# Zhe-You Liu

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## 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 Adminstration

## OPEN SOURCE CONTRIBUTIONS

**Apache Airflow | Committer**                                      October 2024 - Present

*A data orchestration tool with over 40k stars on GitHub, used by more than 80,000 companies.*

- Invited as Apache Airflow Committer in 5 month during semester.
- Contributed 90+ PRs and reviewed 100+ with feedback in the last 6 months.
- Resolved OOM issue when reading logs in the webserver, reducing memory usage by 10x.
- Refactored the parameter system and database exception handling for the core API, benefiting over 50 endpoints.
- Fixed executor log handler for hybrid executors, including Celery and Kubernetes, improving log readability.
- Fixed incorrect display of multiline messages in logs after filtering (affecting the 2.10.x UI).

## EXPERIENCE

**Appier | Backend Intern at Data Platform Department**                        July 2024 – Present

Distributed System, Data Ingestion, Airflow, Databricks, Kubernetes, Terraform                        *Hybrid Working*

- Built a centralized config onboarding service with Airflow, powering pipelines across 6 core features.
- Refactored a data ingestion API from Flask to FastAPI, migrating 50K+ lines from Hive to Delta Lake.
- Created an integration testing framework with auto API docs, cutting dev time by over 50%.
- Developed a shared API client generator for internal metadata API used by 5+ services.
- Developed an operations dashboard integrated with OAuth, RBAC and k8s API, supporting usage across 5 teams.

**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.

## 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 buidler 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.

## TECHNICAL SKILLS

**Languages**: C, C++, Python, Go, PHP, Java, JS, HTML, CSS
**Frameworks**: FastAPI, Flask, Django, Gin, Vue3, React
**Databases**: MySQL, PostgreSQL, Redis, SQLite
**DevOps Tools**: Docker, Kubernetes, Terraform, GitHub Actions, GCP, Git, Linux