

# Xiao Chen

◇ chenx376@outlook.com ◇ github.com/chenx376 ◇ LinkedIn

## Education Background

<b>Carnegie Mellon University (CMU)</b>	2017.1 – 2018.5
M.S. in Electrical and Computer Engineering	GPA 3.7 / 4.0
<b>Sun Yat-sen University (SYSU)</b>	2012.9 – 2016.6
B.Eng in Automation major	GPA 3.8 / 4.0

## Technical Skills

**Languages:** Java, Python, C++, C, JavaScript, R, Scala, Bash, Matlab

**Skills:** MySQL, HBase, MongoDB, Android, AWS, Azure, GCP, Linux, Hadoop, MapReduce, Spark, Kafka, Undertow, AngularJS, Docker, Kubernetes, Redis

## Work Experience

**Employees Turnover Intention Analysis (Nantian Electronics Information Corp, China)** 2016.7 – 2016.10

*Software Engineer Internship – Java, Python, R, Hadoop*

- Processed raw Company employees' data by non-streaming MapReduce. Analyzed and visualized information to predict their turnover intentions based on SVM – Adaboost & Bagging, achieved more than 75% accuracy
- Built Turnover Intention model for company to help software development teams better allocate resources

**Students Online Exam Website (TAL Education Group, China)** 2015.8 – 2015.11

*Full – Stack Engineer Internship – Python, Flask, MySQL, Linux, HTML*

- Built a website with Python Flask framework to support students to finish online exams, implemented front-end webpage with Jinja2 template. Received strong positive feedback from 95% existing students
- Participated in SQL optimization and management for TAL Education databases

## Selected Projects

**High Performance Twitter Data Analytics System** 2017.1 – 2017.6

*Java, Python, AWS, Hadoop MapReduce, HBase, MySQL, Undertow*

- Built a high performance, fault-tolerant web service to analyze over 1.5TB Twitter data with 5 different queries
- Analyzed and processed raw data into a data warehouse via Hadoop streaming and non-streaming MapReduce, using Undertow framework & AWS ELB for the frontend server and both MySQL & HBase as backend database
- Applied more than 10 methods to optimize the database & front-end and achieved an average of 28000 RPS for mix queries on a dataset containing 400 million records

**Cloud Computing Related Projects** 2017.1 – 2017.6

*Java, Shell, Python, AWS, Hadoop MapReduce, HBase, MySQL, MongoDB, Spark*

- Built an online code testing web services which support Java, Python and MySQL online code testing and whose servers are separately built on AWS, GCP, Azure based on Docker containers and managed by Kubernetes
- Implemented dynamic-pricing Driver Matching Service with Kafka and Samza to simulate and process multiple streams of Uber driver locations and events data in streaming fashion
- Utilized Spark as well as GraphX to compute the PageRank value for each node in the Twitter social graph

**Survivable Social Network on Heroku Cloud** 2016.12 – 2017.5

*JavaScript, AngularJS, Express.js, MongoDB*

- Built a user-friendly web application on Heroku for messaging during disastrous events
- Acted as a full-stack programmer, dealing with both backend/frontend coding and Unit/Integration test

**Social Network Website with Mixed Database** 2017.3 – 2017.4

*Java, HBase, MySQL, MongoDB*

- Developed a social website to implement system functionalities like login, follower – followee search, posts retrieval and recommendation followers. Used MySQL & HBase & MongoDB as backend database