Tianyu Frank Zeng

Madison, WI 53706 **·** fzeng6@gmail.com **·** (206) 512-4349

OBJECTIVE

Seeking for entry level/junior software engineer position with focus on web application and software development.

EDUCATION

University of Wisconsin – Madison   **Madison, WI**
Bachelor of Science in Computer Science, Statistics (GPA: 3.3/4.0)   *Dec 2019*
Coursework: Algorithm, Data Structures, Software Engineering, Relational Databases, Computer Networks, Deep Learning.

SKILLS

- **Languages:** Java, Python, JavaScript, SQL
- **Web Technologies:** React, Node.js, Express.js, Spring MVC
- **Others:** Git, Linux, PostgreSQL, Redis

WORK EXPERIENCE

HelpCare Connect Lab   **Madison, WI**
Student Full Stack Software Developer   *Aug 2018 — May 2019*

- Implemented the **REST APIs** with PHP, SQL and MySQL for online care-giving and healthcare services.
- Developed a fully functional prototype application using **JavaScript** and **Bootstrap** and launched campus-wide.
- Integrated third-party API into the existing system and maintained quality assurance, including resolving SQL injection.
- Implemented a Naive Bayes model in **Python** to predict psychological risk and achieved 82% accuracy.

CUNA Mutual Group   **Madison, WI**
Data Analytics Scientist Intern   *Jun 2018 — Aug 2018*

- Developed an internal dashboard that was adopted by managers to visualize results from sentiment analysis.
- Designed a web crawler with Twitter API in **Python** that retrieved 10k user comments and stored in **MySQL**.
- Implemented a Gradient Boosting Decision Tree to predict the severity of insurance claims and reduced MSE by 15%.
- Performed feature engineering on large data sets in **Spark** and facilitated the development of statistical models.

PROJECTS

SmartBrain (http://smart-brain-frontend.s3-website.us-east-2.amazonaws.com/)   **Madison, WI**
Full Stack Developer   *Nov 2019 — Nov 2019*

- Implemented **REST APIs** with **Node.js**, **Express.js**, and **PostgreSQL** for the real time image classification service.
- Developed a single page application with **React.js** that asynchronously fetch the payload from the back-end APIs.
- Scaled the application by serving the front-end on **AWS S3** and caching data with **CDN** using Cloud Front to deliver data with low latency.
- Implemented **JWT** token based authentication for REST APIs using **Redis** as session store for the performance.
- Automated system deployment with AWS CodePipeline to achieve continuous deployment.

PM Tool (https://fzpmtool.herokuapp.com/)   **Madison, WI**
Full Stack Developer   *Jul 2018 — Jul 2018*

- Developed a project management app in **Java** and **Spring** to allow users to easily create and manage projects by priority.
- Designed **RESTful** Web Services and incorporated persistent data storage with MySQL to retrieve projects and tasks.
- Built components of the website, including task board and authentication page in **React** components.

Summit Membership System (https://github.com/SummitApp/FireBase-Functions)   **Madison, WI**
Backend Developer   *Nov 2018 — Dec 2018*

- Taught myself **JavaScript** in 1 month and collaborated with 2 teams to lead development of the system, launching with Firebase and Firestore.
- Built the backend system in Firebase and JavaScript, such as alert notification function and launched company-wide.