KYAW LINN KHANT

ROBOTICS ENGINEER

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PROFILE

Fresh graduate in Robotics & Artificial Intelligence (BEng Hons, University of Hertfordshire) with practical experience in autonomous systems, AI-driven robotics, and embedded software development. Skilled in designing, prototyping, and deploying robotics solutions, with a strong foundation in programming, control systems, and AI/ML. Passionate about applying robotics to real-world challenges, demonstrated through portfolio projects such as reinforcement learning–based self-balancing robots, multi-agent search & rescue systems, and computer vision–driven gesture recognition.

EDUCATION

BEng (Hons) Robotics & Artificial Intelligence   **September 2023 — August 2025**
University of Hertfordshire

Diploma in Infocomm Technology   **July 2022 — March 2023**
PSB Academy, Singapore

TECHNICAL SKILLS

Python	C++	Git & GitHub	Linux & Bash
Raspberry Pi	Embedded Systems	Arduino	OpenCV
STM32	MATLAB	ROS	CoppeliaSim
Webots	MuJoCo	PyBullet	Reinforcement Learning
Computer Vision	Sensor Integration	Zigbee Communication	3D Vision
Machine Learning	CAD (Fusion 360)	Technical Writing	PyQt5

CO-CURRICULAR ACTIVITIES

Vice President, IES-PSBA Student Chapter, Singapore   **January 2024 — December 2024**

PROJECTS

Reinforcement Learning Self-Balancing Robot
- **Developed** a reinforcement learning–based self-balancing robot trained with PPO in MuJoCo simulation.
- **Designed** a deployment pipeline to convert PyTorch models to ONNX 'TensorFlow float32 'quantized int8 TensorFlow Lite.
- **Implemented** the trained policy on a Teensy 4.1 microcontroller, enabling low-latency real-time inference and autonomous balance control on embedded hardware.

Naruto Hand Seal Detection with Facial Recognition
- **Developed** a custom CNN model for Naruto hand seal recognition, integrated with TensorFlow/Keras and MediaPipe Hands for landmark tracking.
- **Designed** a multi-modal recognition framework combining hand gestures with DeepFace-based facial expression analysis.
- **Implemented** a PyQt interface that overlays live video detection, enabling gesture–emotion combinations (e.g., seal + smile) to trigger automated actions like snapshots and GUI responses.

For additional projects, please visit my portfolio website.

ADDITIONAL INFORMATION

- **Links:** Portfolio, GitHub, LinkedIn