SENIOR PRODUCT DEVELOPER · SOFTWARE ENGINEER

New Taipei City, Taiwan

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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. Currently on a gap year, learning and open to opportunities.

Skills___

Languages C/C++, Python, Shell Scripting, JavaScript (Vue.js), Rust

Technologies Linux Development, Systemd, Jenkins CI/CD, Git, GDB, Docker

Specializations High Availability Systems, Active-Active Clusters, Storage Technologies, OS Internals

Work Experience _____

Senior Product Developer

Jan. 2024 - Feb 2025

DUAL ACTIVE CLUSTER SYSTEM

Synology Inc.

- 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.

Product Developer Dec. 2019 - Jan. 2024

HIGH AVAILABILITY SYSTEM

Synology Inc.

- 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 intermodule operations.
- Collaborated extensively with multiple teams to streamline disaster recovery processes and enhance user experience through improved reliability and faster recovery times.

Publications

Data-driven scheduling for the photolithography process in semiconductor

Mar. 2025

AMERICAN INSTITUTE OF MATHEMATICAL SCIENCE

• 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

Sep. 2017- Jun. 2019

MASTER OF SCIENE IN INFORMATION MANAGEMENT

Hsinchu, Taiwan

• Ranked 1st in entrance examination and awarded scholarship.

National Chiao Tung University

Sep. 2013- Jun. 2017

MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT SCIENCE

Hsinchu, Taiwan