# Bijon Setyawan Raya

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### EXPERIENCE

## Intermediate Fullstack Developer

October 2022 - March 2024

Faria Education Group

Taipei, Taiwan

- Optimized file export processes, achieving a significant reduction in export time by 98.33%.
- Improved search precision and user navigation within user feeds.

## Graduate Research Assistant

February 2021 – January 2023

National Tsing Hua University

Hsinchu, Taiwan

- Designed and developed Schedulearn, a Deep Learning scheduling system that dynamically scales to optimize training resource utilization.
- Reduced overall makespan and turnaround time by 10-50%, code base size by 50% and requirement utilization by 70%.

# Teaching Assistant

Sep. 2020 – January 2023

National Tsing Hua University

Hsinchu, Taiwan

#### EDUCATION

# National Tsing Hua University

Hsinchu, Taiwan

Master of Science in Computer Science

Feb. 2021 - Jan. 2023

# National Tsing Hua University

Hsinchu, Taiwan

Bachelor of Science in Computer Science

Sep. 2015 - Jan. 2021

# AWARDS & CONFERENCES

Ruby Kaigi 2023 | Tokyo, Nagano

May 2023

IEEE Cloud Com 2022 | Bangkok, Thailand

December 2022

Civil Internet of Things Taiwan 2017 (3rd place) | Taipei, Taiwan

Projects

Image Search Engine | FastAPI, PyTorch, and SQLite.

• Allows users to upload images through a simple UI, extracts features from the uploaded images using ResNet18, and compares them using cosine similarity to retrieve similar images.

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

 Retrieved, analyzed, and pre-processed audio features of over 2000 songs from different genres using Spotify API. Then, utilized Non-negative Matrix Factorization to develop song recommendation models based on these pre-processed audio features.

AI Coding Assistant | Ollama, Llama 3, and Python WASM.

• Allows users to program and run Python code directly in their browser, with the added benefit of getting assistance from a LLM running in the background to help with coding tasks, debugging, and more.

Personal Website & Klang | Contentlayer, Next, and Tailwind CSS.

**Schedulearn** | Docker, FastAPI, Horovod, and SQLite.

## TECHNICAL SKILLS

**Languages**: C/C++, Go, JavaScript, TypeScript, Ruby, and Python. **Web Frameworks**: Django, FastAPI, Next.js, and Ruby-on-Rails

Containerization: Docker and Kubernetes.

Deep Learning Libraries: Keras, PyTorch, and TensorFlow. Distributed Computing Frameworks: Horovod and PySpark. Machine Learning Libraries: Numpy, Pandas, and scikit-learn.

Database: ElasticSearch, MySQL, and SQLite.

Others: Git and Linux/Unix