

Po Yun Cheng

poyuncheng.bob@gmail.com | github.com/Tanimal19

Taipei, Taiwan

Education

2022–2026

National Taiwan University,

B.S. in Computer Science and Information Engineering

- Exchanged to the University of California, Merced. (Spring of 2025)
- Relevant courses: Data Structure and Algorithm, Algorithm Design and Analysis, Operating System, Computer Network, Machine Learning, Deep Learning, Software Engineering.

Experience

Feb. 2026–
Present

AI Research Intern,

AI Solution Center, Cathay Life Insurance

- Developing an LLM-powered auto-tagging and evidence-grounded summarization engine for long context document processing.

Feb. 2025–
Feb. 2026

Undergraduate Research Assistant (Advisor: [Prof. Jonathan Lee](#)),

Software Engineering Lab, National Taiwan University

- Designed a high-performance ETL pipeline to embed hundreds of Java classes within 10 minutes on consumer-grade hardware (16GB RAM).
- Developed a [RAG-based code understanding system](#) using Spring Boot and FAISS, enabling LLMs to retrieve and reason over large-scale codebases.
- Improved retrieval recall by 70% through metadata-enriched embeddings and hierarchical code chunking to better capture code semantics.
- Applied software design patterns to reduce system coupling and improve extensibility.

Mar. 2024–
Oct. 2024

Undergraduate Research Assistant (Advisor: [Prof. Mike Y. Chen](#)),

Human-Computer Interaction Lab, National Taiwan University

- Contributed to VR user experience research; co-authored a [paper](#) published at ACM CHI 2025 (top-tier HCI conference).
- Led end-to-end user study design and execution; built VR experimental software in C# and performed data analysis and visualization in Python.

Projects

[Data Center Manager](#), course project (Cloud Native Application Development)

- Collaborated with four teammates to develop a data center management web application.
- Utilized Docker Compose and Github Actions to build an automated CI/CD workflow.

[RL Blackjack Model](#), course project (Foundation of Artificial Intelligence)

- Implemented a deep learning agent using Counterfactual Regret Minimization (CFR) and Monte Carlo sampling for decision-making in imperfect-information games.
- Used info key abstraction to reduce training time by 98% while maintaining similar win rate.

[MLB Match Prediction Model](#), course project (Machine Learning)

- Applied feature engineering techniques including interpolation, distribution analysis, label encoding, and feature selection using Random Forest importance.
- Built ensemble models (stacking and boosting) combining tree-based classifiers and SVM, achieving a top 15/130 ranking on the private leaderboard.
- Performed ablation study with hyperparameter tuning and cross-validation to find optimal architecture.

Skills

- **Programming:** Python, Java, Typescript/Javascript, C/C#
- **Full-stack:** React, Svelte, Tailwind CSS, NextJS, NodeJS, Flask, OAuth, JWT
- **AI / ML:** PyTorch, Scikit-learn, Ollama, LangChain, Spring AI, FAISS, PostgreSQL(pgvector)
- **Tools:** Git, Github(Actions), CLI, Docker, Google Cloud Platform
- **Languages:** Mandarin (Native), English (TOEFL 99), Japanese (N4)