

Sheng Ma

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SUMMARY

Seeking a full-time software engineer position.

EDUCATION

Master of Science: Computer Engineering	Sep 2017 – Dec 2018
Northwestern University	Evanston, IL
Bachelor of Science: Electrical Engineering	2015 - 2017
University of Missouri - Columbia	Columbia, MO
Bachelor of Science: Automation	2012 - 2015
East China University of Science and Technology(ECUST)	Shanghai , China

TECHNICAL SKILLS

- Programming Languages: Java, SQL, Go, React, Vue, HTML, CSS
- Programming Tools: Docker, Shell
- Cloud Computing: AWS EC2, Google Cloud, Big Query, Google Dataflow
- Data Storage and Processing: MySQL, ElasticSearch, BigTable
- Other Tools: Git/Github, Apache Tomcat, Design Pattern

WORK EXPERIENCE

Software Developer Intern	Jun – Sep 2018
IFLYTEK(HTML,CSS,JavaScript(Vue),Git,SVN)	Hefei,Anhui,China
<ul style="list-style-type: none">• Developed Car Interfaces with Vue.js ,H5, CSS less, element-ui to meet the new requirements of UI and UE.• Applied axios to communicate with backend apis to obtain data.• Used vue-router to show correct view of specific URLs.• Applied vue modules in programming to make code more clean and easier to read.• Used vuex to establish channels between parent and child components, so as to make communications on data between each components easier and more efficient.• Wrote code according to object-oriented principles to lower the difficulty for future maintance.• Used Git and SVN to cooperate with other teammates. SVN is used to fetch the latest UI and UE files. Git is used to fetch the latest code.	

PROJECTS

Events Search and Ticket Recommendation: *Java Web Service Development*

- Developed an interactive web page for users to search nearby events and purchase tickets based on HTML/CSS/JavaScript/Ajax.
- Utilized **Apache Tomcat** as java servlets container to hold java servlets for **RESTful** APIs to handle HTTP requests and responses.
- Fetched the real events data (price, location, category, etc.) from Ticketmaster API and stored it in relational (**MySQL**) database.
- Implemented business recommendation with **content-based** recommendation algorithm.
- Implemented content-based recommendation algorithm by **MapReduce** to recommend events for users.
- Transferred data from MySQL database to NoSQL database (**MongoDB**) to scale it up.
- Deployed the local server to **AWS(Amazon Web Service) EC2** instance to handle at most 150 queries per second without obvious loss of efficiency (tested by **Apache JMeter**).

NearBy: Geo - Index Based Social Network

- Designed a geo-based social network web application (create/view posts, search, profile etc.) with **React JS**.
- Used **React Router v4** to implement basic token based registration/login/logout flow and implemented server-side user authentication with **JWT**.
- Implemented features such as "Create Post", "Nearby Posts As Gallery" and "Nearby Posts In Map" (**Ant Design, GeoLocation API** and **Google Map API**.)

- Built a web server (based on **Go**) to handle posting requests and deployed to **Google Cloud(GAE flex)**.
- Utilized **ElasticSearch (GCE)** to design geo-location based search functions for user to get all nearby posts within a certain distance (e.g. 200 km).
- Used **Google Dataflow** to dump posts data (stored in **BigTable**) to BigQuery for offline analysis.
- Implemented a spam-detection function of certain keywords at post level by **BigQuery**.

Pizza Order System

- Developed the front-end part of a Pizza Order Single-Page Application based on **webpack-simple**.
- Wrote Single-Page Application in Javascript (**Vue.js**) to realize the functions such as page switching, login, register, price calculation.
- Applied **Axios** to communicate with backend api to acquire specific data.