



Hsiu-Chi Tsai

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Taipei / Hsinchu, Taiwan

SKILLS

Languages

Python Go TypeScript

Bash C

Infrastructure

Kubernetes Docker Helm

O-RAN CI/CD

Frameworks

Flask React LINE Bot SDK v3

Tools

Git Linux PostgreSQL

MinIO

EDUCATION

[National Yang Ming Chiao Tung University \(NYCU\)](#)

Undergraduate
AI (Biomedical)
2021 - Present

[National Tsing Hua University \(NTHU\)](#)

Undergraduate
Electrical Engineering & Computer
Science
2022 - Present

[Charles University](#)

Undergraduate
Medicine
2024 - Present

HONORS

[Presidential Education Award](#)

Ministry of Education, Taiwan, 2023

[Microsoft Youth Hero Award](#)

Microsoft Taiwan, 2020

[IEEE Region 10 ACEI Program](#)

IEEE, 2025

SUMMARY

Open-source contributor to CNCF projects (Kubernetes, Jaeger, Nephio) with 15+ merged PRs across major repositories. Builds production systems in Python and Go. Experience spans cloud-native infrastructure, full-stack development, and technical community leadership at NYCU.

OPEN SOURCE CONTRIBUTIONS

15+ merged PRs to CNCF and cloud-native projects; 20-PR refactor series on Jaeger UI.

[jaegertracing/jaeger-ui](#) CNCF

Class-to-functional component refactor series: 20 PRs converting React class components to hooks-based functional components across plexus graph library and trace views. 1 merged, 19 in review.

[kubernetes/kubernetes](#) CNCF — Convert `V().Error()` to `V().Info()` so log verbosity levels are respected.

[kubernetes/minikube](#) CNCF — Handle nil/empty status slice in `exitCode()` to return 7 when Docker container missing.

[goharbor/harbor](#) CNCF — Surface silent password-skip as a warning log; refactor for testability with DI.

[nephio-project/porch](#) CNCF — Replace Query/Exec with QueryContext/ExecContext across dbcache; enable OpenTelemetry traces.

[docker/model-runner](#) Docker — Add on-the-fly conversion from CNCF ModelPack to Docker model-spec format (+1351/-150).

[score-spec/community-provisioners](#) CNCF — New provisioner with params, outputs, and Google Cloud CLI emulator image.

PROJECTS

[O-RAN / Nephio Automation](#) — Multi-agent workflow automating O-RAN network function deployment on Nephio/Kubernetes. Custom intent operator with CRDs for declarative RAN management.

[LINE Campus Helper v2](#) — Production LINE Bot serving NYCU students: 8+ modules, bilingual Rich Menu, 100% test coverage. Python/Flask with handler-pattern architecture.

[NASA Space Apps Challenge](#) — Exoplanet data visualization and analysis tool built during NASA Space Apps hackathon.

EXPERIENCE

Developer · NYCU CIRDA

2025 - Present

- Built LINE Campus Helper v2: modular handler architecture with postback-driven Rich Menu, serving NYCU students across 3 campuses.
- Implemented 8+ feature modules (traffic, cafeteria, academic affairs, emergency contacts) with 100% test coverage and bilingual support.

Medical Clerk (Clerkship) · Taipei City Hospital, Yangming Branch

2024 - Present

- Clinical clerkship rotations in Neurology and Cardiology within the Department of Internal Medicine.
- Developed digital cognitive training tools for community dementia care centers, aiding early-stage cognitive decline intervention.

LEADERSHIP & COMMUNITY

Founding Lead · GDG on Campus (GDSC) @ NYCU

Aug 2022 - Jul 2023

- Founded chapter from zero; ran Learn-Connect-Build cadence across 10+ events.
 - Co-hosted Google I/O Extended 2023 Hsinchu with industry speakers and 100+ attendees.
- [chapter](#) · [yearbook](#) · [io recap](#)

Team Lead · 32iterations — MeiZhu Hackathon 1st Place

2025

- Led a cross-university team (NYCU + NTHU) to win the Maker Exchange category with a smart-city data + AI solution for Hsinchu City.

Vice President, Student Association · Chiaotung Campus, NYCU

Jun 2023 - Jul 2024

- Coordinated campus-wide communications for mental health policy advocacy.