Sheng Ma

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SUMMERY

Seeking a full-time software engineer position.

EDUCATION

Master of Science: Computer Engineering **Sep 2017 – Dec 2018**
Northwestern University GPA 3.3/4.0 Evanston, IL
Bachelor of Science: Electrical Engineering **2015 - 2017**
University of Missouri - Columbia GPA 3.7/4.0 Columbia, MO
Bachelor of Science: Automation **2012 - 2015**
East China University of Science and Technology(ECUST) GPA 3.3/4.0 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**

- 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.

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**.