# **Eric Zheng**

## Full stack Developer

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#### **SUMMARY**

- Over 8 years of experience as a Full Stack Developer, skilled in developing scalable, high-performance web applications using ReactJS, Node.js, Express, and Spring Boot.
- Extensive experience with modern front-end technologies including HTML5, CSS3, SASS, JavaScript, ES6, TypeScript, Redux, React Router, Bootstrap, and Webpack.
- Solid expertise in ReactJS architecture, including components, JSX, Virtual DOM, Redux state management, and optimized rendering techniques.
- Implemented micro-frontend architecture to modularize large applications, enabling independent deployment and improved codebase scalability across teams.
- Proficient in backend development using Node.js, Express, and Spring Boot to create robust RESTful APIs and microservices.
- Experienced in designing and managing databases with MySQL, PL/SQL, PostgreSQL, MongoDB, Firebase, Amazon DocumentDB, and DynamoDB.
- Skilled in deploying scalable cloud solutions using AWS Elastic Container Service (ECS), Lambda, AWS SNS, Cognito, Redis caching, and Elastic Beanstalk.
- Adept in Continuous Integration/Continuous Deployment (CI/CD) using GitHub workflows, Jenkins, and Docker for streamlined software delivery.
- Expert in integrating APIs and web services with front-end applications using Ajax, Axios, and asynchronous programming techniques (async/await).
- Extensive experience in writing unit and integration tests with Jest, React Testing Library, Mockito, and JUnit, implementing Test-Driven Development (TDD).
- Familiar with Agile and Scrum methodologies, effectively managing project lifecycles from planning to deployment.
- Strong foundational knowledge of data analytics and machine learning, including supervised and unsupervised learning methods (KNN, SVM, KMeans) and data visualization.
- Proven track record in optimizing database performance through query caching (ElastiCache) and efficient schema designs.
- Experience in developing responsive web applications optimized for various user devices using Bootstrap, CSS3 media queries, and flexbox.
- Knowledge of CSS methodologies, including BEM naming strategy, to create scalable and maintainable codebases.
- Excellent communication skills, passionate technology enthusiast, and capable of efficiently managing multiple, challenging tasks under pressure.

#### **TECHNICAL SKILLS**

**Programming Languages & Frameworks**: avaScript, TypeScript, HTML, CSS, SQL, Java, Python, C++, JSON, React, React Native, Vue, Next.js, jQuery, Sass, Tailwind CSS, Vite, Node.js, Express, Spring, Spring Boot, JPA/Hibernate, Gson, GraphQL

Databases: MongoDB, PL/SQL, PostgreSQL, MySQL, Redis

Tools & DevOps: Webpack, Babel, Docker, Git, GitHub, GitLab, Jira, Postman, Maven, Gulp, Jenkins, Kubernetes

Testing & CI/CD: Jest, React Testing Library, JUnit, Mockito, Jenkins, GitHub Actions

Cloud & Infrastructure: AWS, Azure

Data Processing & Machine Learning: MapReduce, Hadoop, Pandas, NumPy, Scikit-Learn, Matplotlib, SciPy

#### **EXPERIENCE**

### neARabl, New York City, NY- Full Stack Engineer

Jul 2023 - Apr2025

Project: Spatial Operations Dashboard

neARabl is a New York City-based technology company specializing in augmented reality solutions to transform navigation, operation, and maintenance within complex buildings. Founded in 2021, neARabl leverages

cutting-edge Al, computer vision, and machine learning to enhance visitor experiences, reduce rework, and optimize building maintenance.

- Developed immersive, component-driven web interfaces using React.js, Next.js, and TypeScript, effectively rendering spatial intelligence data on real-time AR dashboards.
- Architected a scalable frontend infrastructure leveraging Tailwind CSS, styled-components, and Material-UI, ensuring rapid iteration and visual consistency across applications.
- Engineered advanced custom hooks for efficient state management, real-time REST API interactions, and WebSocket integrations, enhancing the user experience with instant AR data updates.
- Implemented client-side routing using React Router v6, optimizing seamless navigation tailored specifically to spatial UI/UX requirements.
- Improved frontend performance significantly by strategically employing React.memo, useCallback, and virtualization techniques (react-window), effectively handling large spatial datasets with minimal latency.
- Developed and maintained robust RESTful APIs using Spring Boot and Spring Data JPA for ingesting, transforming, and retrieving high-volume spatial datasets.
- Integrated Amazon DynamoDB for low-latency access to dynamic, high-frequency telemetry and alert data, supporting real-time overlay responsiveness.
- Leveraged Oracle Database with PL/SQL stored procedures to manage structured spatial records, perform scheduled data clean-up, and execute complex geo-query logic.
- Deployed containerized services on AWS ECS, integrating with API Gateway and Lambda for stateless compute tasks and scalable endpoint delivery.
- Built backend analytics pipelines using Java Streams API and JFreeChart, delivering operational dashboards and location intelligence insights.
- Applied ML models using Weka to correct indoor geolocation drift and enhance predictive navigation for AR overlays.

### MoneyLion, New York City, NY- Software Engineer

Feb 2021 - Apr 2023

Project: Authorization Platform

MoneyLion is a fintech company offering digital banking, credit, and investment tools to help users manage personal finances. Their tech stack emphasizes automation, security, and personalized financial experiences.

- Built a cloud-based authorization dashboard with React.js, TypeScript, and Redux Toolkit for managing user access across banking and credit tools.
- Developed an SPA using React Router v6 to support smooth transitions between investment, lending, and banking modules.
- Synced real-time access changes using Firebase Realtime Database, ensuring immediate updates to user permissions. Synced real-time access changes using Firebase Realtime Database, ensuring immediate updates to user permissions.
- Created Node.is/Express microservices for access policies, audit logs, and client authorization flows.
- Implemented secure authentication with Firebase Auth, Auth0, JWT, and OAuth 2.0, enabling SSO and MFA.
- Utilized PostgreSQL for persistent role storage and Redis for token validation and session caching.
- Triggered compliance checks and risk evaluations via Firebase Cloud Functions.
- Deployed services with AWS ECS and Lambda, and maintained observability with CloudWatch.
- Ensured code integrity through CI/CD pipelines, Jest-based unit testing, and regular security audits.

## Basis Technologies, New York City, NY- Software Engineer

Aug 2018 - Dec 2020

Project: Campaign Insights Data Migration

Basis Technologies delivers a comprehensive digital advertising platform that streamlines campaign planning, buying, optimization, and reporting. Their solution integrates workflow automation, programmatic advertising, and data insights to help agencies and brands run high-performance campaigns across all digital channels.

- Created a web-based QA dashboard using React.js to help analysts validate data integrity during the migration from MySQL to MongoDB.
- Developed real-time side-by-side visualizations of legacy and new data records, with support for matric-level filtering (impressions, clicks, conversions) and anomaly detection.

- Integrated Chart.js for campaign trend analysis and used memoization and virtualization to maintain responsive UX for large datasets.
- Wrote data transformation pipelines in Node.js, converting relational data into nested MongoDB-compatible JSON schemas.
- Designed efficient MongoDB indexes to accelerate dashboard query performance and minimize load times..
- Used Postman to design and validate REST API contracts, ensuring correct and complete data exposure to the frontend team.

**Certificates:** 

**AWS Certified Developer – Associate** 

Issued by: Amazon Web Services Training and Certification