

# WILBERT ANDREW YONATHAN

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## CAREER OBJECTIVE

Final-year Artificial Intelligence in Engineering student at Xiamen University Malaysia with experience in computer vision, reinforcement learning and efficient AI. Seeking an AI Engineering or Computer Vision internship to develop practical solutions through research and problem-solving while advancing technical skills.

## EDUCATION

**Xiamen University Malaysia**

Sep 2023 – Sep 2027

Bachelor of Engineering in Artificial Intelligence | CGPA: 3.77/4.00

## WORK EXPERIENCE

**Student Registration & Operations Assistant**

Apr 2025

Xiamen University Malaysia

- Supported registration setup and booth guidance within a team serving 800+ foundation students.
- Organized university assets for registration operations and proper storage.

## PROJECT EXPERIENCE

**PaddyLiteX: Paddy Disease Detection**

Apr 2026 – Present

- Enhanced a DenseNet-121-based YOLOv8n baseline using DenseLiteX, SPPF and C2PSA, raising mAP@0.5 from 80.69% to **81.67%** with 68.01% fewer parameters and 72.59% lower GFLOPs.
- Validated through ablations, achieving 0.88 percentage points higher mAP@0.5 and 4.24% fewer parameters than original YOLOv8n, and built an interactive three-model comparison demo.

**MarineLite: Marine Organism Detection**

Jun 2026 – Jul 2026

- Integrated GhostConv and SimSPPF into DU-MobileYOLO, increasing mAP@0.5 from 74.23% to **75.36%** while reducing parameters by 7.02% compared with the baseline.
- Validated accuracy-complexity improvements through ablation studies and deployed an interactive demo with bounding-box visualisation and model comparisons.

**dPickleball: Reinforcement Learning Agent**

May 2026 – Jul 2026

- Trained an autonomous PPO agent in Unity ML-Agents using a six-level curriculum, reward shaping and league self-play to control movement and paddle rotation.
- Contributed agent policies and collaborative tournament evaluation, helping the team achieve **2nd** place in the competition.

## EXTRACURRICULAR ACTIVITIES

**Head of Photography & Videography, Love in Action**

Feb – Mar 2026

Coordinated coverage, managed media workflows and edited outreach materials.

**Head of General Affairs, XMUM AI Club**

Apr – Oct 2025

Coordinated logistics and external collaborators for a national-level AI event.

**General Affairs Committee, AIESEC XMUM**

Sep 2023 – Sep 2025

Supported administrative coordination and committee communication.

## ACHIEVEMENTS AND AWARDS

- Dean's List:** Awarded for three consecutive semesters.
- XMUM Merit Scholarship:** Awarded for the four-year undergraduate programme (2023–2027).

## SKILLS AND LANGUAGES

**Programming:** Python, C, C++

**AI/ML:** Machine Learning, Deep Learning, Computer Vision, Reinforcement Learning, CNNs

**Frameworks and Libraries:** PyTorch, TensorFlow, scikit-learn, Ultralytics YOLO, OpenCV, NumPy, Pandas, Matplotlib, Seaborn, Unity ML-Agents, FastAPI, Gradio, Streamlit

**Tools and Workflow:** Git, GitHub, Docker, Jupyter, VS Code, Hugging Face Spaces, Render

**Languages:** English, Mandarin, Indonesian, Malay, Hokkien

**Soft Skills:** Communication, Presentation, Teamwork, Leadership, Problem Solving

## REFERENCES

**Shaidah Binti Jusoh** | Assistant Professor

Thesis Supervisor | Email: shaidahjusoh@gmail.com | Tel: [Phone]

**Qasem Ashwaq Mukred Saeed** | [Role and organisation]

Computer Vision Supervisor | Email: [Email] | Tel: [Phone]