

JEWEL LAI ZE SYN

Bachelor of Computer Science majoring in Data Science and Artificial Intelligence

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SUMMARY

Final-year Computer Science student double majoring in Data Science and Artificial Intelligence, with practical experience across Cloud Computing, DevOps, Software Engineering, AI, and data-driven projects. Over five years of academic learning and hands-on project experience building applications using multiple programming languages, frameworks, cloud platforms, and automation tools. Demonstrated strong independent learning, technical problem-solving, and the ability to deliver production-ready solutions through industry projects, professional certifications, and a personal portfolio.

TECHNICAL SKILLS

Programming & Frontend: Python, Java, C#, C++, JavaScript, HTML, Tailwind CSS, React, React Native, Vite, Next.js

Backend & Apps Platforms: Node.js, Express, Laravel, Microsoft Power Apps, Microsoft Power Automate, Arduino IDE, Firebase

Data, Analytics and AI: SQL, Pandas, NumPy, Jupyter Notebook, TensorFlow, MongoDB, Power BI, D3.js, KNIME

Cloud, DevOps & Tooling: Amazon Web Services (AWS), Oracle Cloud Infrastructure, Microsoft Azure, Docker, Kubernetes, GitHub Actions, Grafana, Vercel, Railway, Render, Ollama, OpenAI / Codex, Gemini AI, VS Code, Git

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: 3.70 / 4.00 (Current)
- 2 × Lee Foundation Study Grant (2025 & 2026)
- Dean’s List (Semester 2, Year 2)

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
- APU Merit Scholarship of 50% Recipient (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

- Strengthened cloud operating system and patch management assessment by evaluating OCI OS Management Hub capabilities for automated patching, package management, compliance, and lifecycle management across Linux and Windows.
- Improved log troubleshooting efficiency by developing an AI-assisted log analysis prototype using OCI Generative AI and RAG to analyse five OCI log categories, including Load Balancer, Network Firewall, WAF, and VCN Flow logs.
- Enhanced AI-assisted troubleshooting by developing an automated pipeline that ingested OCI logs into a knowledge base, enabling a RAG-powered chatbot to provide context-aware troubleshooting guidance.
- Strengthened solution maintainability and knowledge transfer by documenting the solution architecture, deployment workflow, testing procedures, and governance for future implementation and support.

SOLUTIONS ENGINEER INTERN Aug 2024 – Jan 2025
Enfrasys Consulting Sdn. Bhd. · Malaysia

- Improved IT asset tracking and audit readiness by enhancing a Power Apps Inventory Management System through UI redesign and workflow optimisation, supporting 300+ managed IT assets and internal audits.
- Improved cross-department application accessibility by designing a unified platform that consolidated six departmental systems into a single interface with consistent authentication and user experiences.
- Improved LOA tracking visibility by developing a three-page Power BI dashboard using Microsoft SQL Server queries and operational reporting data for senior management, Business Development, and Operations teams.

- Improved security incident triage by reviewing Microsoft Azure and Defender alerts to distinguish false positives from potential malicious activities during daily security monitoring.

CERTIFICATIONS

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|--|---------------------|
| • Oracle Cloud Infrastructure 2025 Certified Foundations Associate | Issued Jul 6, 2026 |
| • AWS Certified AI Practitioner | Issued Jul 6, 2026 |
| • AWS Certified Cloud Practitioner | Issued Jul 10, 2026 |

SELECTED PROJECTS

Intelligent Warehouse Management System

Laravel • React • FastAPI • Docker • XGBoost • MySQL

- Developed an AI-powered warehouse management system integrating Demand Forecasting, Intelligent Slotting, and Wave Planning using Laravel, React, FastAPI, Docker, and MySQL.
- Developed and evaluated time-series forecasting models (Baseline, ARIMA, XGBoost) to predict inventory demand and support replenishment decisions.
- Designed an automated model retraining pipeline that enables continuous AI model updates from newly uploaded datasets.

GoFly Travel Dashboard Website

GitHub Actions • Docker • Azure • Redis

- Built multi-environment CI/CD pipelines using GitHub Actions to automate development, testing, and production deployments.
- Implemented cloud-native deployment using Docker, Azure Container Registry, Azure Container Apps, Redis, and monitoring services.
- Implemented deployment automation, branch protection, and release workflows while contributing to frontend and backend development.

Motorcycle Helmet Detection Model

YOLOv8 • Flask • OpenCV • Python

- Developed and evaluated a YOLOv8-based helmet detection system, comparing multiple training configurations to optimise detection accuracy and deployment performance.
- Built a Flask-based AI dashboard integrating object detection with rule-based rider compliance analysis for image and video processing.
- Implemented post-processing algorithms to classify rider helmet compliance using spatial relationship analysis and evaluated performance using mAP, Precision, Recall, and confusion matrices.

SmartPlant Sarawak Mobile Application

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

- Led the development of a biodiversity monitoring mobile application for NeuronAI and the Sarawak Forest Corporation (SFC), contributing to both full-stack development and project leadership.
- Built an IoT-based plant monitoring system integrating ESP32, environmental sensors, Firebase, and React Native for real-time monitoring and alert generation.
- Implemented embedded firmware in Arduino (C++) and cloud integration to stream live sensor data and automate environmental alerts.

Interactive Roadside Drug Test Dashboard

D3.js • JavaScript • HTML • CSS • KNIME

- Developed interactive D3.js dashboards to analyse Australian roadside drug testing trends through custom visual analytics.
- Designed three interactive visualisations featuring geographical drill-down, radar charts, comparative trends, and contextual tooltips.
- Built ETL pipelines using KNIME to clean, transform, and prepare government datasets for analysis.