

MUHAMMAD AMMAR BIN MUSTAFFA KAMAL

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PROFESSIONAL SUMMARY

Electronic Engineering undergraduate with hands-on experience in embedded systems, mobile app development (Flutter), and web development. Skilled in Arduino, ESP32, and front-end technologies. Proven ability to lead technical projects and quickly adapt to new tools and frameworks. Actively seeking opportunities to contribute to impactful engineering and tech-driven initiatives.

EDUCATION

Bachelor of Electronic Engineering with Honours / *In Progress*

Universiti Tun Hussein Onn Malaysia (UTHM), Johor | 2022 – Present

Diploma in Electrical Engineering

Universiti Tun Hussein Onn Malaysia (UTHM), Johor | 2020 – 2022

EXPERIENCE

Intern | REMBA Aspirasi Sdn Bhd

Senawang, Negeri Sembilan | Jul 2024 – Sep 2024

- Deployed CCTV and infotainment systems for client facilities, ensuring optimal coverage and functionality.
- Supported technical collaboration between the private sector and academic institutions (SSM and universities).

Diploma's Intern | VTech Communications

Muar, Johor | Apr 2023 – Aug 2023

- Assisted in the product development lifecycle and quality testing for telecommunications devices.
- Diagnosed technical issues and supported engineering teams in hardware troubleshooting.

Part-time Assistant | Harolds Bread

Taiping, Perak | Jan 2022 – Mar 2022

- Managed daily business operations and food preparation while delivering excellent customer service.

PROJECTS

MotorMedic (Flutter Mobile App)

- Led the development of an educational motorcycle maintenance app using Flutter and Dart. Designed the UI/UX to empower users with self-service repair knowledge.

LoRa Wireless Water Content Monitoring System

- Designed and built a LoRa-based system for detecting water content irregularities using Arduino and ESP32. Completed as a Final Year Project and part of a grant initiative for Diploma studies.

Bell Pepper Detection (Computer Vision)

- Utilized machine learning and Yolov8 to detect and classify bell pepper types. Conducted model training and validation on Google Collab.

AR App (Unity & Vuforia)

- Developed a mobile AR app with image tracking that transforms photos into video playback. Features include a 3D rotating cake, particle system fireworks, and C# scripted typewriter text effects.

SKILLS

Programming: C++ (Intermediate), Python (Intermediate), Dart (Intermediate), HTML/CSS/JavaScript (Intermediate), Lua (Beginner).

Technologies & Tools: Arduino, ESP32, Flutter, AutoCAD, Tinkercad, Adobe Illustrator, Microsoft 365.

Certifications:

- Microsoft Certified: Azure Fundamentals - [\[Link\]](#)
- Microsoft Certified: Azure Data Fundamentals. - [\[Link\]](#)

ACHIEVEMENTS

- **Gold Medal**, Engineering, Science and Technology Exhibition (*ESTE22*), Mahsa University (2022).
- **Silver Medal**, International Undergraduate Innovation Competition 2025 (*IUIC 2025*), UTHM
- **Silver Medal**, Modern Education & Technology Advance in Research and Innovation for Sustainable Excellence (*METARISE 2025*), Yogyakarta, Indonesia
- **(3rd Place)**, IEEE Control Systems Society, Excellence Project Special Award (*FKEE IA 2026*)
- **(3rd Place)**, Best Project Award Computer Engineering Cluster
- **Silver Medal**, FKEE Industry Award 2026 (*FKEE IA 2026*), 13 January 2026, UTHM

LANGUAGES

Bahasa Melayu (Native), English (Proficient), Mandarin (Basic).

EXTRACURRICULAR

- FKEE UPSKILING PROGRAM IC DESIGN BOOTCAMP
- FKEE SULAM' Project for schools around Batu Pahat
- STEM Mentor, SJKC Yani (Yong Peng): Led a "Smart Water Plant" workshop teaching sensor technology to students aged 5-12.

REFERENCE

Dr. Radzi Bin Ambar

FYP Supervisor

Universiti Tun Hussein Onn

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