

Bijon Setyawan Raya

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EXPERIENCE

Machine Learning Engineer

November 2024 – Now

Cathay United Bank

Taipei, Taiwan

- Developing a guardrail mechanism to ensure seamless and safe interactions with LLMs.
- Leading the development of a multi-AI agent API tailored for various business units.

Intermediate Fullstack Developer

October 2022 – March 2024

Faria Education Group

Taipei, Taiwan

- Achieved a 98.33% time reduction in file export and improved user feed search speed and accuracy.
- Refactored one fourth of the code base from older to recent web technologies.

Graduate Research Scientist

February 2021 – January 2023

National Tsing Hua University

Hsinchu, Taiwan

- Developed a prototype for ascheduling system for a distributed deep learning system.

Teaching Assistant

Sep. 2020 – January 2023

National Tsing Hua University

Hsinchu, Taiwan

- Intro. to C/C++ Programming and Linear Algebra.

EDUCATION

National Tsing Hua University

Hsinchu, Taiwan

Master of Science in Computer Science

January 2023

National Tsing Hua University

Hsinchu, Taiwan

Bachelor of Science in Computer Science

January 2021

TECHNICAL SKILLS

Languages: C/C++, Python*, JavaScript/TypeScript.

Web Development: FastAPI*, Next.js.

Deep Learning: Horovod, Keras, PyTorch*.

Data Analysis: Numpy, Pandas, PySpark, Hadoop

Machine Learning: Scikit-learn.

Database: DuckDB, ElasticSearch, MySQL, PostgreSQL, SQLite.

Utilities: Docker*, Kubernetes*, Git, Linux/Unix.

Web Platform: Amazon Web Service*, Google Cloud Provider

PROJECTS

Multi-AI Agent API | *FastAPI, Agno*

Retrieval-Augmented Generation System for Books | *Ollama, Llama Index, ElasticSearch*

- A fast, accurate retrieval engine, enhanced with metadata search, and an intuitive, user-friendly interface.

Image Search Engine | *DuckDB, FastAPI, PyTorch*

- A lightweight image search engine with efficient image retrievals.

Music Recommendation System | *Numpy, Pandas, Python, and scikit-learn.*

- An efficient music recommendation system with Linear Algebra.

Schedulearn | *Docker, FastAPI, Horovod, Python, SQLite*

- A lightweight deep learning scheduler that reduces make span by 50% and increased throughput by 70%.