**Sheng Ma**

Address: Evanston, Illinois | [shengma2019@u.northwestern.edu](mailto:shengma2019@u.northwestern.edu) | 573-554-6387

**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.
* 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.