xnumtw@gmail.comxnum@GitHubTaipei, Taiwanxnumtw@LinkedIn

Experienced, skilled programmer, hands-on experience in UNIX programming and command-line interface environment. Strong problem solving skills. Focus on high availability and fault tolerant distributed system technologies now.

# Working Experience

Jun 2018-Present COBINHOOD, Ltd.

Software Engineer

cryptocurrency exchange features.

Jun 2017-Jun 2018 Taipei Exchange

Software Engineer

core systems development and maintenance.

- Introduced RPM Package Manager into system installation procedure, reduced 40% time for building new machine.
- Analyzed receiving multicast packet loss problem, peak loss rate reduced from 50% to 0.2%
- Developed new message dispatch gateway and conducted secure file transfer method to replace plain design for Web client.
- Researched distributed system and consensus algorithm, proposed next generation online transaction processing system design based on application-level approach.
- Optimized old continuous data transfer system to 110 times faster and solved several race condition bugs, developed a cross platform new one by event-driven design with backward compatible.

### Sep 2015-Apr 2017

### **NCTU Information Technology Service Center**

Part-Time Software Engineer

full-stack web development.

- Migrated 4 mail services and thousands of accounts to Google G Suite service and developed NCTU G Suite mail system using the microservice architecture.
- Developed firewall plugin system integrates WAF with switches.

### Education

2015-2017

MSc, Institute of Computer Science and Engineering National Chiao Tung University

Thesis title: MCTS-based Path Exploration for Symbolic Execution

Teaching Assistant: Basic Programming

Relevant coursework:

- Software Testing
- · Operating System
- Parallel Programming
- Advanced UNIX Programming
- · Network Security
- Network Programming

2011-2015

BSc, Computer Science National Taichung University of Education

Teaching Assistant: Programming

# Skills

Computer Science • Symbolic Execution

• Distributed System

• Performance Tuning

• Software Security

Computer Programming

Linux Programming

Network ProgrammingSystem Software

Tools

• gdb, git, unix cli, vim, gnu make

Programming Languages

Proficient: C/C++, Bash Shell Script
Intermediate: PHP (Laravel), C#

## **Awards**

May 2015 **Taiwan Student Cluster Competition** 

Led a team to won 3rd prize. Constructed and tuned high performance computing cluster  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left($ 

with GPUs and InfiniBand.