

Faye Zhang

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PROFICIENCIES

- Programming Languages: Java, HTML5/CSS3/JavaScript
- Web: React-Redux, MongoDB, NodeJS, Express, Apache, MySQL, MapReduce, Amazon EC2, JUnit, JMeter, Git/Github, RESTful API
- Mobile: Google Map, Firebase, AdMob, Google Analytics, Yelp API, iOS common patterns (Delegate, Observer), MVC
- Knowledge of: JQuery, Bootstrap, Ajax, Sass, Spotify API, TicketMaster API, etc

PROJECTS

Ticket Master: Event Search and Ticket Recommendation

- The project aims to use personalization to improve ticket search and recommendation
- Created Java servlets with RESTful APIs to handle HTTP requests and responses
- Built relational and NoSQL databases (MySQL, MongoDB) to capture event data from TicketMaster API
- Designed algorithms (e.g., content-based recommendation) to improve event recommendation based on search history and favorite records)
- Deployed server to Amazon EC2 to handle 150 queries per second tested by Apache JMeter.

NBA Player Strength Visualization

- [Demo](#)
- Created a dashboard to visualize individual player's shot data, including a shot chart and 4 line/bar charts.
- Implemented linked highlighting among all charts using raised common React state among charts.
- Created a field goal percentage filter to provide more detailed visualization areas with made shots.
- Developed a match filter to more specifically visualize stats for home, away, won and lost matches.

Firelook: a LBS based Android App for Tourists and Local Residents

- [Demo](#)
- 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 **Google 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

Social: an iOS app to provide Geo-indexing to social networks

- [Demo](#)
- Used UITableView to illustrate search result with customize UITableViewCell
- Updated UITableView by delegate pattern based on implement UITableViewDataSource protocol
- Implemented Multiple MVC (Model-View-ViewController) through UINavigationController and UITabBarController to support better capabilities
- Customized Map view for better user interaction
- Integrated CocoaPod for dependency management
- Retrieve post info and fetched info from backend servers with AFNetworking

Around: a Geo-index based social network

- [Demo](#)
- Built a scalable web service in Go to handle posts and deployed to Google Cloud (GAE flex) for better scaling
- Utilized ElasticSearch (GCE) to provide geo-location based search functions such that users can search nearby posts within a distance (e.g. 200km)
- Used Google Dataflow to implement a daily dump of posts to BigQuery table for offline analysis
- Aggregated the data at the post level and user level to improve the keyword based spam detection (BigQuery)

YelpCamp:

- Responsive React-Redux Web App. Authentication, Express, NodeJS, MongoDB
- [Demo](#)

TeamPlanner:

- Responsive React-Redux Web App. Authentication with the full server hosted by Firebase
- [Demo](#)

KeyBoard Game:

- Single page React app with Spotify API
- [Demo](#)

EXPERIENCE

Sr. Reliability Software Engineer (San Jose, CA) Jan, 2015 – Present

- **SK Hynix Memory Solution.** Product Reliability Team.
- Design, develop, optimize and execute regression test cases for enterprise SSD product.
- Work with team to implement reliability test by creating **JAVA** API for internal product reliability test.
- Develop software tools and infrastructure to streamline test process and aid in failure analysis

Validation Engineer Intern (San Jose, CA) Jan, 2014 – Oct. 2014

- **HGST, a West Digital Company.** Preamp Technology & Characterization Team.
- Created **TCL automation script with GUI** to measure chip power consumption while toning through multiple register settings. Worked with validation engineer in Fujisawa head quarter on data review.

Software Engineer Intern (Plymouth, MN) May, 2013 – Aug. 2013

- **Nonin Medical.** Firmware Team.
- Worked on development of automation of C script to support test of firmware functionality and validate the accuracy of hardware prototypes for non-invasive medical devices.

EDUCATION

- Bachelor of Science Electrical Engineering *University of Minnesota-twin cities*
- Jul, 2010 – May, 2012
- Master of Science Electrical Engineering *University of Minnesota-twin cities*
- Sep, 2012 – May, 2014