559 Matadero Ave, #5 Palo Alto, CA 94306 1-734-276-1145 sgzhaohang@gmail.com

Education

University of Michigan – Ann Arbor, MI

December, 2012

• Master in Electrical Engineering: System

• GPA: 3.76/4.0

Tsinghua University – Beijing, China

July, 2011

• Bachelor in Electrical Engineering

• GPA: 3.5/4.0

• Class Rank: Top 20%

Experience

Google – Los Angeles, United States

May, 2012 - August, 2012

Software Engineer Intern

- Worked in Apps Common Storage (Cosmo) team, which mainly provides storage services for Google Drive and other products as well
- Designed and implemented an end-to-end solution for data retention and recovery with a six-layer infrastructure. Although Cosmo is migrating its storage backend, the implemented system is reliable both during and after the migration period
- Designed and implemented a MapReduce purge system, which runs daily to purge expired backup data in order to keep compliant with Google's Wipeout policy. The system works on millions of users' data and is robust against different kinds of transient failures

Innovation Works - Beijing, China

July, 2010 – January, 2011

Software Engineer Intern

- Collaborated in designing three LBS smartphone applications, one of which I was mainly responsible for hit 40,000 subscribers just within several months
- Involved in Android development for the three applications, the frontend of one of which was totally implemented by myself.
- Designed and implemented a log mechanism that collected users' behavior on the client side and analyzed them on the server

Hulu - Beijing, China

July, 2008 – January, 2009

Software Engineer Intern

- Participated in developing an internal working platform that was responsible for automatically generating and allocating tasks
- Implemented a web service with the function of analysis, classification of users' query terms, and getting statistics results concerning users' preferences

Projects

Internet Voting Fraud

February, 2012 – March, 2012

- Implemented a Man-in-the-browser attack against Helios (a Web-based voting system with advanced cryptographic security protection) with a malicious browser extension
- Based on Firefox browser's extension vulnerability, I implemented an Adobe Acrobat/Reader's buffer overflow attack that can secretly install the malicious extension on voter's machine

Text Classification

March, 2010 – July, 2010

- Participated in the SRT (Student Research Training) program of Tsinghua University. The
 program is mainly about Web data mining and my focus is on classification of large amount of
 Chinese text information from Internet
- Studied and implemented a text classification system including words parsing (especially important for Chinese), feature selection and, compared and analyzed the results with different algorithms

Computer Skills

Proficient in C++, Java, Python

Strong foundation of data structure, algorithm and software design

Good understanding and interests in machine learning and information retrieval.

My GitHub Link: https://github.com/FindBoat