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

Xiang Li

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

Objective Seeking a Software Development Engineer Internship from mid-May to mid-August, 2017

Education Rice University, Houston, Texas

Expected Dec. 2017

Department of Computer Science

Master in Computer Science track from Computational Science and Engineering program

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

Aug. 2016

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

Bachelor in **Computer Engineering**, with major GPA: **3.5**/4.0

Computer Skills

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

Operating Systems: Linux Ubuntu/CentOS, Mac OS, Windows, Minix

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

- Constructed an integrated test environment on **Jenkins** for a five-person development goup
- 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

Full-stack Web Development for an Online Social Network

Sep. 2016 - Dec. 2016

- Used **React/Redux** and Bootstrap in **ES2016+** (webpack) to develop front-end web pages (landing, main, and profile), allowing logged-in users to add friends, post articles and update profiles
- Implemented an **Express** server on **Node.js**, connected to MongoDB; supports CRUD operations for profiles, avatars, headlines, articles, comments and followers
- Added user authentication (salting by hash, cookie), session management via **Redis**, third-party authentication via **OAuth** (Facebook, Twitter), 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 those small companies who meet large print jobs (> 500 pages) but cannot afford expensive printers, by fully utilizing existing normal printers simoutaneously
- Designed a genetic algorithm to intelligiently allocate print jobs to different printers
- 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

- Designed and coded a five-stage **pipeline CPU**, supporting the complete MIPS instruction set
- Resolved all data/control harzard issues, and verified the CPU on a FPGA board

Intelligent Medicine System

Nov. 2012 - Dec. 2012

- Wrote C codes on Arduino Mega, with GSM module (for transmitting SMS to mobile phones)
- Won Silver Award in 2012 Winter Design EXPO of Joint Institute, SJTU

Academic Honors Guanghua Scholarship, 3 /1000 students per institute

Sep. 2014 - Jun. 2015

Merit Student, 1/25 students per year

Sep. 2014 - Jun. 2015

Dean's List, for excellent academic record with GPA > 3.5

Feb. 2014 - Aug. 2014

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%)