






Jiayun (Vivian) Zhang

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EDUCATION

University of San Francisco (GPA: 4.0/4.0)

Master of Science in Computer Science

San Francisco, CA

Aug 2021 - Dec 2023

Diablo Valley College (GPA: 4.0/4.0)

Computer Science

Pleasant Hill, CA

Aug 2019 - Dec 2020

WORK EXPERIENCE

Silicon Valley Chinese Sports Association

Full Stack Web Developer

Remote

Jun 2023 - present

- Designed and implemented features for over 50 basketball teams and thousands of athletes to register for competitions on a public sports website, utilizing skills include **Next.js**, **React**, **Typescript**, **Tailwind CSS**, **SQL** and **Git**.
- Enhanced registration process for a better user and admin experience, resulting in a 33% reduction of process time.
- Optimized frontend features using **Swift** for continuous improvement of the iOS app to enrich user experience.

Good River

Software Engineer Intern

Sep 2022 - Dec 2022

- Engineered a schedule management application using Trello Power Up and Trello **REST API**, with a **JavaScript** frontend and a **Python** backend supported by **SQLite** as the database. Used **Flask** as the backend REST API server.
- Integrated the application with Google Calendar to enable users to achieve seamless schedule management.
- Earned the "Audience Favorite Award" at USF 2022 CS Night. Received excellent feedback from more than 100 users.

UNIVERSITY PROJECTS

Ecommerce Web Application (<https://www.whoopee.store>)

Fall 2023

- Created a responsive e-commerce website with **HTML**, **CSS**, **Bootstrap** for a visually appealing and user-friendly interface; employed **Javascript**, **jQuery**, **handlebars**, and **AJAX** to provide a dynamic user interface.
- Implemented robust and scalable backend functionality using **Node.js**, **Express.js**, and utilized **MongoDB** for data storage, ensuring efficient data handling and seamless user experiences such as login and shopping cart management.
- Successfully deployed the website on **AWS**, leveraging **Route53** for domain management, **EC2** for hosting, and **CloudFront** for content delivery with **SSL** certification to improve user security and online shopping experience.

Distributed Data Analysis Platform

Fall 2022

- Developed a Hadoop-like distributed file system(**HDFS**) and computation engine using **Golang**. Enabled efficient **parallel processing** of large datasets(approximately 200GB) across multiple distributed machines.
- Designed and implemented **MapReduce** tasks for deep analysis of large datasets and extraction of valuable insights.
- Achieved a significant 50% increase in data processing speed by utilizing chunking and parallel uploading through Goroutine. Implemented a replication algorithm that stores multiple replicas across networks to achieve fault tolerance.

Ticket Purchase Web Application

Spring 2022

- Developed a two-tier ticket purchase web application using **Java**, leveraging **Object-Oriented concepts**. Employed **Jetty** as the web server, with **HTML**, **CSS**, and **JavaScript** for the front end, and **MySQL** as the backend database.
- Enhanced the user experience and security by integrating the application with **Google Account Single Sign-On**
- Implemented comprehensive **CRUD** functionalities through a **REST API** for ticket transaction management.

TECHNICAL SKILLS

Programming Languages: Java, JavaScript, Typescript, C, C++, Golang, Python, HTML/CSS, SQL

Skills: HDFS, MapReduce, Spark, React, Angular, Node.js, Express.js, Next.js, JQuery, Bootstrap, Tailwind CSS, Linux

Tools: Git, REST API, AWS, ns-3, Handlebars, MongoDB, MySQL, SQLite, AJAX, Wireshark, TCP/IP, UDP, Socket

REWARDS

- Grace Hopper Celebration Scholarship, Sep 2023
- Academic Excellence Scholarship, Sep 2022
- Newmark Women in Tech Scholarship, Jun 2022
- USF Admission Scholarship, Sep 2021