MUHAMMAD AZIZUL HAZIM BIN ABD RAZAK

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SUMMARY

A graduate from University of Malaya with BSc in Electrical Engineering, equipped with a strong foundation in electrical engineering and solid knowledge in programming. Actively seeking opportunities, particularly in Trainee or Graduate Programs within your organization. Well-versed in embedded systems as well as software development. Possesses the ability to adapt swiftly to new environments and quick to acquire new proficiency, especially in technical & software skills. Eager to build good rapport with fellow teammates and foster a conducive environment within the organization.

EDUCATION

University of Malaya, Kuala Lumpur   *2018 - 2023*

- Yayasan Khazanah Watan Scholarship Award
- Bachelor's Degree: BSc Electrical Engineering (Hons) – CPGA: 3.33
- Pre-University: Foundation in Physical Sciences – CGPA: 4.00
- Malaysia University English Test (MUET) – Band 5

MRSM Tun Ghafar Baba, Malacca   *2016 - 2017*

- Sijil Pelajaran Malaysia (SPM) – 7A+, 2A
- Sijil Pelajaran MRSM – 2A+, 3A, 4A-, CGPA: 3.88, Best Student in Chemistry & Physics Awards
- Chemistry & Mathematics National Olympiad – Distinctions & Honourable Mentions

TECHNICAL SKILLS

Programming Languages	: Dart, Bash, Python, C, C++, SQL, HTML, CSS, JavaScript, Swift, ARM Assembly
Framework & Libraries	: Flutter, React, SwiftUI, Google Firebase, SQLite, OpenCV, NumPy, Flask
Tools & Software	: Linux (Debian family), Shell Terminal, VTune, GDB, JIRA, VSCode, GitHub
Linguistics	: Written and Oral Communication in English and Bahasa Malaysia

EXPERIENCE

Intel Microelectronics (M) – Software Engineer Graduate Trainee (Platform SW Execution – Media)   *Apr 2023 - Present*

Contributed to the development of Intel Graphics Media Stack for Intel Processors on IoT Linux systems, optimizing the hardware to execute media-processing tasks. The software components span from driver level up to application level.

- **Task Coordination:** Effectively managed tasks on JIRA, updated progress concisely during daily scrum meetings. Supported in media-related tasks for Intel Core Series, Intel Arc GPUs, and Intel Xeon Scalable Processsors.

- **SUTs Setup:** Built systems under tests (SUTs) from boards, silicons & other hardware peripherals. Flashed Linux OS and set up systems environments via Bash terminal to match issues or task requirements.

- **Issue Debugging:** Reproduced, debugged & isolated the root cause for issues reported by validation team to reduce the number of active tickets on JIRA and unblock software releases i.e. for Intel Arc E-Series GPUs.

- **Automation & Efficiency:** Developed automation scripts to reduce future efforts i.e. written bash script for modular installation of Media Stack & python script to run KPI Performance Measurement on remote machines.

- **Feature Development:** Added support capabilities in Intel's Video Processing Library for GStreamer-MSDK to perform HW-accelerated AV1 encode for AYUV & Y410 color formatted streams on Intel's Panther Lake series.

- **Code Upstreaming:** Submitted fixes & enhancement to the Intel's Media Stack innersouce GitHub repositories to to get them downstreamed to the open-source version. Authored patches and pull requests in compliance with Intel's coding and documentation standards, ensuring successful acceptance by code maintainers

CERTIFICATES

Google Data Analytics Professional Certificate

Learnt data analysis skills with and built a capstone project with R and Tableau.

- Learnt key analytical skills (data cleaning, analysis, & visualization) and tools (SQL, R, Tableau, Excel).
- Visualized and presented data findings in dashboards, presentations & visualization platforms.

Stanford CS193p 2021 – Developing Apps for iOS

Developed an iOS app card complete with gesture supports and app & memory persistence.

- Developed an iOS app according to Apple's Human Interface Guidelines using SwiftUI and UIKit frameworks to create a card-based game that features gesture supports and fluid animations.

ACADEMIC PROJECTS

Integrated Design Project – Team Leader, Fullstack Developer   *May-Jul 2022*

Developed an integrated & automated smart parking system that aligned with United Nations' 11th Sustainable Development Goal (SDG) that encourages smart and sustainable urban living.

- **Team & Project Management:** Laid out project workflow, distributed tasks according to team members' capabilities, and proposed debugging & troubleshooting solutions to ensure smooth development process.

- **E-Wallet App Mockup:** Developed the app using Flutter framework with native Firebase integration to perform User Authentication & CRUD Operations, complete with UI that adhere to iOS & Android user guidelines.

- **License Plate Recognition & Parking Vacancy Monitoring Systems:** Developed both systems on a Raspberry Pi 3B+ unit using Python language and OpenCV library, with external peripherals such as Pi camera and IR sensors.

- **Centralizing Integrated Systems**: Centralized the license plate recognition system, parking vacancy monitoring and e-wallet payment system to a single database via Google Firebase's Realtime Database API.

E-Makerthon Competition – Frontend Developer   *Mar 2021*

Developed an android app that performs automated Covid-19 case tracking to offer useful analytics for the users.

- **UI Design:** Designed the app interface based on Android's Material Design guidelines. Developed the app using Flutter framework with Google Firebase's Cloud Firestore integration to access the collected data.

- **Data Scraping & Analytics:** Automate data collection from Kementerian Kesihatan Malaysia via Python script and perform analytics such as generating case heatmaps and future predictions based on polynomial regression.

INVOLVEMENTS

Intel University VLSI Bootcamp – Facilitator: Volunteered to facilitate students throughout the RTL Design workshop.

Intel IGC Sports Day – Gel Ball Competition: Worked as a team with good teamwork & strategy and won the 1st place.

Code.EE Competition – Team Leader: Analyzed questions, distributed tasks, and wrote solution in C within allocated time.

UM Symphony Orchestra – Percussionist: Played percussion instruments (i.e. snare drum) for UM Graduation Ceremony.

Debat Terbuka ASTAR – YDP Dewan: Managed flows of debate sessions by moderating the speakers, and ensure time constraints were adhered to.

Majlis Anugerah Emas PASUM – Head of Technical Team: Coordinated tasks between both technical team and PWTC's staff based on the flow of the event.

REFEREES

Manager	: Chong Boo Chean – Media Development Team Manager, Intel Microelectronics (M)	+6011-2600 8641
Supervisor	: Mohammad Mahir bin Maznaan – Senior Project Coordinator, MHPT Engineering	+6019-752 2724
IDP Advisor:	Dr. Mohamad Sofian Bin Abu Talip – Senior Lecturer, University Malaya	+6019-665 8657