

# Law Swee Wei

+60169379117

sweewei1107@gmail.com

LinkedIn/sweeweilaw

GitHub/sweewei

## TECHNIQUE SKILLS

- Analysis & Modeling Skills: Exploratory Data Analysis (EDA), Feature Engineering, Statistical Analysis, Optimization Analysis, Web Crawling, Machine Learning, Deep Learning, Computer Vision
- Large Language Models (LLM): LangChain, Retrieval-Augmented Generation (RAG), Prompt Engineering, Fine-Tuning, API Integration
- Programming Languages: Python, R, SQL, C++, HTML, CSS, JavaScript
- Development Tools & Platforms: Git, Docker, Google Cloud Platform (GCP), Tableau, Power BI
- Languages: Mandarin (Fluent), English (TOEIC 845), Malay (Basic)

## WORK EXPERIENCES

### Data Scientist, Innolux Corporation, Taiwan

Dec 2020 – May 2025

Developed AI-driven intelligent operation systems by delivering end-to-end solutions across business understanding, data preparation, modeling, and deployment; streamlined workflows and improved business performance in cross-functional teams. Key contributions include:

- Optimized truck loading via bin packing algorithms, over 95% performance surpassing manual outcomes.
- Applied genetic algorithm to real-time scheduling, reducing idle time by 70%.
- Built time series models for material planning, cutting costs by 50%.
- Performed hypothesis testing to detect inspection anomalies, enabling retraining and reducing defect.

### Project Research Assistant, National University of Kaohsiung, Taiwan

Aug 2018 – Aug 2020

Collaborated with on-campus departments to apply knowledge to real-world needs, addressing pain points with tailored solutions. Key contributions include:

- Used logistic regression to identify key local landslide factors for disaster prevention.
- Preprocessed and visualized alumni survey data using R to support trend analysis.

## EDUCATIONS

### MS in Statistics, National University of Kaohsiung, Taiwan

Aug 2018 – Jul 2020

- Thesis: A Comparative Analysis of Using Aggregated-Forecast Approaches in Demand Forecasting

### BS in Applied Mathematics, National University of Kaohsiung, Taiwan

Aug 2014 – Jul 2018

## PROJECTS

### AI Chatbot Project

[github/sweewei/AIChatBot](https://github.com/sweewei/AIChatBot)

- Developed a domain **RAG** chatbot with **LangChain**, **FAISS**, and **HuggingFace** embeddings, integrating **LLM API** for context-aware multi-turn dialogue.
- Implemented full-stack integration with **FastAPI (Pydantic)** and **HTML, CSS, JavaScript**.

## AWARDS

### EBDP & EBDA, APMG International

May 2024 – Oct 2024

- Certified in Enterprise Big Data Professional (EBDP) and Analyst (EBDA), with expertise in big data architecture and analytical modeling.

### AI Hands-on Course, AI Foundations Program, Taiwan

Nov 2023 – Mar 2024

- Certified in as machine learning, deep learning, and computer vision with hands-on implementation.
- Project: Automated **computer vision** defect detection for manufacturing quality inspection