Jiapei Liang

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OBJECTIVE

Seeking full-time software engineer related position.

EDUCATION

Purdue University **May 2017**
Bachelor of Science, Computer Science **GPA: 3.4 / 4.0**

TECHNICAL SKILLS

Languages: Java, Javascript, Node.js, HTML, CSS, Swift, Objective-C, Go, C++, Ruby, Python, C#
Frameworks: React, Redux, Angular, Spring **Mobile:** iOS, Android, React Native, Ionic
Database: MySQL, Oracle SQL, MongoDB, Firebase, Elasticsearch
Testing: JUnit, JMeter, Mocha, White-box Testing, Black-box Testing, A/B Testing
Development: Object-Oriented Design, Agile (Scrum), SDLC, Documents (Design, Sprint Planning, Retrospective)
Others: Logstash, Kibana, Bootstrap, Git, Google Cloud, BigQuery, Google AdMob, Google Map API, GAE, GCE

PROJECTS

User Behavior Analysis

- Used **Elasticsearch, Logstash, Kibana (ELK) Stack** to target users on the basis of demographics, location, behavior, device and service provider, etc.
- Built an **ElasticSearch** project to store user session data and process raw information for further analysis
- Utilized GeoIp in **Kibana** to analyze the geographic distribution of new customers and returning users
- Tested with geolocations of 10k fake users with JMeter and delivered to 70 alpha test users to improve the quality of the product and ensure beta readiness
- Designed a MapReduce program in MongoDB to aggregate time series data and predict peak seasons

Local Event Search: Java Web Service Development – Event Search and Recommendation Engine

- Developed a dynamic web page for users to search local events
- Improved personalized event recommendation based on search history and favorite records

Back End:

- Created Java servlets with **RESTful** APIs to handle HTTP requests and responses
- Built system to fetch event data from TicketMaster API and store in relational (**MySQL**) and NoSQL (**MongoDB**) databases.
- Designed algorithms (e.g., **content-based** recommendation) to implement event recommendation
- Deployed back-end server to **Amazon EC2** that can handle 150 QPS which is tested by **Apache JMeter**

Front End:

- Designed an interactive web page utilizing **AJAX** technology (**HTML, CSS and JavaScript**)
- Developed an **Android** mobile app for users to search nearby events based on locations

Circle: Geo-Index Based Social Network

- Developed an iOS app for users to post events and updates (description, geo-location, etc.)
- Built a scalable web service in Go to handle posts and deployed to **Google App Engine** for better load scaling
- Utilized **Elasticsearch** with **Google Compute Engine** to provide geo-location based search functions such that users can search nearby posts within a distance (e.g. 200km)
- Used **Google Cloud Dataflow** to implement a daily dump of posts to **BigQuery** table for offline analysis
- Aggregated the data at the post and user levels to improve the keyword-based spam detection (BigQuery)

FireLocal: LBS based Android App for Tourists and Local Residents

- Developed an **Android** App for users to post events and search nearby events based on keyword tags
- Integrated **Google Map** API to display the nearby hot events and navigate to the event
- Used **Firebase** to store and manage UGC including comments, images, descriptions, title, geolocations
- Used in-app advertising (**Google AdMob**) to display Google advertisers and keep users engaged