

Haozhe (Alex) Zhang

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INTERNSHIP EXPERIENCE

Schlumberger

Software Developer Intern / Schlumberger-Doll Research

May 2022–August 2022
Cambridge, MA

- Created a backend management module with **React** to monitor current status of company's visualization platform.
- Refactored platform's Logplot with **INT GeoToolkit APIs**, allowing scientists to visualize data in multiple dimensions and empowering them to observe two times more patterns and as many correlations as before.
- Redesigning controller mechanism for 3D renderer written in **Three.js** to provide 3D visualization of geological data, such as electroconductivity, water content, etc. at specific depths, used by Chevron, ExxonMobil, Royal Dutch Shell, and more.

Meta Force, LLC.

Software Developer Intern

March 2022–May 2022
Beverly Hills, CA

- Developed company's official website with animations and responsive design with **React, Redux, Tailwind**, and **Vite**, increasing website visiting duration by ten times.
- Built and hosted multiple official websites of company's NFT products on Heroku, leading to a profit of \$10 thousand.

Xiaomi

Software Developer Intern & Intern Interviewer / Department of MIUI Experience

September 2021–December 2021
Beijing, China

- Developed multiple sections for MIUI 13's official website (archived at miui13.home.miui.com/tv) with **Next.js** and **Tailwind** and adjusted visual effects to match department's changing expectations and achieved **3 million DAU**.
- Boosted operations team's work efficiency by 30% via developing splash screen and product library management modules for Xiaomi Community's backend with **React** and **Umi.js** to enable automated splash screen and product management displayed to all **5 hundred million Xiaomi users** during Double-Eleven Shopping Festival.
- Carried out APIs for Xiaomi Group's privacy policy management platform with **Egg.js** and **MySQL**, enabling administrators to access published privacy policies and publish new policies to **8.6 hundred million Xiaomi smartphones**.
- Enriched animation solution pool by analyzing and reproducing animations on Apple MacBook Pro's official website.

Alibaba

Software Developer Intern / Alibaba Cloud Utility Products Business Unit

May 2021–August 2021
Hangzhou, Zhejiang, China

- Expanded functionality and improved usability of Alibaba Cloud by implementing new features, varying from constructing the Advanced Features of VPC console to carrying out VSwitch change-of-binding module of VRouter-Table, resulting in an indirect increase in revenue of **\$2~5 million**.
- Devised a code generation solution with **React.js** and **Handlebars.js** in order to enhance efficiency and ensure efficient throughput of large frontend development teams with over 5k downloads and increased development efficiency by 20%.

EDUCATION

University of Southern California, Master of Science in Computer Science (GPA 3.8/4.0)

January 2022–May 2023

University of Florida, Master of Science in Management (GPA 3.6/4.0)

January 2020–August 2021

University of Florida, Bachelor of Science in Computer Science (GPA 3.7/4.0, Cum Laude)

August 2016–December 2020

TECHNICAL SKILLS

Backend: Java, Spring Boot, Spring Security, Nginx, Tomcat, Kafka, Golang, Hertz, Node, NestJs, Egg.js, Python, Flask

Frontend/Mobile: JavaScript, TypeScript, HTML, CSS, Less, Tailwind, React, Next.js, Redux, MobX, RxJS, React Native, Spring MVC, Thymeleaf

Databases: MySQL, Firebase, MongoDB, MyBatis, Hibernate, Sequelize, Redis, Gorm

Other Tech Stacks: Pandas, Numpy, PyPlot, Seaborn, Sklearn, AWS, GCP

PROJECTS

TikTok

January 2023–February 2023

Led a team of 8 engineers to rebuild and host a simplified TikTok backend on **GCP** via ByteDance Backend Bootcamp.

- Managed the team by coordinating development progress, making development guidelines and rules, and devising workflows.
- Constructed the scaffold of the project, connected logger, and implemented video and user modules, including friend messaging, video retrieval, file storage, and video publication with **Go, Hertz, Gorm, Amazon AWS S3**, and **ffmpeg**.

Nowcoder

December 2022–January 2023

Engineered and hosted a social media application with **Spring Boot, Spring MVC, MySQL, MyBatis, Redis**, and **Kafka**.

- Implemented user login, profile settings, direct message, post, comment, like, and follow modules via **Spring MVC, Spring Boot, Spring Security, Thymeleaf, MyBatis**, and **Redis** including email activation, **Kaptcha** generation, etc.
- Devised system notifications for user like, follow, and comment events by utilizing **Kafka** to achieve a fast response.
- Deployed the project on a **Google Cloud Platform** instance hosted at <http://35.184.221.134/> with **Nginx** and **Tomcat**.
- Utilized **Quartz** to recurrently calculate post rankings every 5 min and **Caffeine** to enhance program efficiency via caching.
- Integrated **Spring Boot Actuator** and **Spring Security** to expose project endpoints and calculate UV and DAU of the site.

Humming

April 2020–September 2020

Programmed a mobile application simulating delivery service via drones and robots within San Francisco in the Agile fashion.

- Engineered all 7 screens to provide functionalities of user authentication, solution planning, order creation, status tracking, profile information modification, etc., with **React Native** and **Firebase**.
- Enhanced 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.