

Chen Ting Huang (Tim)

SENIOR PRODUCT DEVELOPER · SOFTWARE ENGINEER

(+886) 930-578-300 | timhuang304@gmail.com | AsheeHuang | huangchenting

Summary

Experienced Software Engineer with 5+ years in high-availability systems, backup solutions, and active-active clusters. Skilled in Linux development, system programming, and concurrency management. Proven track record leading modules, enhancing system performance, and delivering reliable solutions under tight deadlines.

Skills

- LanguagesC/C++, Python, Shell Scripting, JavaScript (Vue.js)
- TechnologiesLinux Development, Systemd, Jenkins CI/CD, Git, GDB, Docker
- SpecializationsHA Systems, Active-Active Clusters, Block-Level Backup, OS Internals, Concurrency, IPC

Work Experience

- Synology Inc.

SENIOR PRODUCT DEVELOPER

Jan. 2024 - Jan. 2025

New Taipei, Taiwan
- Synology Inc.

PRODUCT DEVELOPER

Dec. 2019 - Jan. 2024

New Taipei, Taiwan

Projects

- Active-Active Cluster Server
 - Engineered critical components supporting complex system operations, including boot/shutdown sequencing, RMA management procedures, configuration synchronization, and plugin integrations.
 - Managed concurrency issues and improved system stability and performance in high-load, dual-active environments.
 - Spearheaded proactive monitoring solutions to quickly identify, diagnose, and resolve potential bottlenecks and system vulnerabilities.
- High Availability System (Active-Passive)
 - Developed robust modules for efficient system-level synchronization, reliable binding, and automated failover mechanisms.
 - Leveraged critical technologies including DRBD, Pacemaker, Corosync, rsync, lsyncd, and systemd to ensure seamless high-availability solutions.
 - Optimized system performance and minimized downtime through targeted enhancements and rigorous system testing.
- Bare-Metal Backup & Restore for DSM
 - Directed the integration and optimization of comprehensive block-level backup and restore operations, ensuring end-to-end data integrity.
 - Designed and implemented advanced communication and coordination mechanisms leveraging IPC for efficient inter-module operations.
 - Collaborated extensively with multiple teams to streamline disaster recovery processes and enhance user experience through improved reliability and faster recovery times.

Published Work

- Data-driven scheduling for the photolithography process

AMERICAN INSTITUTE OF MATHEMATICAL SCIENCE

Mar. 2025

 - Co-authored a multi-objective optimization study employing NSGA-II and Data Envelopment Analysis to develop a composite dispatching rule for photolithography scheduling.

Education

- National Chiao Tung University

MASTER OF MANAGEMENT , INFORMATION MANAGEMENT

Sep. 2017- Exp. Jun. 2019

Hsinchu, Taiwan
- National Chiao Tung University

BACHELOR OF MANAGEMENT , MANAGEMENT SCIENCE

Sep. 2013- Jun. 2017

Hsinchu, Taiwan