# Work Experience

## ViewSources, Full-time Software Engineer, Jan. 2014-Dec. 2014

- Developed a software to visualize power curve that auto scales with data amount up to millions of points.
- Used caching and prefetching to make switching among curves fast and fluid.
- Implemented the classic DPA and CPA algorithm for DES, which recovers the key from input plain text and output encrypted text according to the recorded power traces.

### Alibaba, Software Engineer Intern, Dec.2015-Jan.2016

- Developed the newsfeeds for Taobao Headlines using Vue.js. The page works correctly on most mainstream devices.
- Customized the page layout for iPad and achieved better browsing experience.

### Education

Master in Computer Science, New York University, Graduate School of Arts and Science, Jan. 2015–Dec(or Aug). 2016

GPA 3.914/4.0, Teaching Assistant of the course Social Multiplayer Games (Fall 2015 & Spring 2016)

Bachelor in Computer Engineering, Shanghai Jiao Tong University (SJTU), Sep.2010-Jun.2014

GPA 3.55/4.0, Research Assistant of LoCCS (Lab of Cryptology and Computer Security)

#### Skills

- Programming Languages: C/C++, Python, SQL, Javascript, HTML/CSS, Scala, bash, git
- Hadoop Techniques: Mapreduce, Pig, Hive, Spark
- Framework: Angular, Django, Bootstrap, Typescirpt, Vue.js

### **Projects**

# Recommender System for NYC Residential Community, May – Aug 2015

- Built a website www.findyourcommunity.info (using Django) that recommends communities according to a user's race, education, preferences on eating, shopping, education etc.
- The website integrated data from multiple data sources such as Yelp, NYC crime map, and zip-code demographics.
- Used MapReduce, Pig, Hive and Spark to analyze the integrated data and to generate integrated ratings per zip-code.
- Integrated a hybrid of two recommendation algorithms which take user demographics and user preferences respectively.

# Developer of multiple Social Multiplayer Games, Jan – May 2015

- Cheat (http://orzzzl.github.io/Cheat/game.min.html), a card game. Used Typescript and Angular, CrateJS and Bootstrap.
- Nine Men's Morris (http://orzzzl.github.io/NineMen-sMorris/game.min.html), a board game
- Weiqi/Go (http://orzzzl.github.io/smpgWEIQI/game.min.html), a board game
- Pac-Man (http://duffywan.github.io/Pac-Man/game.html), a real-time game
- Used Angular and supported drag-n-drop on mobile devices. Used manifest to enable offline playing.
- Applied unit tests and end-to-end tests.

# Replicated Concurrency Control and Recovery, Sep – Dec 2015

- Implemented the algorithm of replicated concurrency control and recovery.
- Adopted available copies approach to replication. Used two phase R/W locking at each site and validation at commit time.
- · Avoided deadlocks using wait-die protocol; achieved Read-only transactions using multi-version read consistency.

#### Awards

# ACM International Collegiate Programming Contest (ACM-ICPC), Nov.2015

• 8th place, Great New York Regional

New York University Prog-Nova Programming Contest, Dec 2015

• 3rd place in ICPC division

# **Publications**

Zeleng Zhuang\*, Jiachao Chen, Haosheng Zhang, "A Countermeasure for DES with both Rotating Masks and Secured SBoxs", ready to submit to CIS2014

#### **Activities**