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OBJECTIVE

To contribute to the field of Electronic Engineering and work for organizations that will further it support, motivation, and a better work environment in a way that both benefits society and the growth of technology.

FORMER EDUCATION

2023   **BACHELOR OF ELECTRONICS ENGINEERING WITH HONOURS**
Universiti Teknikal Malaysia Melaka
Current CGPA: 3.66/4.00

2016   **DIPLOMA IN ELECTRONICS (Robotics & Automation)**
MARA-Japan Industrial Institute,
CGPA: 3.73/4.00

2016   **MALAYSIAN SKILLS DIPLOMA (Electronic Product Development)**
Accreditation of Prior Skills Achievement. (PPT)
Department of Skills Development, Malaysia.

PROFESSIONAL CERTIFICATES

2019   **CERTIFIED EXPERT CRAFTSMAN IN PLC**
Certificate by **SHRDC** for expertise in designing, improving, and troubleshooting **advanced PLC programming**. Technical skills are including designing electrical motor control systems, electro fluid power, and CAD.

2015   **CERTIFIED IPC TRAINER (IPC 7711 / 7721)**
IPC 7711/7721 refers to the standard for Rework, Modification, and Repair of Electronic Assemblies developed by **the Association of Connecting Electronics Industries** (IPC).

TECHNICAL SKILLS

1   **SOFTWARE/AI DEVELOPMENT**

Software Use: MatLab, PyCharm
Language Use: Python, XML
Libraries Use: TensorFlow, Torch

2   **MOBILE APPS DEVELOPMENT**

Software Use: Android Studio
Language Use: JAVA, C++, XML

3   **CIRCUIT DEVELOPMENT & SIMULATION**

Software Use: Proteus ISIS, Multisim

4   **PCB Design**

Software Use: Altium Designer, Proteus ARES, Autodesk Eagle

5   **MICROCONTROLLER/ MICROPROCESSOR PROGRAMMING**

Software Use: MPLAB, MPLABX, STM32Cube IDE, Arduino
Language Use: C, C++

6   **PLC/HMI PROGRAMMING**

Software Use: FPWIN, CX-Programmer, GX-Developer, TIA Portal

7   **CAD DESIGN**

Software Use: Autodesk AutoCAD, SolidWorks

8   **FAULT FINDING & REPAIR**

Standard Use: IPC 7711 / 7721

9   **ELECTRONICS ASSEMBLY**

Standard Use: IPC 610

	PROJECT DEVELOPED
Artificial Intelligence	**Malaysian Sign Language Recognition using CNN** Duration: 9 months The deaf community uses sign language to communicate with others. This project developed software that uses image processing techniques and a Deep Learning algorithm to predict real-time static sign language gestures. **Enzyme Thermostability Prediction using LSTM** Duration: 3 months Prediction of protein thermostability is important in enzyme engineering. This project uses One-Hot Encoding and Deep Learning Algorithm to predict the protein thermostability based on its protein sequence and pH value. **Semantic Segmentation on Cili-Padi Fertigation Image using Transfer Learning** Duration: 3 months Chili-Picking Robot needs to identify various elements in a farm before it can pick chilies. This project uses Semantic Segmentation and Transfer Learning approach to classify elements in images taken by the robot.
Electrical/ Electronics System	**Heat Sealing Machine for Medical Device using Electropneumatic and PLC** Duration: 6 months An industry requires mass production of a medical device with high-precision plastic sealing. This project developed a semi-automated industrial machine to perform heat sealing on a medical device using a PID temperature controller, PLC, and electro-pneumatic system. **Low-Cost Optical Fiber Tapering Machine using Raspberry Pi** Duration: 1 month A tapered optical fiber can be produced by gently stretching an optical fiber while it is heated, such that the glass becomes soft. This project used a low-cost Raspberry Pi system with HMI to control the process of tapering the optical fiber. **Low-Cost Quadrature Oscillator based Function Generator** Duration: 3 months This project developed a low-cost, low-accuracy function generator with 500-2500 Hz frequency and gain control for sine, cosine, sawtooth, and square waves provided by a Quadrature Oscillator.
IoT System	**Motor Pump Maintenance Monitoring Design Using IoT System** Duration: 4 months Monitoring and controlling the motor pump at the dam becomes a challenge during the COVID-19 lockdown. This project developed a mobile application to monitor and control the motor in real-time without being at the dam site. **Data Acquisition for FMU40 Sensor using HART and Low-Cost IoT System** Duration: 3 months The software to acquire the measured tank level of the FMU40 sensor is expensive. This project developed an embedded system that can decode a HART Protocol and send the data to the cloud using a low-cost IoT system. **Rapid Prototyping System for IoT Device using CAN Bus Protocol** Duration: 1 month Different IoT applications require different sensors to be connected to the cloud. This project provides a system that can easily connect and disconnect various sensors to the internet without resetting the entire system using a CAN Bus Protocol.

WORKING EXPERIENCE

Nt Automation & Design Sdn.Bhd.
Technical Specialist & Assistant Engineer [Robotics & Automation]
(July 2021 – October 2022)

- Manage materials, scheduling, and manpower for projects.
- Support in designing and assembling electrical systems for automation machinery.
- Support in designing and implementing software systems (PLC) for automation machinery.
- Support in designing and assembling CAD models for machinery parts.
- Write technical reports for new products.
- Collect data and present the efficiency of new products.
- Provide support for clients in the design and application of new products.

Murata Electronics (Malaysia) Sdn. Bhd.
Technician Maintenance
(August 2017 – April 2018)

- Performed machine breakdown and scheduled maintenance.
- Support production process and setup.
- Design and implement *kaizen* (improvement) related to the machine.
- Write technical reports concerning the effectiveness of any improvement.

Technical Specialist & Assistant Engineer [Electrical & Programming]
(April 2018 – September 2018)

- Support major breakdown investigation and maintenance related to electrical and programming.
- Design and implement *kaizen* (improvement) related to electrical and programming PLC.
- Write technical reports concerning the effectiveness of any improvement.
- Support engineer in the implementation of engineer's projects.
- Collect data and present the efficiency of new improvements.
- Write a technical report about major breakdown involving root cause, maintenance, and countermeasure actions/designs.

Department of Skills Development Malaysia
National Electronics Trainer
(January 2016 - September 2016)

- Execute training modules/plans developed by National Electronics Experts.
- Prepare and train national competitors in electronics theory and technical skills.
- Develop test projects to evaluate competitors' performance.
- Collect and evaluate data on competitors' performance.
- Present and plan strategy on improving competitor's performance.

PARTICIPATIONS

2022	WorldSkills MALAYSIA BELIA (WSMB) **Jury** **Test Project Developer**	**2015**	WorldSkills COMPETITION (WSC), SAO PAULO, Brazil **Malaysia Competitor** (Medallion for Excellence)
2018	WorldSkills YOUTH FORUM ABU DHABI, UAE **Participant**	**2014**	ASEANSKILLS COMPETITION (ASC), HANOI, Vietnam **Malaysia Competitor** (Medallion for Excellence)
2017	WorldSkills MALAYSIA BELIA (WSMB) **Test Project Developer**	**2013**	MALAYSIAN SKILLS COMPETITION (PKM) **MARA Competitor** (Certificate of Participation)
2016	ASEANSKILLS COMPETITION (ASC), KUALA LUMPUR, Malaysia **Malaysia Trainer & Interpreter** (2 Gold Medals)		

REFERENCES

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