E-mail: xiang.li@rice.edu Phone: 713-502-0992

Xiang Li

2410 Shakespeare Street, Unit 60, Houston, Texas, 77030

Target Job 2017 Summer Internship – Software Development Engineer

Department of Computer Science

Education **Rice University**, Houston, Texas

Master degree in Computer Science, in Computational Science and Engineering program

GPA: 3.7/4.0

Shanghai Jiao Tong University, Shanghai, P. R. China

Aug. 2016

University of Michigan - Shanghai Jiao Tong University Joint Institute (UM-SJTU JI)

Bachelor degree in Computer Engineering

Major GPA: 3.5/4.0

Computer Skills

Java, C/C++, Javascript, C#, Python, SQL, HTML/CSS, Verilog Programming Languages:

Platforms/Frameworks: Git, SVN, Vim, Node.js, React/Redux, Hadoop, Jenkins, MyBatis, Hibernate

Work Experience Software Engineer Intern, Transwarp Technology, Shanghai, P. R. China

Feb. 2016 - Apr. 2016

Expected Dec. 2017

- Constructed an integrated test environment on Jenkins for a five-person development group
- Designed connection methods for company's own Hadoop database with DBCP connection pool and ORM frameworks (Mybatis, Hibernate), along with supporting batch processing operations

Project Experience

GIS-map-based Client-Server Game

Nov. 2016 - Dec. 2016

- Players in each team move on the NASA WorldWind map to be together within certain rounds
- Created lobby and team chat rooms, supporting real-time conversations based on Java RMI
- Implemented message passing in all communications (not using Java JMS), handling well-known and unknown commands from senders; achieved cmd-to-cmd communication for game processing

Full-stack Web Development for an Online Social Network

Sep. 2016 - Dec. 2016

- Front-end url: https://renren.surge.sh (supports Chrome best)
- Used React/Redux and Bootstrap in ES2016+ to develop web pages (landing, main, and profile)
- Implemented an Express server on Node.js, connected to MongoDB, which supports authenticated login/logout and CRUD operations for profiles, avatars, articles, comments and followers
- Added user authentication (salting by hash, cookie), session management via Redis, third-party authentication via OAuth2, Passport (Facebook), and permanent image uploading via Cloudinary

Software for Distributed Printing Service, sponsered by HP, Team Leader

Sep. 2015 - Dec. 2015

- Saved at least 70% print time for small companies, who meet large print jobs (> 500 pages) but cannot afford expensive printers by fully utilizing existing normal printers simultaneously
- Handled issues including paper jam and paper fault, and supported customization function
- Coded in C# to accomplish computer-printer interactions, in around 2000 lines of codes

Operating System and Cryptography Projects in C

May 2014 - Dec. 2015

- Wrote a **unix-like shell** using system calls , supporting common commands
- Completed earliest-deadline-first scheduling and lottery scheduling in Minix 3
- Impelmented **AES** and **RSA** Encryption/Decryption

CPU Design and Verification

Oct. 2014 - Nov. 2014

- Coded a five-stage MIPS pipeline CPU and verified it on a FPGA board with common instructions
- Resolved all data/control harzard issues using forwarding and hazard prediction technique

Selected **Publications**

Research interests in computer networks and network security

- Xiang Li, Mengyuan Li, Na Ruan, Fan Wu, and Jie Li, "Efficient and Enhanced Broadcast Authentication Protocols based on Multilevel µTESLA", in Proceedings of the 33rd IEEE International Performance Computing and Communications Conference (IPCCC), Dec. 2014 (acceptance rate: 30%)
- Na Ruan, Lei Gao, Haojin Zhu, Weijia Jia, Xiang Li and Qi Hu, "Toward Optimal DoS-resistant authentication in Crowdsensing Networks via Evolutionary Game", in Proceedings of the 36th IEEE International Conference on Distributed Computing Systems (ICDCS), June 2016 (acceptance rate: 18%)