

Muhammad Azfar Safwan Nordin

BEng (Hons.) Mechatronics Engineering
Universiti Malaysia Pahang

Dedicated and results-driven software engineer that is interested to dive into the future of technology, mainly IoT, and AI. Currently spending time to polish skills in new technology stack, namely React, Angular and Flutter.

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EXPERIENCE

Fullstack Developer

Feb 2021 – Feb 2023

P2 Digital Holdings Sdn. Bhd.

- Designed and developed new features for the company's main product, GoJupiter, as well as creating unit tests for specific user stories.
- Performed debugging and code maintenance to ensure application's usability and stability.
- Managed servers on Amazon Web Services (AWS) and Digital Ocean (DO) to ensure all systems run smoothly.
- Participated in a team project to build a new website for GoJupiter's homepage.
- Collaborated with a team of developers in Agile environment to achieve sprint goals.
- Liaised with business and sales team to ensure consistency on products and services offered by company.

Technician

Dec 2020 – Jan 2021

Greendex Sdn. Bhd.

- Performed a wide range of physical and skilled work associated with the installation, operation and maintenance of water disinfection system (chlorination), including but not limited to disciplines of mechanical (piping), electrical (wiring) and instrument (sensor).
- Ensured safety of the site by doing calibration to the chlorine gas leak detector.
- Conducted regular preventive maintenance to equipment and tools.

Assistant Equipment Engineer / Intern

Jun 2020 – Sep 2020

CPI (Penang) Sdn. Bhd. (EMS Division)

- Analysed equipment malfunctions and failures and accordingly develop corrective actions.
- Provided job assistance and conducted job trainings for employees as needed.
- Provided technical assistance in installation and maintenance of company equipment.
- Maintained inventory control of equipment tools and parts.
- Assisted other engineers in delivering their tasks faster than scheduled deadline.

Assistant Mechatronics Engineer / Intern

Jun 2017 – Sep 2017

Development Department, Health Campus Universiti Sains Malaysia

- Designed and developed Air Quality Indicator which detects temperature and relative humidity using Arduino.
- Prepared, inspected and tested new equipment and machinery before deployment.
- Repaired and maintained usability of medical equipment and electrical devices.

EDUCATION

Industrial Skills Enhancement Program (INSEP) in Manufacturing Process

Dec 2019 – Mar 2020

- Penang Skills Development Center (PSDC), Bayan Lepas, Pulau Pinang

BEng (Hons.) Mechatronics Engineering

Sep 2014 – Jun 2019

- Universiti Malaysia Pahang – Grade: 2nd class

Matriculation Certificate

Apr 2013 – May 2014

- Pulau Pinang Matriculation College, Kepala Batas, Pulau Pinang – Grade: 2nd class

Sijil Pelajaran Malaysia

Jan 2008 – Dec 2012

- Maahad Tahfiz Sains Nurul Aman (MTSNA), Kok Lanas – Grade: 6A 3B 2C

SKILLS

Software proficiency & experience:

- **MATLAB** – Engineering and mathematical model design and simulation.
- **Proteus** – Circuit design and simulation.
- **NI Multisim** – Circuit design and simulation.
- **CATIA** – 3D Computer-aided design with additional tools for simulation.
- **AutoCAD Mechanical** – Computer-aided design tool; for mechanical design.
- **Sketchup** – Computer-aided design tool; mainly for civil architecture.
- **Quartus** – Logic design and circuit simulation.

Communication Languages

- English
- Bahasa Malaysia (Malay)

- **MPLAB IDE** – PIC programming.
- **Ansys** – Flow simulation.
- **Atmel Studio** – Assembly language IDE.

TECH STACK

PROGRAMMING LANGUAGE

Advanced

- Ruby
- Ruby on Rails
- Javascript
- HTML
- CSS
- PostgreSQL

Intermediate

- C
- C++
- PHP
- MySQL
- React
- Angular
- Flutter

CLOUD PLATFORM

- Amazon Web Services (AWS)
- Digital Ocean (DO)
- Google Cloud Platform (GCP)

OPERATING SYSTEM

- Windows
- Linux
- MacOS

SELECTED LIST OF STUDENT PROJECTS

FINAL YEAR PROJECT 2018

Title:

SnO₂ /Si Microstructure
Characterisation and Solar Cell
Sunlight Radiation Measurement

Supervisor:

Dr. Noor Mazni Ismail

- Investigated the effect of oxidation temperature to the microstructure of SnO₂.
- Measured the solar radiation absorbed by SnO₂/Si solar cell using solar power meter.

CAPSTONE PROJECT 2018

Title:

Automated Beef Patty Molding
Machine

Supervisor:

Dr. Izwan Ismail

- Designed and built a prototype of Automated "Mini Beef Patty" Molding Machine.
- Designed a GUI to control and monitor the status of the machine using C#.

ROBOTICS 2018

Title:

3 DOF Robotic Arm

Supervisor:

Dr. Muhammad Aizzat Zakaria

- Designed and developed a 3 degree of freedom (DOF) robotic arm.
- Calculated and established the Karnaugh map (K-map) of the robotic arm.
- Created code in Arduino as back-end and code in Visual Studio as front-end that communicate with each other.

COMPUTER AIDED MANUFACTURING 2017

Title:

Mini Formula 1 Model

Supervisor:

Dr. Muchamad Oktaviandri

- Manufactured a metal, non-working model of formula 1 car.
- Designed the formula 1 model in 3D using Catia and exported the manufacturing steps into G-code, then manufactured the model using Makino KE55 CNC machine.

FLUID DRIVE SYSTEM 2016

Title:

Metal and non-metal Sorting with
metal sanding machine

Supervisor:

Dr. Ahmad Shahrizan Abdul Ghani

- Designed and developed a metal and non-metal sorting with metal sanding machine using PLC and pneumatic system.

SENSOR & INSTRUMENTATION SYSTEMS 2017

Title:

Assistive spoon for patient with
Parkinson's disease

Supervisor:

Ts. Dr. Nafrizuan Mat Yahya

- Designed and built an assistive spoon for patient with Parkinson's using Arduino and MPU6050 accelerometer and gyroscope module.

CO-CURRICULAR ACTIVITIES

2020	Participant	- CATIA V5 Augmented Reality Webinar
2018	Participant	- Plus Solar National Conference 2018
	Participant	- Pahang Engineer's Run 2018 (10km)
2016	Treasurer	- PSSGM Naga Rantau UMSP (2016/2017 session)
2016	Committee	- Silat-based Community Service & Motivation Camp 3.0 (KIKOS)
2015	Facilitator	- Reading Circle Program (RCP)
	Participant	- SEKAP 3.0 (<i>Selangkah ke Alam Pendekar</i>)
2014	Participant	- IKON 1.0
	Member	- PSSGM Naga Rantau UMP
2013	Participant	- National Service Training Programme (PLKN) Group 1 Series 10/2013

REFERENCES

Wan Muhammad Amsyar

Programmer / Technical Support,
P2 Digital Holdings Sdn. Bhd.
Shah Alam, Selangor
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Firdaus Siraj

Technician,
Greendex Sdn. Bhd.
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Cheng Hong Chee

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