



MUHAMMAD IDHAM BIN ISA

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TECHNICAL SKILL

- Programming Languages: **Python** (TensorFlow, Keras, Scikit-learn, OpenCV), **C++**, JavaScript
- Database & Backend: MongoDB (Cloud & Local Deployment), REST API development with Node.js and Express
- Embedded Systems & Microcontrollers: STM32, Arduino, **Raspberry Pi**, ESP32
- AI: **Deep Learning**, Hailo AI Hat, Computer Vision
- Operating Systems: **Linux**

WORK EXPERIENCE

- Internship, Melaka ICT Holding Sdn. Bhd.**

Jun. 2024 - Sep. 2024

 - Assisted in website content updates and basic maintenance.
 - Supported network setup by connecting and organizing Ethernet cables for server operations.
 - Designed digital and print materials to support marketing and communication needs.
- Sale Assistant, Aeon Co. (M) Berhad**

Jun. 2022 - Sep. 2022

 - Assisted customers with product selection, inquiries, and purchases to ensure a positive shopping experience.
 - Maintained store cleanliness, merchandise displays, and stock organization.

EDUCATION

- Bachelor of Computer Engineering with Honours**

Sep. 2021 - Jul. 2025

Universiti Teknikal Malaysia Melaka(UTeM)

 - CGPA: 3.35, Dean's List: 2 Semesters
 - Relevant Course: Computer Vision and Pattern Recognition, Machine Learning, Artificial Intelligent
- Matriculation (Biology, Physics, Chemistry)**

Apr. 2020 - May 2021

Johor Matriculation College

 - CGPA: 3.34, Dean's List: 1 Semester

PROJECTS

- Final Year Project – PLC Rejection Integrated System Based on Deep Learning**
 - Designed and implemented an automated rejection system for can cap defects using PLC and AI integration.
 - Applied **CNN** and **YOLOv8** for real-time defect detection and classification.
 - Deployed AI models on Raspberry Pi 5 with Hailo AI Hat for high-speed processing.
 - Controlled PLC actuators to reject defective can caps based on AI output.
- Integrated Design Project - Smart Pest Repellent using Ultrasonic Wave**
 - Designed an ultrasonic wave-based pest repellent targeting rats sensitive to high-frequency sound.
 - Integrated ESP32-CAM and Arduino Mega with ultrasonic sensors to emit repellent waves.
 - Implemented IoT monitoring to stream live camera feed for remote environment observation.

Information Security Project - Visitor Management System

- Built a backend system with a MongoDB cloud database to manage visitor records.
- Implemented basic web security measures to protect stored data.

CERTIFICATION AND TRAINING

- Omron PLC level 1 and level 2 Certification

CO-CURRICULAR ACTIVITIES & ACHIEVEMENTS

- Gold Medalist – INOTEK 2025 (Final Year Project Presentation)
- Bronze Medalist – INOTEK 2024 Festival (Integrated Design Project)
- Participant – Vision Showcase 2025 (Artificial Intelligence Project Showcase)
- Volunteer – SULAM Program: Taught microcontroller & coding to secondary school students
- Crew Member – Haunted House Event, FTKEK Festival (2022 & 2023)

LANGUAGES

- **Bahasa Malaysia:** Fluent
- **English:** Intermediate

REFERENCES

TS. DR. AFIFAH MAHERAN BINTI ABDUL HAMID

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TS. DR. ABD SHUKUR BIN JA'AFAR

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