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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.

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## Working Experience

**June 2017-  
Present**

### **Taipei Exchange**

*Software Engineer*

core systems development and maintenance. excellent problem solver.

- Provided software security advice and design on new system architecture.
- 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.
- Developed networking failure simulation framework for testing.
- Developed system testing framework with FIX protocol.
- Imported and shared doxygen to deal with auto document generation.
- 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

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

2011-2015

**BSc, Computer Science** National Taichung University of Education

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## Skills

### Computer Science

- Symbolic Execution
- Distributed System
- Performance Tuning
- Software Security

### Computer Programming

- Linux Programming
- Network Programming
- System Software

### Tools

- gdb, git, unix cli, vim, gnu make

### Programming Languages

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