**Sheng Ma**

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**WORK EXPERIENCE**

**United Nations New York, NY**

*Software Developer Engineer at Emerging Technologies Team* May – Present 2019

* Developed Alba (Chat Robot), which was to be used by 39,700 staffs at UN in 193 member nations to search for information, withC# and Microsoft Bot Framework for five channels (Web Chat, Google Home, Facebook, Skype, Microsoft Teams), and ensured that Alba was functional in six official languages.
* Built Unite Cognition Tool using React, D3, and Ant Designto create a platform for users to view articles, video clips, and Q&A which are supported by the data fetched from back-end APIs.

**IFLYTEK Anhui, China**

*Software Developer Intern at Smart Car Team*  Jun– Sep 2018

* Developed Car Interfaces using Vue.js, H5, CSS, 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 the correct view of specific URLs.
* Applied **vue modules** in programming to make code cleaner and easier to read.
* Integrated the parent and child components of xxx system using **vuex**, making communications between the two xxx times/minutes/faster

**SELECTED PROJECTS**

**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**.

**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.
* 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 93.7 queries per second without obvious loss of efficiency (tested by **Apache JMeter**).

**EDUCATION**

**Northwestern University Evanston, IL**

Master of Science - Computer Engineering, Dec 2018, GPA: 3.32/4.0

**University of Missouri Columbia, MO**

Bachelor of Science – Electrical Engineering, May, GPA: 3.68/4.0

**East China University of Science and Technology Shanghai, China**

Bachelor of Science: Automation, Jul 2015, GPA: 3.3/4.0

**TECHNICAL SKILLS**

Java, SQL, Go, React, Vue, HTML, CSS, AWS EC2, Google Cloud, Big Query, Google Dataflow, MySQL, ElasticSearch, BigTable, Docker, Shell, Git/Github, Apache Tomcat, Design Pattern

**INTERESTS**

Landscape photography enthusiast, Avid singer – 3-year lead singer in a cappella with 3? awards