

Ethan Zhao

# Full Stack Developer | Software Engineer

Tel: (201) 699-8556 | Email: [ethanjzhao@gmail.com](mailto:ethanjzhao@gmail.com) | [Portfolio](#)

## Summary

Experienced Software Engineer professional in React.js, Angular.js 10+, Node.js, JavaScript, TypeScript based programming with a strong background in Computer Science, bringing over 3 years of project experience in software development, I am not only adept at tackling different intricate challenges but also a dedicated team player, fostering collaboration and ensuring collective success.

## Skills

**Language:** JavaScript, TypeScript, Java, Python, SQL, HTML, CSS, SASS, SCSS

**Framework & Libraries:** React.js, Angular.js 10+, Next.js, React Native, Node.js, Express.js, Material UI, Tailwind CSS

**Database:** MongoDB, DynamoDB, PostgreSQL, MySQL

**Cloud Service:** AWS EC2, Lambda, S3

**Tools & Practices:** RESTful API, Jest, React Testing Library, Prisma, Mongoose, Git, Linux, Spring Boot, MVC, Babel, NPM, Kubernetes, ESLint, Docker, Postman, Jira, Figma, Agile/Scrum

## Experience

### Beaconfire Solution Inc.

East Windsor, New Jersey, United States

#### Fullstack Web Developer

Nov 2023 - Present

- Led the development of new features of an Employee Management System using the **MEAN** Stack, responsible for setting up the code base, developing new features of housing management, visa management and a collaboration hub.
- Implemented authentication and authorization using Router Guard from **Angular Router** and Interceptor.
- Implemented **optimistic update** by updating the state immediately on the interface while making asynchronous requests using **Angular HttpClient** and **NgRx**.
- Enhanced performance by applying **RxJS** operators and optimizing components, preventing unnecessary re-renders.
- Utilized Angular HttpClient for efficient data fetching and implemented **lazy-loaded components** to display loading pages during data retrieval.
- Ensured responsiveness by incorporating **Angular Material** into the application and maintained consistent theming across components using **Angular** services.
- Tested components behaviors using Jasmine and Karma from Angular.
- Designed and established reusable components to streamline development and maintenance processes.
- Developed server routes and controllers using **Node.js** and **Express.js**, following the **RESTful API** principles, providing precise and easy-to-operate responses for complex logic.
- Leveraged **Mongoose** to write complex queries to query the **MongoDB** database.
- Utilized **Multer** and **AWS SDK** to handle **AWS S3** file upload and download for the collaboration hub feature.
- Reused **JWT** and **middleware** in the **Express** router to verify different user roles.
- Worked in an **Agile** environment with daily meetings and sprints, managing tickets through **Jira**.
- Collaborated effectively using **Git** and **GitHub**, implementing branch protection and conducting code reviews before pull requests to ensure code quality and integrity.

### SamaritanScout.org

Remote, United States

#### Front-End Software Developer

Jul 2023 - Present

- Crafted essential components such as navigation bar, footer using **Material UI**, **React.js**.
- Designed and built a functional searching filter including location, date and multiple tags, using **Context API** to share the states.
- Utilized **React-Router-DOM** and relevant **hooks** to manage and protect different routes, implemented **lazy-loaded components** to efficiently render the component with a loading page, and improved the initial loading time.
- Leveraged advanced **React Hooks** such as `useMemo()` and `useCallback()` to prevent unnecessary rerenders.
- Built contact form sending email via **EmailJS** and integrated donation functionality through PayPal and Venmo APIs.
- Improved user experience by reducing application response time by 30% through **virtualization**, rendering only visible content.
- Optimized image sizes and implemented **tree shaking** techniques to enhance overall user experience.

- Teamed up with UI/UX designer and other stakeholders to establish consistent theming for a unified website appearance.
- Collaborated in an **Agile/Scrum** environment using **Jira**, **Confluence** and **Git** for streamlined project management.

## **Beichende Technology Co., Ltd.**

Fullstack Web Developer

*Shenzhen, China*

*Jan 2021 - Apr 2023*

- Developed the freight orders management feature using **React** and **ElementUI** for the front end, **Node.js**, **Express** and **MySQL** for the backend.
- Leveraged **JavaScript** to manipulate the DOM, efficiently virtualizing different kinds of data.
- Implemented order functionalities, efficient data fetching, optimizing the complex creating, reviewing, updating and cancellation processes, developed robust sorting and searching features using **React Hooks**, **React-Redux** and **Axios**.
- Conducted component testing using **Jest** and **React Testing Library**.
- Applied the **RESTful APIs** using **JavaScript** for the backend, optimizing code structure and ensuring separation of concerns.
- Implemented user authorization and authentication using **JWT tokens**, and hashed the password using **bcrypt.js**.
- Utilized **Prisma** to write complex queries to the **MySQL** database.
- Collaborated with counterparts from the client company, utilized **Postman** to meticulously test API endpoints, ensuring adherence to project documentation and validating the correct flow of **JSON** data format between the frontend and backend.
- Developed comprehensive **unit tests** for controllers, services and DAOs using **Jest** and **Supertest** to guarantee the reliability and stability of the backend.
- Collaborated closely with cross-functional team members to ensure the successful delivery of high-quality software in a collaborative **Agile** environment.

## **Education**

**Stevens Institute of Technology**

MSc in Computer Science

*Hoboken, New Jersey, United States*

*Sept 2021 - May 2023*

**North China Electric Power University**

BSc in Computer Science

*Beijing, China*

*Sept 2017 - May 2021*