



MOHAMAD KHAIRUL IKMAL BIN MOHMAD

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SUMMARY

Highly motivated **Software Engineering student at Universiti Tun Hussein Onn Malaysia (UTHM) with a current CGPA of 3.7**. Passionate in software development following **SDLC practices**, with a strong interest in building scalable and maintainable applications using **Object-Oriented Programming (OOP)** principles. Experienced in developing full-stack solutions with clean **mobile app** architecture, integrating **RESTful APIs**, and developing **AI-powered** or **IoT-integrated** systems using **Flutter** and **Firebase** or **MySQL**. Recognized as a **Gold Award winner** in national-level innovation competitions. Seeking an internship opportunity (**August 2026 – January 2027**) to contribute technical expertise to impactful software development projects.

EDUCATION

Universiti Tun Hussein Onn Malaysia (UTHM)

2023 – Present

Bachelor of Computer Science (Software Engineering), Current CGPA: 3.7
Expected graduation: February 2027

Kolej Matrikulasi Johor (KMJ)

2022 – 2023

Foundation in Science Physical, CGPA: 3.98
Graduated: 2023

KEY PROJECTS

Taska Zurah Attendance System – Smart Childcare Management Platform

Flutter, Firebase, NFC Technology, ESP32, Cloud Messaging, IoT Sensors, JavaFX

- Developed an NFC-based attendance and monitoring system that automated attendance tracking, improved data accuracy, and enhanced digital record management.
- Built a centralized system with real-time parent notifications, attendance-based fee summaries, and analytics dashboard to improve operational efficiency and support better decision-making.
- Implemented Object-Oriented Programming (OOP) principles to ensure code modularity and maintainability across the system architecture.

IoT Smart Farm Monitoring and Irrigation System for Food Security

Flutter, Firebase, ESP32, RESTful APIs, IoT Sensors, Realtime Database

- Engineered a full-stack IoT precision agriculture mobile application using Flutter and Firebase architecture, integrating ESP32 microcontroller firmware to stream live environmental data and execute automated irrigation control via remote pump commands, significantly improving crop monitoring efficiency.
- Architected a smart farm decision-support system by integrating a real-time AI crop advisory chatbot via Anthropic API and RESTful APIs (OpenWeatherMap) to provide data-driven farming recommendations and critical alerts, enabling proactive risk management for field conditions.

Halfday Cafe Food Ordering System – Web-Based POS & Table Service Platform

PHP, MySQL, JavaScript, HTML/CSS

- Developed a full-stack web-based POS system using PHP and MySQL to streamline table service workflows, featuring digital menu browsing, order customization, and a secure receipt-upload payment gateway.
- Architected a multi-role access system with session-based authentication and OOP principles, integrating a real-time staff order queue and an admin dashboard for sales analytics and menu management.

ITC Event Management System – Web-Based Event Management Platform

HTML, CSS, JavaScript, Firebase Authentication, Firebase Cloud Firestore

- Developed a centralised web-based event management system for the UTHM Information Technology Club, replacing fragmented poster and email workflows with real-time event publication, online registration, and automated participant tracking through CRUD operations.
- Implemented role-based access control with Firebase Authentication and Cloud Firestore, delivering separate admin and user dashboards for event management, registration tracking, and a responsive interface that synchronises event data instantly across users.

ACTIVITIES AND INVOLVEMENT

- Finalist, Digital Innovation Symposium 2025 (DINS 2025), Universiti Tun Hussein Onn Malaysia
- Facilitator and Committee member, UTHM TechUp: First Step into IoT exposure for primary student, SK Bandar Batu Pahat
- Participant, PutraHack Hackathon 2026, Universiti Putra Malaysia.
- Participant, LEED25 Cyber Entrepreneurship Day – Managed a team-based sales booth, handled product promotion, customer interaction, and financial sales activities.
- Finalist, MLBB Esports SAF Competition (Inter-Faculty Sports), Universiti Tun Hussein Onn Malaysia.

SKILLS

- **Languages:** Java, Dart, JavaScript, C++, HTML/CSS, SQL, PHP, Python, Node.js
- **Libraries, Frameworks, Databases & Tools :** Git, GitHub (Version Control), Flutter, RESTful APIs, Firebase, MySQL, Supabase, Android Studio, VS Code, Arduino IDE, Figma, Power BI, Anaconda
- **Soft Skills:** Strong problem-solving, teamwork, communication skills, and quickly adapt in fast-paced environments.

CERTIFICATION

- CCNA: Introduction to Networks Certificate (Issued by Cisco)
- SAS Viya Overview Certificate (Issued by SAS)
- Machine Learning Using SAS Viya Certificate (Issued by SAS)
- Data Literacy in Practice Certificate (Issued by SAS)
- Data Literacy Essentials Certificate (Issued by SAS)

ACHIEVEMENTS

- Gold Award Winner, Digital Innovation Symposium 2025 (DINS 2025), Universiti Tun Hussein Onn Malaysia.
- Best Presentation Award Winner, Digital Innovation Symposium 2025 (DINS 2025), Universiti Tun Hussein Onn, Malaysia.

LANGUAGES

- Malay - Native
- English - Proficient

REFERENCES

Dr. Nurezayana Binti Zainal
FYP Supervisor | Lecturer
nurezayana@uthm.edu.my
07-4533784