

Thurein Aung

Personal Information

Gender : Male
Citizenship/Nationality : Myanmar / Burmese
P/P No : Mxxxxxx8
Contact Details : 22121665@siswa.um.edu.my
Contact Phone : +60 198091034
Website : [linkedin.com/in/thurein-theo-aung-636900151](https://www.linkedin.com/in/thurein-theo-aung-636900151)



Summary

I am excited to contribute my diverse skill set and experience to your esteemed organization. With a strong academic background and extensive experience in engineering, project management, and teaching, I am confident in my ability to make a meaningful impact in a dynamic work environment. In addition to my academic achievements, including three master's degrees and a bachelor's degree in engineering, I have also actively engaged in teaching and mentoring roles. As a Teaching Assistant at the Singapore University of Technology and Design (SUTD), I collaborated with senior lecturers to conduct practical classes for Power Electronics for at least 2 semesters. This experience not only enhanced my technical knowledge but also sharpened my communication and leadership skills. My passion for education extends beyond the classroom. I have dedicated over two years to voluntary teaching for high school students seeking to improve their academic performance. Furthermore, I have conducted free lectures in colleges in Myanmar to share my knowledge and experience with the younger generation. These experiences have not only reinforced my commitment to education but also instilled in me a deep sense of responsibility and mentorship. Throughout my career, apart from teaching experience, I also have honed my skills in project management, sales, and engineering. As a Sales and Project Engineer/Engineering Manager at Federal Fire Engineering Pte Ltd, I was responsible for overseeing the design, implementation, and maintenance of fire suppression systems for various projects. Additionally, my experience as an ACMV Design Engineer at GDS Engineering Pte Ltd and as a Production Process Engineer at Panasonic Refrigeration Devices Singapore Pte Ltd has equipped me with valuable insights into HVAC systems and production process optimization.

Education



University of Malaya

Doctor of Philosophy, AI in aquaculture (2023 – 2026)



Singapore University of Technology and Design (SUTD) Masters of engineering (Research), Nano Electronic Engineering



Chang Gung University 長庚大學

Masters of Science, Nano Electronic Engineering



University of South Australia

Master of Engineering, Engineering and Technology management



Yangon Technological University

Bachelor of Engineering, Electrical and Electronic Engineering



Singapore Polytechnic

Diploma, Marketing Management

Most recent research and research interests

Most recent researches are Artificial Intelligence in Aquaculture, low power millimeter wave transceivers, BLE PA, ADC, DC-DC converters, EV wireless charging. Area of my research interests shall be Artificial Intelligence, Machine/ Deep Learning, Digital Signal Processing, Cyber Security, AI controlled wireless dynamic charging in EV cars, IOT (Internet of things) devices, RF circuits and MMIC design, RF/Microwave/Millimeter/Sub-Terahertz/Terahertz wave, Passive Circuits, Modelling and Optimization of RF Circuits, Solar energy and Sustainable Technology, Integrated Transceiver Technologies for wireless communication, wireless sensing and biomedical application., low power millimeter wave transceivers, BLE PA, ADC, DC-DC converters, EV wireless charging etc. I believe that my background in electronic engineering has prepared me for the further career development. I have three master Degrees and one undergrad degree as well as a diploma. As a trained engineer for over many years in Singapore, I equip myself with full range of technical expertise in electrical, mechanical and other engineering. I have more than 10 years of engineering experience. I am also a CAD drafting professional with broad understanding of design and construction process with exceptional creativity, problem solving and interpersonal skills. As a highly motivated, hardworking and excellent team player, I enable myself to work independently as well as a team. I always keen to learn new technology and independently proactive mostly. My current researches are complied with UN's Sustainable Development Goals SDGs 13, 14 and 15.

Teaching Experience

- Teaching Assistant duties including practical classes with Senior lecturer in SUTD for Power Electronics class including Lab - total 156 hr(s) done, at least 2 semesters.
- Freelance and part time teaching/ home tuition to secondary and high school / GCE students in Myanmar and Singapore.
- Two years' experience in Voluntary teaching for High School students who want to take examination (again) without attending day schools.
- Performed free lectures in some colleges in Myanmar to share experience and knowledge to younger generation whenever opportunity arises.

Skill(s)

Coaching and teaching, Machine learning, Deep learning, Python, Matlab, Octave, ADS, Cadence Virtuoso, Verilog A, AutoCAD2015, PLC, CAD/CAM, Microsoft Office- Excel, Words, PowerPoint, Outlook, Project and Visio, Electrical and Electronics Engineering, Mechanical Engineering, Energy Management, Engineering Management, Financial Management, Process Engineering, Process Improvement, Sales, Project Management, Quality Management, Marketing, Marketing Management, Drafting, Facility Management, Ladder Logic, etc.

Work Experience



Engineering Manager

Federal International (2000) Ltd

Jul 2012 - Apr 2016 (3 years 10 months)

Previously employed by Federal Fire Engineering Pte Ltd, a subsidiary of Federal International 2000 Ltd, a leading supplier of fire suppression systems for comprehensive fire detection, control, and protection projects. Responsibilities included overseeing design, implementation, supply, fabrication, and maintenance of systems for various projects such as commercial buildings, kitchens, and onshore/offshore installations. In the role of Sales and Project Engineer, tasks involved preparing sales quotations, managing sales orders, liaising with customers, estimating project costs, coordinating with various departments, overseeing site activities, and fulfilling other duties as directed by the project manager. As an Engineering

Manager, responsibilities included inspecting project sites, monitoring progress, ensuring compliance with safety standards, attending site meetings, supervising engineers, advising on design modifications, reviewing technical data, recommending equipment upgrades, assisting with technical information, and participating in product design and technical training sessions.



Design Engineer

GDS Engineering Pte Ltd

May 2011 - Jun 2012 (1 year 2 months)

Responsible for designing and drafting ducts for VRV/VRF/Chiller air conditioning systems, refrigeration piping, and fresh air intake/exhaust systems specifically for basement carparks. Additionally, tasked with creating other M&E tender drawings, shop drawings, and As-Built drawings for submission and site coordination purposes. Ensuring that drawings and documents are organized according to ISO standards. Providing guidance to management on design, construction, and modifications. Conducting calculations and analyzing data to maintain the accuracy of technical reports. Attending manufacturer's product design and technical training sessions as needed. Participating in design meetings when necessary. Notable projects include Singapore American International School, Weatherford Loyang, JEM, and Westgate.

Panasonic

Production Process Engineer

Panasonic Refrigeration Devices Ltd. Jul

2010 - May 2011 (11 months)

Responsible for overseeing Process Engineering in the production of refrigerator compressors, including managing assembly line modifications, improving production processes, designing jigs, installing and commissioning equipment, troubleshooting issues, and upgrading assembly line equipment and robotic arms. Providing guidance to managerial staff on design, construction, and assembly line modifications. Collaborating with the Team Leader to enhance the performance of inverter compressors. Successfully executed a challenging project aimed at developing a production improvement plan to streamline compressor assembly processes and reduce production time.



Operations and Maintenance Engineer

Singapore Food Industries Ltd

Nov 2008 - Jul 2010 (1 year 9 months)

Responsible for overseeing the daily operations and monitoring of PLC-controlled refuse services at two incineration plants. Tasks include preparing maintenance schedules, supervising servicing and repair works conducted by contractors, conducting in-house servicing of air compressors, boilers, and other equipment alongside fellow technicians. Operating boilers on a daily basis and administering chemicals such as water softener. Providing guidance to managerial staff on plant and equipment modifications for enhancement. Compiling daily, monthly, and yearly operation and maintenance reports for management review. Recommending and selecting new equipment or replacements to enhance operational efficiency and achieve cost savings.

Assistant Engineer

Jurong Hi-Tech

Dec 2007 - Nov 2008 (1 year)

Assisted a senior Engineer in the design, testing, fabrication, and installation of LED light fixtures. Supported the project manager in project management tasks such as scheduling, costing, and task coordination. Estimated quantities and costs of materials, equipment, and labor to assess project feasibility. Conducted site visits during construction to monitor progress and collaborate with contractors and clients. Participated in site and technical meetings with main contractors and consultants. Utilized calculations and analytical data to prepare technical

reports. Created tender drawings, shop drawings, and As-Built drawings for submission and site coordination purposes. Attended design and site meetings as necessary. Noteworthy project involvement includes the replacement of LED light tubes in all lift lobbies and corridors spanning 1-68 stories at Raffles Swissotel Hotel.



Technician

SSG Pte Ltd

Feb 2004 - Jun 2007 (3 years 5 months)

In the early years, supported a supervisor in the daily operation of factory equipment. Conducted routine in-house servicing of production machines and equipment alongside other technicians. Starting in 2006, assisted an office supervisor in generating sales orders and work orders, as well as creating CadCAM drawings for the production line. Completed additional tasks as delegated by the supervisor.

Assistant Engineer

Myanmar Tractor manufacturing factory

Jan 2003 - Jan 2004 (1 year 1 month)

In this role, I oversee the daily production of gears and shafts while supporting the Team Leader in scheduling production plans. I work closely with other technicians to perform routine maintenance on production machines and equipment within our facility. Additionally, I input programming into CNC machines to ensure efficient production processes. My responsibilities also include conducting calculations and analyzing data to prepare technical reports, as well as creating drawings for submission and production purposes. I actively participate in design and other meetings as needed and serve as the secretary for the factory FHSE team. Moreover, I am always ready to take on any other duties assigned by the Team Leader or Factory Manager.

Licenses & Certifications

- Machine learning Cert
- Deep Learning Cert
- Tools & Cyber attack
- Communication and Relationship Management Course (WDA)
- Problem Solving and decision making Course (WDA)
- Personal effectiveness Course (WDA)
- Singapore MOM approved safety Assessor Certificate from NTUC
- Singapore MOM approved Building Industrial Safety and Health Supervisor Certificate
- Class 2B and 3 valid Singapore driving license
- Certificate in Singapore SCDF firefighting and fire safety course
- NTU basic financial management course
- NTUC safety supervisor course

Membership(s)



Certified Member (CM) - World Aquaculture Society member - 20240686



Certified Member (CM) – IEEE member - 95095924

Honors & Awards



Scholarship - Singapore University of Technology and Design (SUTD)

Sep 2018 Master degree scholarship with stipend

Publications

1. Aung, Thurein, Mahalingam Nagarajan, and Kiat Seng Yeo. "A New Degeneration Technique for 60 GHz Triple Cascode Wideband Low Noise Amplifier." 2021 IEEE 14th International Conference on ASIC (ASICON). IEEE, 2021 proceeding (Published on 01.12.2021)
2. T. Hui Teo, Thurein Aung, Shi Hui Chua, Akhil Jayadeep and Irvine Novian "Self-Power Footwear – a new style of safe and sustainable living" World Engineer Summit 2021 international conference (In Press)
3. Malaysia's Crucial Role in Advancing Sustainable Aquaculture Globally (processing with UM)
4. Artificial Intelligence Methods Used in Various Aquaculture Applications: A Systematic Literature Review (processing with UM)
5. Training Aquaculture Artificial Intelligence (AI): A Systematic Literature Review of AI Model Development and Applications (processing with UM)

Scientific events and Presentations

- Event coordinator for Singapore IEEE MCSoc 2021 Hybrid international conference
- Presented own scientific paper at IEEE ASICON 2021 international conference
- Presented own scientific paper at World Engineer Summit 2021 international conference

Referee

(1) Prof Dr. Rafiza (Universiti Malaya)
Associate Professor in Faculty of Education
Universiti Malaya
rafiza@um.edu.my