# jason810496

Mail | Github | LinkedIn

#### **EDUCATION**

## National Cheng Kung University

Tainan, TW

Bachelor of Computer Science and Information Engineering

Expected September 2026

• TSMC Hackathon - IT Infra Automation Monitoring using GenAI 2024 : Second Place

• ICPC Asia Taiwan Regional Programming Contest 2023 : Bronze Medal

• National Collegiate Programming Contest 2023 & 2022 : Merit Award

• Programming Coursework: Algorithms & Data Structures, Computer Arch, System Administration

# EXPERIENCE

# Appier | Backend Intern at Data Platform Department

July 2024 - Present

FastAPI, Pytest, PostgreSQL, Trino, Hive Metastore, Delta Lake, Databricks, Data Ingestion

Hybrid Working

- Refactored a data ingestion API from Flask to a FastAPI monorepo, restructuring over 10k+ lines of code.
- Developed an operations dashboard integrated with OAuth and RBAC, supporting usage across 5 departments.

# PAIA | Part-time Backend

December 2023 - July 2024

Django, PostgreSQL, Redis, Docker, Pytest, Performance Profiling

Hybrid Working

- Fix the Redis anti-pattern for calculating 'today\_login\_count' and speed it up over 300 times.
- Developing new features and refactoring with Test-Driven Development.

# OPEN SOURCE CONTRIBUTIONS

## Apache Airflow | View all contributions on GitHub

March 2024

A data orchestration tool with over 37.3k stars on GitHub, used by more than 8,000 companies.

- Refactored the parameter system and database exception handling for the core API, benefiting over 50 endpoints.
- Refactored 2000+ lines of code and had 9 PRs merged in the past month.

#### COMMUNITY & LEADERSHIP

#### Conference Guest Speaker

November 2023

MOPCON(Mobile Open Platform Conference)

Kaohsiung Exhibition Center

- Topic: "Creating an AI training ROS map editor using Three.js, exporting to FBX for use in Unity."
- Utilize Three.js and Vue3 to build scene builder frontend for digitial twin system.
- Over 100 audience members attended our lecture session.

# Director/DSA Lecturer

July 2020 - July 2021

Wuling Computer Science Club

Wuling Senior High School

- Teaching C++ syntax, data structures, and algorithms to a club of 50 members.
- Increasing course engagement by 30% by leading committee members to organize diverse lectures.

## **PROJECTS**

# IT Infra Automation Monitoring using GenAI | CI/CD, GCP, Github Action, FastAPI

January 2024

- Wrote a general Message Queue consumer API simulating different error scenarios.
- CI/CD setup: Faced with insufficient GCE permissions, I built a CI server that integrates with GitHub Actions.
- Utilize IAM, Cloud Run, GCE, Artifact Registry and Log Exporter SDK for the hackathon.

# iThome Ironman 30-Day Article Series | FastAPI, PostgreSQL, Redis, Docker, Pytest, MQ

May 2023

- Topic: "FastAPI Implementation, Testing, and Deployment."
- Use Redis to implement caching for pagination and 'get by id' operations, achieving a 1.5x performance boost.
- Implement a primary-replica structure to enhance parallel reading performance by over 1.3 times.
- Over 2500 people viewed the article series, with an average of 300 views per article.

# TECHNICAL SKILLS

Languages: C, C++, Python3, Go, PHP, Java, JS, HTML, CSS

Frameworks: FastAPI, Flask, Django, Gin, Vue3, React

Databases: MySQL, PostgreSQL, Redis, SQLite

DevOps Tools: Docker, Kubernetes, Github Actions, GCP, Git, Linux