Qiu Haoran

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Education Background

University of Hong Kong   **Hong Kong**
Bachelor of Engineering in Computer Science & Minor in Mathematics, Major GPA: 4.03/4.3   *2015 - present*
- **Teaching Assistant** of COMP 2396 Object-oriented Programming and Java   *2017 - present*
- **Dean's Honor List**, Faculty of Engineering   *Nov. 2016*
- Entrance Scholarships for Excellent Mainland Students, University of Hong Kong   *Sept. 2015*
- **Relative Coursework**: Object-Oriented Programming, System Architecture and Distributed Computing, Operating Systems, Database Management, Functional Programming, Data Structures and Algorithms

Work Experience & Leadership Experience

Department of Computer Science, HKU   **Hong Kong**
Research Assistant, Systems and Networking   *Sept. 2017 - present*
- Plover: **Fast Virtual Machine fault-tolerance**. Designed algorithm to decide the appropriate time to do synchronization. Build and do performance evaluation on MySQL, Django+Nginx+uWSGI, PostgreSQL, Tomcat, and other web services.
- OWL: **Concurrent attack detector and analysis tool**. Published CVE: 2017-12193 on Linux Kernel key subsystem. Evaluate model on MySQL, Apache and Linux Kernel.

Hututa Technologies Ltd.   **Hong Kong**
R&D Software Engineer Intern   *July 2017 - Aug. 2017*
- Make a biological gene mapping algorithm "Stampy" runnable on a **distributed system**. Speed accelerate around **3 times faster** than Spark. Bug report about the algorithm. Virtual machines and clusters management.
- Design and develop a network monitor system. Added **dynamic DNS** update. MySQL, Nginx, and Gunicorn are appropriately used in this system. Languages mainly used: Python, PHP, Javascript.

XNode | Startups Accelerator and Coworking Space   **Shanghai**
Web Programmer Intern & IT Assistant   *June 2016 - July 2016*
- Website development - Build client network, tag-search, meeting room online booking system.

Chinese Culture Communication Association   **Hong Kong**
IT Director   *Sept. 2015 - Sept. 2016*
- Organized Chinese Culture related activities both on-campus and off-campus. WeChat platform operation.

Projects & Contests

- Othello, Artificial Intelligence Project   *Nov. 2017*
- CodeIT Suisse 2017, Credit Suisse Group   *Sept. 2017*
- Distributed System Architecture Project: JPoker 24-Game   *Mar. 2017*
- Honorable Mention, Mathematical Contest in Modeling(MCM)   *Jan. 2017*
- "Live Long Changing", Cathay Pacific 24-Hour Hackathon   *Oct. 2016*

Skills

- **Programming Languages:** Familiar with: Java, C/C++, Python, Haskell, MATLAB
  Also basic ability with: JavaScript, PHP, HTML&CSS.
- **OS, Software & Tools** Linux, LaTeX, Markdown, Node.js, MEAN, RESTful Web Service
- **Languages:** Mandarin (Native Speaker), English (TOFEL: 104), Cantonese (Basic)

Extra-curricular Activities

- Residential Student Advisor, University of Hong Kong   *2016 - 2017*
- Trail Walker - 50 km Walk Along Hong Kong Island Trail, General Education, HKU   *Nov. 2016*
- Member of Bridge Team of SCSH, HKUSU   *2015 - Present*
- Student Helper for HKU Admission in Mainland China, Ji Nan Session   *Summer 2016*
- Championship of Men's Basketball Competition, CSSAUD   *Spring 2016*
- HKU Information Day Volunteer, Faculty of Engineering   *Oct. 2015*