

Jiahui Lu

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EDUCATION

M.S in Computational Engineering (GPA: 3.7/4.0), **University of California**, Los Angeles 03/2019
B.S in Engineering (GPA: 3.8/4.0), **Beijing Institute of Technology** 07/2017

SKILLS

Programming: Java, Python, C/C++, JavaScript, SQL, PHP, HTML, CSS, shell scripting, Ruby, Matlab, Go
Frameworks: Spring Boot, Hadoop, Node.js, Django, Flask, AngularJS, React, Redux, Spark, Ruby on Rails
Tools/DBs: MySQL, PostgreSQL, Docker, MongoDB, RabbitMQ, Redis, Hive, Netflix OSS, ELK Stack, Git
Knowledge: OOP/OOD, Design Patterns, Microservice, Distributed Systems, Big Data Analytics, Networks

EXPERIENCE

Software Engineer Intern, Meituan, Mobike City Travel Team [[Docs Link](#)] 06/2018 – 09/2018

- Delivered a real-time taxi dispatch simulator with decoupled backend microservices under Spring Boot
- Proposed a taxi dispatch model for the NP-hard combinatorial matching by GBDT and Hill Climbing method
- Implemented REST APIs for user and trip info in PostgreSQL as well as trajectory data stored in Redis
- Visualized the real-time trajectories with SockJs, Stomp.js, Leaflet.js, VisualSearch.js, and Google Map API

Software Engineer Internship, Connected Car Team, Mercedes Benz 01/2017 – 06/2017

- Developed a web application with monitoring APIs under Spring for remote Apps with email notifications
- Deployed, maintained, supported, and troubleshooted the ELK Stack technology suite
- Involved management of software projects with Scrum, JIRA, and Jenkins

PROJECTS

Under Armour Orienteering Tracking System 08/2018 – 10/2018

- Developed the system with Java, Spring Boot/Data/Cloud, MongoDB, MySQL, RabbitMQ, and Netflix OSS
- Built multiple microservices architectures (for data persistence/distribution, location tracking, and etc)
- Used RabbitMQ as the message broker; used MongoDB for geolocation and MySQL for player information
- Created a front-end using JavaScript, Socket.io, React, Redux and Google Map API
- Utilized Docker to containerize infrastructures; Incorporated Eureka as service registration and discovery; Used Hystrix as circuit breaker; Applied Spring Boot Actuator to monitor application health

Tweets Based Sentiment Analysis System 11/2017 – 01/2018

- Deployed a web application with Python/Flask and visualized sentiment data based on d3.js, c3.js, nvd3.js
- Preprocessed tweets and built data pipeline from a Twitter crawler using Twitter Streaming API
- Conducted ELT process with Apache Spark's Python API on AWS EC2
- Designed and trained fitting data by applying a Neural Network Classifier using Numpy and TensorFlow

MAEN Stack Based Favorite TV Shows Sharing Website 12/2017 – 03/2018

- Implemented the web application under AWS Cloud9 and deployed with Heroku and mlab
- Designed and developed Angular.js based frontend with AngularUI, ng-table, Angular Deckgrid, ng-router
- Used Express to support RESTful Routing and implemented MongoDB to achieve data associations
- Implemented the user authentication with Passport.js and WebSocket based chat room with socket.io;
- Realized recommendation APIs by content-based collaborative filter algorithm in the Hadoop framework

Search Engine Implementations with MapReduce and Django 02/2018 – 05/2018

- Deployed a web system with Python/Django; used Java/Hadoop to realize PageRank and Autocompletion
- Implemented Google PageRank Algorithm with indexed data utilized MapReduce for matrix operations
- Applied visualizations of Page Ranks and Page Clusters by React and d3.js
- Built up N-Gram Data Library by MapReduce and imported into MySQL to support Autocompletion