YUAN SUN

+(412)-417-8630 ◇ lechorage@gmail.com

EDUCATION

Master of Information Science   Aug. 2017 - May. 2019
University of Pittsburgh

Bachelor of Engineering in Network Security   Sept. 2013 - June. 2017
People's Public Security University of China

SKILLS

Programming Language	Java, Python, Scala, C#, MATLAB, C++
Website build& development	SpringMVC, MyBatis, Hibernate, JavaScript, HTML, Node.js, ASP.Net
PlatForms & Tools	AWS, GCP, Azure, MySQL, MongoDB, Neo4j, Docker, Kubernetes, Spark, Hadoop, HBase, Kafka

EXPERIENCE

NetEase YanXuan   May. 2018 - Aug. 2018
Software Engineer Intern   *Java, SpringMVC, MyBatis*

- Worked on the core technical team and mainly dutied for the development of an online store backend with more than **30 million users** to achieve offline store retail, cashier and warehouse management with **Java, Springboot** and **Mybatis**.
- Designed the interface for sale and store parts of the system and implement all function on the controller level and remote service implements. Reduced time(nearly 90%) for data transmitting from the database to the controller level with implementing a ranking algorithm.
- Implemented store-check function with Redis and Distributed locks with Redis.
- Processed data with **Hadoop** and analyzed it to predict sales trends and developed visualization tool with **D3.js**.

G20 Summit   May. 2016 - July. 2016
Part-time Software Engineer   *C++, MySQL, ASP.Net*

- Identified transportations by using **SSD**(single shot multibox detector) and rescheduled the Signal Algorithm to improve 35% traffic capacity.
- Maintained the city's population database with **ODB** and participated in the development of citizen system.
- Developed a tool with **Python** and Bash for improving search system and implementing software self-translating function.

Standard Chartered Bank   Jan. 2016 - Feb. 2016
Software Engineer Intern   *C#, MySQL, Python*

- Contributed to the maintenance and development of the bank system backendstage with **C#**.
- Learned system architecture and associated business logic of modern banking system.
- Participated in fund data analysis and forecast.

PROJECTS

Twitter social dataset analysis and services   Feb. 2018 - May. 2018

- Used **MapReduce** and **Hadoop** to process over 100 million records (around **1TB**) of Twitter users, and designed different databases with **MySQL** and **HBase** for different request formats.
- Designed special row-key of HBase for a quick scan which reduced the cost for the record's weight calculation. Updated the query's weight with the real-time search frequency and page-rank algorithm with user's information.
- Implemented **Auto-scaling** according to the rps and deployed instances to handle high peek access.Designed **load-balancer** and discovery systems with high available instances' groups and Round-Robin Algorithm.
- Developed the backend with **Java** and **Vert.X** for range scan and weight calculation, connected front-end with Ajax and used JDBC with databases.

Yelp Restaurant Recommendation System   Oct. 2017 - Dec. 2017

- Implemented crawlers with **Python** to get restaurants' information and user reviews and ratings from Yelp. Processed the dataset (Over **30GB**) with **MapReduce** and **Hadoop** to get tokens and evaluated it.
- Designed a dictionary for high-frequency tokens and corresponded words. Determined the weighting algorithm and updated restaurant scores according to user's feedback and user's rating.
- Developed the backend with **Java** and **SpringMVC**, and also achieved the fuzzy search and match function with Levenshtein and N-Gram algorithms.

Parallel Processing of Taxi System   Mar. 2018 - May. 2018

- Analyzed user and drivers' dataset with **Spark** and Page-Rank algorithm, and evaluated it. Designed a message queue with producer and consumer to realize the function of **Kafka**.
- Fetched two real-time streams(users and drivers) from consumer and determined the matched driver according to distance, gender, and scores which with different weight coefficient.
- Developed the **node.js** application which leverages deck.gl and react-map-gl to render driver locations and trips.