MOHD ZAHIRUDDIN BIN MOHD JAMAL

Tech Lead / Full-Stack Developer / Embedded System Developer
System Design / Client Relation / Technology Research

Sepang, Selangor 43900 • +6011-6564 2468 • zahiruddinjamal@gmail.com
github.com/Kishiro80 • linkedin.com/in/zahiruddin-jamal-9957081a1

PROFESSIONAL EXPERIENCE

***MyCES Sdn Bhd**, Kajang • Tech Lead* *08/2022 - Present*

Led a team of 4 programmers to design and develop new product for company, and communicate with 4 On site installer to install equipment, and integrate existing system.

- Responsibilities:
  - Led a team of 4 programmers to develop a new product, overseeing the project from conception to completion.
  - Managed a team of 4 on-site installers and designed a new installation process, and implement new technology that reduced costs by 50% while maintaining functionality and stability.
  - Acted as a liaison between the company and clients, proactively gathering client concerns and requirements, contributing to tailored solutions.
- Achievement:
  - Train 4 fresh graduates to become Full-Stack Developer
  - Researched and implemented innovative technologies, such as Long-Range Wireless Ethernet, Modbus Listeners, and Long-Range Modbus Radios, to optimize on-site installation processes.
  - Build client confidence to encourage their investment of time in testing the newly developed system and its subsequent deployment at their site.
  - Played a crucial role in business development by meeting with potential clients and presenting the system, expanding the client base.
- Tech Stack Used:
  - Front-End: Quasar (PWA + Web)
  - Back-End: NestJS, TypeORM, MySQL, Socket, GraphQL
  - Script: Python

***MyCES Sdn Bhd**, Kajang • Full-Stack Developer / Embedded System Developer* *05/2021- 08/2022*

Solo Full-Stack Developer given the responsibility to improve existing system, separate and convert legacy design into REST API with MVC Front-End architecture. Improve and reengineer existing hardware firmware to increase system stability.

- Responsibilities:
  - Improve existing system reliability
  - Improve microcontroller firmware to be more stable
  - Redesign System's Front-End
  - Improve database design to be faster and more reliable
  - Tackle the issue of slow server
  - Tackle the issue of server inconsistency
  - Tackle the issue of very high loading time

- Achievement:
    - Backend API is at least 1000x times faster.
    - Device are more stable with 99++% data availability.
    - Identified the slow string indexes and convert to integer indexing (1000 times faster!)
    - Identified SQL query that took very high loading time, and improve the query to reduce server load.
    - Implement hardware multi-core processing, watchdog and implement interrupt for more stable firmware.
    - Split Front end and backend part from legacy PHP, and format it into REST API compatible.
    - Redevelop front end with new design using Quasar, with better responsiveness, and cleaner design.
    - Design and deploy various feature to make the system more robust
    - Design new device to be faster and more stable from previous microcontroller.
    - Add remote management feature to make each device manageable remotely
- Tech Stack Used:
    - Front-End: Quasar (Web)
    - Back-End: PHP, MySQL, MQTT, IOT Core
    - Script: Python

***Star Tech. Industrial Corp. Sdn. Bhd**, Ampang • Internship* *07/2020 - 10/2020*

Taken the responsibility of Full-Stack Web Developer and Embedded System Developer to develop an IOT based product.

- Responsibilities & Achievement:
    - Develop embedded software for Ultra High Frequency RFID Automatic Gating product, and Face Recognition Attendance System with temperature recording.
    - Develop the Front-End webpage to access the data recorded by product.
    - Product is sold to a local university team for further improvement.
- Tech Stack Used: HTML, JS, CSS, PHP, Python

EDUCATION

***Degree in Computer Engineering (With Honors)** • UniMAP, Perlis* *(Sept 2018 - Aug 2021)*

During my three years at UniMAP, I studied a wide range of subjects, including Operating Systems, Embedded Systems, Digital Signal Processing, PID Controller, Computer Architecture, Algorithms, Artificial Intelligence, and IoT. I actively participated in tournaments and co-curricular activities. This experience honed my skills in leadership, robotics, system development, teamwork, and communication, enabling me to excel under pressure and improvise effectively.

- Graduate with honors: CGPA 3.83
- 5 straight semesters of Dean List
- 2 Years of best academic award (Hadiah Buku)
- Graduated with Academic Award
- Graduated with Innovative Final Year Project Award
- President for St John Ambulance Uniformed Unit
- Secretary for Institute of Engineering Malaysia Club
- Join tournament such as National Instrument Robotic Tournament, and URock Robotic Tournament

Diploma in Computer Engineering • *UniMAP, Perlis* *(June 2015 - March 2018)*

During my three years of diploma in UniMAP, I studied basic of programming, basic microcontroller, database system, Verilog HDL, and Signal Processing. I actively participated in Residential College Representative Council Club and organize events. This experience be the basic for my leadership, teamwork, communication, robotic, and system development.

- Graduate with CGPA of 3.43
- 3 Semester of Dean List

SKILLS

Programming Languages: Python, JavaScript, C, C++, LabView

Front-End Development: HTML5, CSS, SASS, JavaScript, jQuery, Vue.js, Quasar

Back-End Development: NestJS, TypeORM, GraphQL, MSSQL, MySQL, noSQL, PHP, CodeIgniter framework

Other: Technical Presentation and Marketing, Graphic Design, PCB Design, 3D Design, Teaching/Training

CERTIFICATION

Certified LabView Associate Developer • *National Instrument* *Certified at 2020*

- Take Labview Certification to build robot for tournament

PROJECT COMPLETED

Professional Projects

- Modbus Monitoring System
- Modbus Data Logger
- Embedded Modbus Data Logger
- Modbus Listener
- Factory Machine Scheduling Using AI
- Long-Range Radio Ethernet
- IOT Long Range Car Identification for Security House Gating System
- IOT Touch Range Gating System
- IOT Automatic Face Attendance and Temperature Recording System

Freelance Project

- IOT Vehicle Speed Monitoring System with AWS DB
- IOT Lake Garbage Collector Robot
- IOT Dam Water Level Monitoring & Control System
- IOT Door Lock System
- Online CCTV Camera
- Automatic Car Parking Space Assignation
- Car Parking Monitoring System
- Image Segmentation using Fuzzy C-means Clustering
- Robot Arm
- IOT Air Monitoring System
- Foodhunt Application

REFERENCES

Mohd Faiz Hassan
MD MyCES Sdn Bhd
mohdfaiz@mycesgroup.com
+60127758732

Ir Zahari Awang
MD Star Tech Industrial Corps
-
+60124929993

Dr Naimah Yaakob
Prog. Chaiman FTKEN UniMAP
naimahyaakob@unimap.edu.my
+6049885676