invited panel:** Innovation and business idea pitching competition virtual convo fest (VCF) 2022, 15 March 2022.
- **Invited panel:** Pitching to win: The art of winning new business, 12 February 2022.
- **Invited judge:** Innovation and design expo 2021, 7 February 2022.
- **Invited judge:** International Melaka Artificial Intelligence of Things (MAIoT) Challenge 2021, 8 December 2021 – International level.
- **Committee member of Faculty Alumni coordinator** where I am in charge of planning and coordinating alumni programs with the current students (2021-2023).
- **Committee member of the Internet of Things (IoT)** where I am in charge of organising IoT competitions and supporting student's projects related to IoT (2018-2019).
- **Faculty Alumni coordinator** where I am in charge of planning and coordinating alumni programs with the current students (2018-2019).
- **Committee member of Integrated Design Project (IDP)** where I am in charge of the marks evaluation committee, assessment sheet preparation and preparation for accreditation (2017-2019).
- **Director of Community Integration** Brunel Malaysian Society 2014 – 2015 in charge of multiracial programs for students.
- **Invited judge:** FKE Industrial Exposure Fair 26 September 2018 – University level.
- **Invited judge:** Innovative Teaching & Learning Research Day (InTRed'18) 6 September 2018 – National level.
- **Invited judge:** The 5th Mechanical Engineering Research Day (MERD'18) 3 May 2018 – International level.
- **Invited judge:** Innovation Carnival: UTeMEX 2017 November 2017 - University level.
- **Invited judge:** Young Inventor Challenge National level (2013) for secondary school students.
- **Invited judge:** Science Fair for Young Children Malaysia National level (2011 – 2013) for primary school students (Innovation).
- **Invited judge:** Science Fair for Young Children Malaysia National level (2011 – 2013) for primary school students (Conference).
- **Chief judge:** Science Fair for Young Children Malaysia Negeri Sembilan State level (2013) for primary school students.
- **Invited judge:** Science Fair for Young Children Malaysia Johor State level (2009 – 2013) for primary school students.
- **Invited judge:** Science Fair for Young Children Malaysia Melaka State level (2011 – 2013) for primary school students.
- **Panel for M.Sc and PhD Postgraduate proposal defence** (2018) for postgraduate students - Faculty level.
- **Panel for Final Year Project (FYP)** (2009 - 2021) for undergraduate students - Faculty level.
- **Panel for Final Year Project (Diploma)** (2007 - 2018) for diploma students - Faculty level.
- **Panel for Integrated Design Project (IDP)** (2018 - 2021) for undergraduate students - Faculty level.
- **Invited judge:** FKEKK Innovation and Competition (INOTEK) (2009 – 2013) for undergraduate students - Faculty level.

* Reference and additional information available upon request.