Karunakar Reddy Kalla

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Summary

Full Stack Developer with 3+ years of experience building scalable web applications using **Java, Spring Boot, React,** and **Node.js**. Skilled in REST APIs, Redux, containerization with **Docker**, and **AWS**. Passionate about designing scalable systems, building fast APIs, collaborating in cross-functional teams, and delivering robust, maintainable solutions.

Technical Skills

Frontend: React, Redux, Angular, TypeScript, JavaScript, HTML5, CSS3, Tailwind CSS, Bootstrap, SASS, Jest
Backend: Java, Spring Boot, Node.js, Express, Hibernate (JPA), REST, GraphQL, WebSocket, Python, Maven, JUnit, Mockito
Databases: PostgreSQL, MySQL, MongoDB, NoSQL, Redis, DynamoDB, Elasticsearch
DevOps/Cloud: Docker, Kubernetes, Jenkins, GitHub Actions, AWS (EC2, ECS, S3), Azure, Postman, Webpack, Babel
Tools: Git, Prometheus, Grafana, ELK Stack, SonarQube, Linux

Experience

Heartland Community Network   Jun 2024 – Jun 2025
Full Stack Developer   *Bloomington, IN, USA*

- Built a robust full-stack application with **React, Redux, Node.js,** and PostgreSQL, cutting API latency by 40% through the use of Redis caching, query optimization, and efficient database indexing to improve response speed under concurrency.
- Created secure and scalable REST and **GraphQL APIs,** reducing data transfer overhead and enabling flexible data flows between frontend and backend, improving user experience across multiple user interaction patterns.
- Implemented **JWT**-based authentication with RBAC, minimizing unauthorized access by 25% and enabling structured privilege control across modules, improving both security posture and maintainability.
- Deployed containerized services using **Docker** and **AWS ECS** with **GitHub Actions,** establishing a CI/CD pipeline that reduced release cycle by 50% and enhanced deployment accuracy with automated testing.

Cognizant Technology Solutions   Apr 2020 – Jun 2022
Software Engineer   *Hyderabad, India*

- Developed scalable microservices using **Spring Boot, Apache Kafka,** and React for processing 50K+ daily events, achieving a 40% reduction in latency through Kubernetes orchestration and performance-optimized service design.
- Built a centralized observability dashboard with Prometheus, **Grafana,** and ELK Stack, integrating AWS **CloudWatch** and New Relic to reduce MTTR by 65% while maintaining 99.95% system uptime through proactive alerting.
- Optimized PostgreSQL APIs using Redis caching, efficient indexing, and Spring Data **JPA,** which decreased latency from 5s to 250ms and reduced AWS costs by 30% while enhancing frontend responsiveness.
- Implemented Jenkins-based CI/CD with **SonarQube** and TDD, increasing deployment frequency significantly and maintaining code quality with automated testing and continuous integration practices.

Cognizant Technology Solutions   Sep 2019 – Mar 2020
Associate Software Engineer   *Hyderabad, India*

- Enhanced user-facing interfaces with **React, Redux,** and **TypeScript,** delivering multilingual and responsive support across devices, increasing user engagement by 20% with high compatibility and modern UX.
- Rebuilt backend services with Node.js and Express, added secure **JWT** authentication, and integrated Stripe for payments, leading to a 15% improvement in successful transaction completions.
- Reduced frontend load time by 30% by applying **Webpack** optimizations and SASS-based theming, implementing lazy loading, code splitting, and consistent styling for a faster user experience.

Projects

AI-Enhanced Crypto Portfolio Tracker

- Developed a crypto portfolio tracker with secure auth, real-time CoinGecko API integration, and a responsive React UI offering a seamless live asset tracking and management experience.
- Integrated OpenAI GPT API to offer AI-generated insights, enabling personalized investment analysis and strategic suggestions that improved user interaction and retention rates.

Cross-LLM Code Validation Visual Studio Code Extension

- Created a VS Code plugin integrating GPT-4, Bard, and AI21 to collaboratively generate and validate Python code, improving coding accuracy and developer productivity in real-time scenarios.
- Engineered a modular workflow engine using TypeScript and the VS Code API, streamlining LLM suggestions into structured blocks to enhance clarity, versioning, and code quality validation.

Real-Time Team Chat Application

- Built a real-time chat app using Spring Boot WebSocket backend and React frontend, implementing typing indicators and group chat rooms while ensuring scalable and responsive communication.
- Enabled secure user sessions with JWT-based authentication, used PostgreSQL and Spring Data JPA for message storage with transactional consistency, ensuring durability and message integrity across sessions.

Education

George Mason University – Master's in Computer Science   Fairfax, USA

Vellore Institute of Technology – Bachelor's in Computer Science and Engineering   Vellore, India