# **MAISARAH** MUSA

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# **SUMMARY**

Able to work independently or within a team, Have high motivation for progress and growing, eager to learn new things. Seeking an opportunity in web-based development, electronics or engineering-related fields that can utilize my qualification and previous knowledge.

# **PERSONAL**

**DETAILS** 

Address: Bandar Puncak Alam,

42300, Selangor

License: DA

# **LANGUAGE**

**PROFICIENCY** 

Malay (Native)

**English** (Intermediate)

**Japanese** (Basic)

### **SOFTWARE**

**SKILLS** 

•	Altera	Quartus	(Basic
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- Arduino (Intermediate)
- C++ Programming (Intermediate)
- COMSOL Multiphysics (Basic)
- **HTML** (Basic)
- JavaScript (Basic)
- MATLAB (Basic)
- Laravel (Basic)
- Microsoft Office (Basic)
- MPLAB (Basic)
- MySQL (Basic)
- PHP (Basic)
- Proteus (Intermediate)
- Python (Advanced)
- Solidworks (Basic)
- TinkerCAD (Basic)
- Verilog HDL (Basic)

# **EDUCATIONAL BACKGROUND**

**Universiti Tun Hussein Onn Malaysia (UTHM), Johor**Degree in Bachelor of Electronic Engineering with Honours

Kolej Matrikulasi Johor (KMJ), Johor

2017

Jun 2022 - Present

2021

# **WORK EXPERIENCES**

# Pipeline Network Sdn Bhd, Selangor Software Developer

- Full-stack developer of Laravel framework
- Converted prototypes built by System Analysts into working products (Back-end and Front-end portion)
- Liaise with developers and analyst to ensure timely completion of project
- Transformed the MAFI (Sistem AgroTrade) and Sistem e-Premis prototype
- Involved in developed web-projects for government agency such as
  Jabatan Kerja Raya (JKR), eGumis (Jabatan Akauntan Negara Malaysia),
  Jabatan Pengairan dan Saliran (JPS) and Kementerian Sumber Asli, Alam
  Sekitar dan Perubahan Iklim (KASA).
- Exposed in Bootstrap, PHP programming, JavaScript, HTML, MYSQL and POSTGRESQL

# Mommy Happy Group Sdn Bhd, Selangor Operator (Packaging) - Part time job

Oct - Nov 2021

- Assembled the daily orders by packing and labelling the parcels appropriately
- Kept the records of delivering notes, invoices of the packages
- Identified the products defect and examined the quality of books, kid's toys before distribution

### Customer Service Representative - Part time job

- Responded promptly to customer enquiries
- Followed up on customer for managing inactive customer's accounts
- Processed orders, requests from customers
- Provided pricing and deliveries information

# Noyce IoT Sdn Bhd, Kuala Lumpur Jul – Oct 2021 Internship Trainee (Electronic Engineer)

- Involved in the research and development team
- Participated in developing C++ and basic Python programming for robotic cat project
- Participated in content generation procedure including taking down notes, course contents for running projects
- Prepared weekly written and oral presentation progress of robotic project
- Prepared a customized presentation over given topics for robotic projects and 3D printing

### **PROJECT** EXPERIENCES

MAFI - Sistem Agrotrade Web-based Development Agriculture Prototype, Pipeline Network Sdn Bhd

Jun 2022 - Jul 2022

2021

Developed a web-based for agriculture website using Laravel framework, bootstrap, PHP, JavaScript, HTML & SQL.

#### **Robotic Cat** Jul 2020 - Oct 2021 Internship Project, Noyce IoT Sdn Bhd

- Developed C++ and Python programming to move a robotic cat by utilizing servomotors.
- Tested to control the robotic cat via a webserver with NodeMCU.

#### Initial Development IoT-based of 2020 - 2021 **Heart Segmentation and Diagnosis System** Final Year Project, UTHM

- Developed a phonocardiogram acquisition device that be able to segment the signal for diagnosing the heart condition.
- Stored the signals in S3 Storage of Amazon Web Services (AWS) as cloud system.
- Utilized a heart sound sensor with Arduino UNO and analyzed the signal on MATLAB software.

# **Analysis of Flex Sensor Operation** Using Proteus in the Arthritis Knee Joint Application, UTHM

Built a simulation for detection the bending of the leg and provided movement for patients in need by creating a sensing machine such as a flex sensor.

# Organ-on-a-chip, UTHM

Designed the microfluidic chip could mimic the human kidney's structural using Solidworks.

Computed the simulation of microfluidic using COMSOL Multiphysics.

### Heartbeat Monitoring System, UTHM

2021

2021

Developed a heart rate monitoring device using Arduino UNO, pulse sensor and I2C LCD display to detect heart rate activities.

#### Global Project-based Learning Program Mar 2021 Shibaura Institute of Technology, Japan

- Built a simple circuit to light up the LEDs, move the servomotor, using buzzers connected to Arduino UNO.
- Developed of dice machine using LEDs as indicator to entertain people.
- Developed for detection of drastic motion to alert people on surrounding.

#### Towards IoT-based Notification 2019 - 2020 System for Agriculture Electric Fence Integrated Design Project, UTHM

- Introduced notification system to notify the batteries level to farmers via Blynk Application.
- Built using Arduino UNO, current sensor and the batteries.

# **MIPS Processor Implementation** Analysis on FPGA, UTHM

Designed and compared both performances of 8-bit & 16-bit MIPS processor using Altera Quartus software.

### **ACHIEVEMENTS** AND EXTRACURRICULAR ACTIVITIES

**APU Certified Associate Web Developer Present** Professional Certification Programme (Asia Pacific University)

**Professional Certification Python Programming** 2022 for Artificial Intelligence Engineers PenjanaKerjaya Programme for Skills Development & Employability

Level 1 & Level 2 Professional Certification 2022 Theory of Inventive Problem-Solving (TRIZ) Penjana KPT-Pace Programme

International IEEE Conference 2021 2021 SCOReD Paper, UTHM Final Year Project

Representing for paper conference entitled as Initial Develop IoT-based of Heart Sound Segmentation and Diagnosis System

### Dean's List Award, UTHM

2020 - 2021

2020

Semester 7 & Semester 8

#### International IEEE Conference 2020 2020 SCOReD Paper, UTHM Integrated Design Project

Representing for paper conference entitled as Towards IoT-based Notification Systems for Agriculture Electric Fence

#### **Archery Championship in** 2017 Sukan Perwira (SUPER), UTHM

Won first place against other teams from Perwira resident college

#### Volleyball Championship in KAKOM, KMJ 2016

Won first place against all matriculation colleges

#### **REFERENCES**

Contact: +6017-2506256

**Mohamad Noramirul Bin Nordin** Lead Developer Pipeline Network Sdn. Bhd.

Nor Izatul Hanim Muhammad Lead System Analyst Pipeline Network Sdn. Bhd. Contact: +6011-28134231

### **ADDITIONAL INFORMATIONS**

Final Year Project (Publication)

Initial Development IoT-based of Heart Sound Segmentation and Diagnosis System

**Integrated Design Project (Publication)** Towards IoT-based Notification System for Agriculture Electric Fence