Low Yu Xuan

Penang, Malaysia yxlow07@gmail.com (+60) 12-908 7237 https://yxlow07.github.io

Personal Profile

A student specializing in backend development and machine learning. Leader of various clubs and events with strengths in problem solving and people relations. Seeking research opportunities to apply technical expertise in innovative software solutions and artificial intelligence systems in the healthcare sector.

Education

Institution: INTI International College Penang **Mar 2025 – Present**
Course: Cambridge A Levels (Intake Representative)
Subjects: Pure Mathematics, Further Mathematics, Physics, Chemistry

Institution: Chung Ling High School Penang **Jan 2020 – Dec 2024**
Course: Computer Science
Academic Achievement: Sijil Pelajaran Malaysia (**9A+, 1A**), Ranked **2nd** in Year, **Best Graduate** of 2024

Leadership Experience

Technical Director, AMISO **Jun 2025 – Present**

- Coordinated a team of developers across Malaysia to expand technological outreach of the association
- Developed a blueprint for a mobile application to promote news of international science olympiads
- Ensured website runs with 100% uptime and with no performance bottlenecks during peak hours

Section Leader, Code In Place 2025 **Apr 2025 – Jun 2025**

- Taught 15 students Python from all around the world from scratch
- Conducted TeachNow sessions to help students identify bugs and improve programming skills
- Introduced and refined student's problem solving skills to improve assignment completion rates by 50%

Chief Executive, International Student Camp (Science and Technology Symposium) **Sep 2023 – Aug 2024**

- Organised an international exchange camp for 150+ participants from 11 schools across 6 countries
- Led the planning and execution of a 6-day international student camp
- Led the whole camp as the main speaker and coordinator with the assistance of 30 committee members

Vice President, i-CreatorZ Club (Maker's Club) **Jul 2023 – Sep 2024**

- Streamlined club operations and communication channels, increased member engagement by 30%
- Directed 2 projects (RankSys, Club Website) to improve accessibility and outreach.
- Coordinated 30 committee members and 100 club members for events

Skills

- **Hard Skills:** Event Planning and Coordination, Public Speaking, Backend Development, AI Systems Training
- **Soft Skills:** Creative Thinking, Problem Solving, Effective Communication, Critical Thinking
- **Technical Skills:** HTML, CSS, JavaScript, Python, C++, PHP, SQL, Flutter, Django, REST API, MVC

Awards and Honors

- NexoraSTEM Algorithmic 24 – **2nd Runner Up** (2025)
- National Artificial Intelligence Competition (NAIC) – **1st Runner Up** (2025)
- LingHacks VI Hackathon – **Best Beginner Project, Top 10 (Rank 4)** (2025)
- Malaysia Artificial Intelligence Olympiad – **Gold** (2025)

- California Informatics Competition (CALICO) – **Silver** (Fall 2024)
- Malaysia Computing Challenge – **Gold** (2024), **Bronze** (2023)
- Malaysia Computing Olympiad – **Silver** (2024)
- Kangaroo Math Competition – **Gold** (2024), **Silver** (2023)
- Singapore & Asians Math Olympiad – **Silver** (2024), **Bronze** (2023, 2022)

Certification

- Information Technology and Computer Science, MCKL College (CS1101), Grade A **Aug 2024**
- Neural Networks and Deep Learning, DeepLearning.ai **May 2025**

Projects

GUIDE-SHARK

- Frontend application written in Flutter using clean code architecture for readability
- Backend application written using Django and provide Rest API services, applying SoC design principle
- Applied Artificial Intelligence (AI) to analyze symptoms and provide quick diagnoses

JotMe

- Frontend features multiple dynamic mood visualization through ChartJS and interactive dashboard
- Backend system integrating KeyBERT for keyword extraction and pre-trained emotion detection models, implementing graph-based contextual analysis for sentiment scoring
- Applied NLP to analyze journal entries to provide personalized mental health insights with crisis intervention features

Byte of Kuih

- Collected 16000+ images to train EfficientNetV2 model on recognising Malaysian traditional kuih
- Fine-tuned model to achieve 98% validation accuracy and 100% testing accuracy