### Zhou Zhizhong

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## **EDUCATION**

## National University of Singapore, Master of Computing (CS)

Jan 2017 - Jul 2018

- CAP: 3.65/5 (Second Honor)
- Relevant Modules: Big-data Analytics, Web Security, Information Visualization, Advanced Network

## Nanjing University, Bachelor of Management (IS)

Sep 2010 - Jun 2014

- GPA: 4.24/5 (Ranking: 26/112)
- Excellent graduate, People's Scholarship, Excellent student in social practice
- Publication: Analysis of Half-life Journals in Library and Information at Home and Abroad, 2013

### WORK EXPERIENCE

## Merkle, Campaign Analyst II

Apr 2014 - Dec 2015

- Designed, developed and executed marketing campaigns, constructed complex data queries with SQL in Netezza Workbench to support business models.
- Developed stored procedures for automated deployment, wrote VBS scripts for auto scheduling.
- Addressed ad-hoc data-preprocessing request, support business team with data issues troubleshooting.

## **RESEARCH EXPERIENCE**

### **Distributed Big-data Platform** (Java)

Apr 2013 - Jun 2014

- Configured a distributed platform including hadoop, hbase and zookeeper, stored data to HDFS through flume and kafka, compiled hadoop-eclipse-plugin and undertook multiple benchmark tests.
- Implemented PageRank, Weighted PageRank, TF-IDF algorithms for MapReduce jobs in this platform.



#### **PROJECT**

#### **Program analysis on LLVM Pass (C++)**

• Implemented different LLVM Pass for program analyses and evaluation, including Taint, Difference and Interval analysis, analyzed LLVM instructions and extended programs with support of loops and path-sensitivity check.

# Conference Information Visualization (Python, Tableau, D3.js)

• Extracted labels from conference papers in xml format, visualized queries with insightful and creative plotting (Sankey, Sunplot, Forced Graph chart) in Tableau with imbedded dynamic D3.js plotting.

## Web Diary application (Python, Flask, Docker)

- Developed a web diary application with RESTful API with team which supports function like user registration, login, personal webpage, diary post edit, publish or hide and delete.
- Designed database schema, implemented endpoint call and response in flask framework, handled application communication with Ajax call.

Web Scraper (Python)

Jun 2018 – Cur.

- Crawled posts in weibo.com, simulated user login to get cookies, parsed html/xml content with regex or BeautifulSoup4 library and stored them in mysql, used multiprocessing to improve efficiency.
- Implemented multiple methods against anti-crawling, including fake user-agents, proxy ip address, csrf check and random sleep, analyzed returned request content to bypass javascript restriction.
- Combined website pages into one pdf file with css rendered.

#### Spam detection on Yelp Data (Jupyter Notebook)

- Implemented a spam detection model on a labelled yelp dataset, experimented to find similar reviews by text shingling and min-hashing. Implemented rate similarity and review similarity metric to identify potential spam candidates with abnormal behavior.
- Experimented on multiple review features to identify spam review, chose relevant features for model training and compared performance on MLP, KNN, DT, LOG models.

#### **TECHNICAL SKILL**

- Datababse: PostgreSQL, MySQL, Sqlite3, Sql Server
- Tools: Git, SaaS, RedPoint, Unica