

JEWEL LAI ZE SYN

Bachelor of Computer Science majoring in Data Science and Artificial Intelligence

+60 16-876 9869 | jewellaizs.0615@gmail.com | Jewel Lai Ze Syn | jewelllllai.website | github.com/Jewellllai

SUMMARY

Final-year Computer Science student majoring in Data Science and Artificial Intelligence, with hands-on experience developing full-stack web, mobile, and cloud-connected applications. Skilled in React, Next.js, React Native, Laravel, Node.js, Express.js, FastAPI, SQL, and Firebase, with experience building APIs, integrating databases, implementing role-based workflows, containerising services, and delivering tested applications through internships and team projects.

TECHNICAL SKILLS

Programming Languages: Python, Java, JavaScript, C#, C++, SQL, HTML/CSS

Frontend & Mobile Development: React, Next.js, React Native, Tailwind CSS, Vite, D3.js

Backend & API Development: Node.js, Express.js, Laravel, FastAPI, Firebase

Databases & Data Services: MySQL, Microsoft SQL Server, MongoDB, Redis

Software Architecture & Integration: REST APIs, role-based access control, authentication workflows

Testing & Quality: Vitest, Newman API testing, Playwright, smoke testing, end-to-end testing

Cloud & Deployment: Microsoft Azure, AWS, OCI, Docker, Kubernetes, Azure Container Apps, Vercel, Railway, Render

Development & Version Control: Git, GitHub, GitHub Actions

Supporting Technologies: Microsoft Power Apps, Power Automate, ESP32, Arduino

Soft Skills: Fast Learning Velocity, Resourcefulness, Ownership and Accountability, Proactive Initiative

EDUCATION

Bachelor of Computer Science, Data Science and Artificial Intelligence

Mar 2025 – Dec 2026

Swinburne University of Technology Sarawak Campus · Malaysia

- **CGPA:** 3.75 / 4.00 (Current)
- 2 × Lee Foundation Study Grant (2025 & 2026)
- Dean's List (Semester 2, Year 2)
- Dean's List (Semester 1, Year 3)

Diploma in Information and Communication Technology, Data Informatics

Aug 2022 – Dec 2024

Asia Pacific University of Technology and Innovation (APU) · Malaysia

- **CGPA:** 3.87 / 4.00
- 50% APU Malaysian Scholarships & Merit Awards Holder (2022 – 2024)
- Skim Pinjaman Pelajaran Dalam Negara - 75% Incentive Recipient
- Lee Foundation Study Grant (2023)

PROFESSIONAL EXPERIENCE

CLOUD INTERN

Dec 2025 – Feb 2026

Vision Technology Consulting Sdn. Bhd. (A Vetece Company) · Malaysia

- Developed an OCI Generative AI and RAG-based log-analysis application covering five OCI log categories, enabling users to retrieve infrastructure troubleshooting guidance through natural-language queries.
- Built an automated ingestion, preprocessing, and retrieval pipeline that transformed raw OCI logs into searchable knowledge-base content for context-aware chatbot responses.
- Integrated cloud AI services, retrieval workflows, and application logic into a functional troubleshooting prototype.
- Documented the solution architecture, deployment workflow, testing procedures, and governance considerations to support reproducibility and future development.

SOLUTIONS ENGINEER INTERN

Aug 2024 – Jan 2025

Enfrasys Consulting Sdn. Bhd. · Malaysia

- Enhanced a Power Apps inventory-management application supporting **300+ IT assets** by redesigning the interface and streamlining asset registration and tracking workflows.

- Designed a unified Power Apps interface consolidating **six departmental systems into a single access point**, simplifying navigation and application access.
- Refined a **three-page Power BI dashboard** using Microsoft SQL Server queries and operational data, and presented the enhanced solution to senior management, Business Development, and Operations teams.
- Reviewed Microsoft Azure and Defender alerts during daily monitoring, documenting findings and supporting incident triage.

CERTIFICATIONS

• Oracle Cloud Infrastructure 2025 Certified Foundations Associate	Issued 23 Dec 2025
• AWS Certified AI Practitioner	Issued 6 Jul 2026
• AWS Certified Cloud Practitioner	Issued 10 Jul 2026

SELECTED PROJECTS

Intelligent Warehouse Management System

Docker • FastAPI • Laravel • MySQL • React/Inertia

- Developed a full-stack warehouse management system integrating Demand Forecasting, Intelligent Slotting, and Wave Planning using Laravel, React/Inertia, FastAPI, MySQL, and Docker.
- Implemented role-based workflows for five user groups, controlling access to warehouse operations, forecasting, model management, wave planning, and intelligent slotting.
- Built backend services connecting forecast outputs with inventory levels, lead-time demand, projected deficits, and reorder recommendations.
- Automated dataset validation, model retraining, artefact versioning, evaluation logging, and selected-model activation through a reproducible application workflow.

SmartPlant Sarawak Mobile Application

React Native • Firebase • ESP32 • Arduino • Node.js

- Led a six-member team in developing a biodiversity-monitoring mobile application for NeuonAI and the Sarawak Forest Corporation, coordinating implementation, task allocation, and stakeholder demonstrations.
- Developed a React Native application integrated with Firebase and Node.js to display real-time temperature, humidity, motion, and location data from ESP32-connected sensors.
- Built Arduino C++ firmware and backend integrations to process sensor readings, synchronise data, and trigger threshold-based in-app notifications.

GoFly Travel Dashboard Website

React • Vite • Node.js • Docker • Azure • Redis • GitHub Actions

- Developed a full-stack travel dashboard using React/Vite and Node.js, hosting the frontend on Vercel and deploying the backend through Azure Container Apps across development, testing, and production.
- Containerised the backend with Docker, published images through Azure Container Registry, and integrated Azure Cache for Redis for shared application data across three environments.
- Automated 64 workflow steps and executed 54 core GitHub Actions runs over 90 days, covering unit, API, smoke, and end-to-end testing, code-sync verification, container builds, and controlled cloud deployments.
- Implemented monitoring and observability through Grafana, Vercel Observability, GitHub Actions, and Azure services to track application health, deployment outcomes, and runtime behaviour.