**Alex Zhang**

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**EDUCATION**

**University of Southern California**

**Master of Science in Computer Science**, GPA 3.65/4.00January 2022–December 2023

**University of Florida**

**Master of Science in Management,** Combined Degree, GPA 3.56/4.00January 2020–August 2021

**University of Florida**

**Bachelor of Science in Computer Science,** Cum Laude, GPA3.62/4.00 August 2016–December 2020

**TECHNICAL SKILLS**

**Frontend Dev:** JavaScript/TypeScript, HTML, CSS/Less/Tailwind, React, Redux/MobX, Vite, React Native

**Backend Dev**: Node/NestJs/Egg.js, Python, Java, Spring Boot, Spring MVC, Thymeleaf

**Databases**: SQL, Firebase, MongoDB, Hibernate, Sequelize

**WORK EXPERIENCES**

**Schlumberger** May 2022–August 2022

*Software Developer Intern* | *Schlumberger-Doll Research*Cambridge, MA

* Developed a backend management module with **React** to monitor the current status of company’s visualization platform.
* Refactored platform’s Logplot with **INT GeoToolkit APIs**, allowing users to visualize multiple logs within one single track.
* Enhanced researchers’ experience of using Formation and Log Visualizer by allowing users to designate min and max.
* Redesigned the controller mechanism for geographic 3D visualizer renderer written in **Three.js** for better user experience.
* Improved the development and testing experience by transplanting the existing 13 unit test cases from Linux to Windows.

**Meta Force, LLC.** March 2022–May 2022

*Software Developer Intern*Beverly Hills, CA

* Developed the company’s official website with animations and responsive design using **React**, **Redux**, **Tailwind**, and **Vite**.
* Created and hosted the website for the Sloth Journey NFT on Heroku, creating a profit of $10 thousand.

[**Xiaomi**](http://home.miui.com/tv)September 2021–December 2021

*Software Developer Intern & Intern Interviewer* | *Department of MIUI Experience*Beijing, China

* Developed multiple sections for MIUI 13’s official website (home.miui.com) using **Next.js** and **Tailwind**, and adjusted visual effects to match the department’s changing expectations and helped increment MIUI’s monthly active users by 100 million.
* Enhanced operations team’s work efficiency by developing splash screen and product library management modules for Xiaomi Community’s backend with React to enable automated splash screen and product management.
* Carried out new APIs for Xiaomi Group’s privacy policy management platform with **Egg.js** and **MySQL-Sequelize**, enabling administrators to access published privacy policies and publish new policies through the server to clients, etc.
* Enriched the animation solution pool by analyzing and reproducing the animations on Apple MacBook Pro's official website.

**Alibaba** May 2021–August 2021

*Software Developer Intern* | *Alibaba Cloud Utility Products Business Unit*Hangzhou, Zhejiang, China

* Expanded the functionality and improved the usability of Alibaba Cloud by implementing new features, varying from constructing the Advanced Features page of VPC to carrying out the VSwitch change-of-binding module of VRouter-Table, creating an indirect increase in revenue of $0.2 million.
* Developed and continuously improved a code generation solution with **React.js** and **Handlebars.js** in order to enhance the efficiency and efficient throughput of large frontend development teams.
* Built automated test cases for DHCP Options Set and Smart Access Gateway and created tutorial documentation to improve the new employees training efficiency by 20%.

**PROJECTS**

[**Employee Manager**](https://github.com/rrrrr4788/EmployeeManagementDemo)November 2022

Wrote an application using **Spring Boot**, **MySQL** and **Hibernate** to perform certain operations for managing employees’ info.

* Enabled users to retrieve one or all employees from the database, add/delete employees, and update employee info.

[**Humming**](https://github.com/Gnoseil/Humming)April 2020–September 2020

Programmed a mobile application that simulates delivery services via drones and robots within San Francisco in the Agile fashion.

* Engineered all 7 screens, which provide functionalities of user authentication, solution planning, order creation, status tracking, profile information modification, etc., with **React Native** and **Firebase**.
* Enhanced the user experience by integrating polyline drawing, route computation, coordinate translation and payment services.
* Devised APIs for order creation and management, payment information generation and validation, and address management.

[**InMotion**](https://inmotional.herokuapp.com/)November 2019–September 2020

Engineered a real-time web app that analyzes human facial expressions from webcam and video, sorts the emotion data into 7 categories, and displays the data with a visual diagram.

* Constructed the user authentication module with **Node.js**, **Express.js**, and **Mongoose**, and blurred user auth info with **JWT**.
* Applied Firestore to store facial expression data uploaded every 100 frames for further facial expression analyses.

[**Waste VR**](https://www.ippd.ufl.edu/projects/2019-20-projects/ptp-strategy/)August 2019–May 2020

Managed day-to-day developmental progress and a team of 5 engineers on a **Virtual Reality** project sponsored by the company PTP Strategy via the UF Integrated Product and Process Design (IPPD) program.

* Oversaw and ensured consistent and accurate output of the sponsor’s desired program under the **Agile** development pattern by collaborating with the programming team members, faculty coach, and liaison engineer.
* Created a VR app with several learning modules in **Unity**, targeted to the general public for education on recycling methods.
* Designed the Quiz Scene of the program, involving scene construction and devising algorithms to complete quizzes.