Hassan Yassin
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PROFESSIONAL SUMMARY

Final-year AI/ML Computer Science student with hands-on experience building deployable machine learning and LLM-powered solutions for real-world problems. Skilled across the entire ML lifecycle, data preprocessing, modeling, evaluation, and deployment with expertise in API integration and end-to-end ML workflows. I am passionate about applying deep learning, generative AI, and computer vision techniques. I am actively seeking a Machine Learning internship to contribute to impactful AI projects.

PROJECTS

EcoVision AI – Intelligent Waste Sorting Ecosystem | OpenCV, YOLOv8, MobileNetV2

- Engineered a dual-engine Flask platform for real-time waste classification and multi-object inventory tracking, optimized for edge deployment on NVIDIA Jetson Nano.
- Achieved 87.53% classification accuracy by fine-tuning a MobileNetV2 model, and a score of 0.9918 for multi-object detection in complex environments using YOLOv8n.
- Developed a computer vision preprocessing pipeline using CLAHE contrast enhancement and Canny edge detection to isolate structural geometry and improve model robustness.

LearnBack – AI Learning-by-Teaching Platform | Python, Generative AI, Three.js

- Designed and implemented an AI-powered reverse-tutoring platform that reinforces student learning through teaching (Protégé Effect).
- Integrated Generative AI with Python to assess student input in real-time and provide adaptive feedback on misconceptions.
- Developed immersive front-end visualizations using Three.js to increase student engagement and interaction.

Deep Learning–Based Heart Attack Risk Prediction | Python, Flask

- Engineered four computational intelligence models (ANN, DNN, GA-ANN, FIS) to predict heart attack risk, achieving 89% accuracy.
- Conducted rigorous model evaluation and comparative analysis using precision, recall, and F1-score metrics to identify the best-performing model.
- Deployed the top-performing model via a Flask web application, enabling users to input health metrics for real-time risk assessment**.**

PathToHire – AI Mock Interview Platform | JavaScript, Python, RapidAPI, Generative AI

- Engineered the backend of an AI-driven mock interview platform to automate technical interview simulations
- Implemented adaptive AI-generated interview questions using user CV data to deliver personalized session

- Integrated RapidAPI and generative AI models to evaluate candidate responses and provide structured feedback

EDUCATION

B.Sc., Computer Science ***October/2026***
Multimedia University, Malaysia

TECHNICAL SKILLS

- **Languages:** Python, JavaScript, SQL
- **ML & Deep Learning:** PyTorch, TensorFlow, Keras, Scikit-Learn, OpenCV
- **Data Science:** Pandas, NumPy, Matplotlib
- **Cloud & MLOps:** Amazon Web Services (AWS), Microsoft Azure, Git, n8n
- **Backend & APIs:** Flask, RapidAPI, Postman, Jupyter Notebook
- **Methodologies:** Generative AI, Computer Vision, Deep Learning, Data Preprocessing

AWARDS/VOLUNTEER WORK

2nd Place – Melaka AI Hackathon | *Oct 2025*

- Awarded second place for developing Eat-In-Sight**,** an AI-powered Telegram bot that analyses meal photos, extracts nutritional information, and logs data into Notion for long-term tracking.
- Leveraged AI-based image analysis and workflow automation (n8n) to support healthier eating habits.
- Demonstrated teamwork, rapid learning, and execution under pressure while applying innovative AI solutions.

Referee – FIRST Global Robotics Challenge Malaysia | *Jul 2025*

- Volunteered as a referee for the national robotics competition, ensuring fair and smooth match execution for teams competing to represent Malaysia internationally.
- Developed skills in focus, quick decision-making, and impartial judgment under high-pressure scenarios.
- Gained insight into STEM education, robotics innovation, and teamwork in competitive environments.

Founder & Initiative Lead – Khotota Khair Initiative | *Feb 2022 – Present*

- Founded a community-driven initiative to discreetly support families in need expanded operations from 20 to 30+ families through grassroots fundraising.
- Led end-to-end operations including fundraising, logistics, coordination, and community engagement.
- Strengthened leadership, organizational, and communication skills while delivering hands-on social impact.