Vraj Shah

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Professional Summary

Software Engineer with 2+ years of experience in full-stack development, specializing in building scalable backend systems and intuitive front-end interfaces. Proficient in Java, Python, C, Angular, Spring Boot, and Node.js. Strong problem-solving skills with experience in RESTful APIs, cloud infrastructure (AWS), microservices, and automated testing. Currently pursuing a Master's in Applied Computer Science at Dalhousie University, with a focus on scalable system architecture and cloud computing.

Technical Skills

Programming Languages: C, C++, Java, Kotlin, Python

Backend Development: Spring Boot, Node.js, Microservices, RESTful APIs

Frontend Development: Angular, ReactJS, HTML, CSS, TypeScript **Cloud & DevOps**: AWS (EC2, S3, Lambda, IAM, etc.), Azure, Kubernetes, Docker, CI/CD (GitHub Actions, GitLab CI)

Databases: PostgreSQL, MySQL, MongoDB, Firebase

System Design & Performance: Scalable Architecture, Distributed Systems, Fault Tolerance, API Optimization

Testing & Automation: Unit Testing, Integration Testing, Automated Testing Infrastructure

Soft skills: Strong communication, Problem solving, Teamwork and collaboration, Interpersonal skills, Attention to detail, Critical thinking, Innovation, Ability to learn continuously, Task Management

Work Experience

Simform Solutions **Dec 2021 - Nov 2023**

Software Engineer *Ahmedabad, India*

- Scaled backend systems to handle 5M+ API requests per day, improving request handling efficiency by 40% through optimized caching and database indexing.
- Reduced API response times by 60% by refactoring backend logic, implementing asynchronous processing, and optimizing database queries, improving user experience for high-traffic applications.
- Led the migration of monolithic services to microservices architecture, improving system scalability and reducing downtime by 45%.
- Developed and deployed a fault-tolerant, high-availability system, ensuring 99.98% uptime by leveraging Kubernetes-based auto-scaling and distributed load balancing.
- Reduced deployment failures by 50% by designing CI/CD pipelines (GitHub Actions), automating build, test, and deployment workflows.
- Refactored legacy backend codebases, implementing best practices in system design and modularization, leading to 30% faster feature development.
- Optimized PostgreSQL queries, reducing database load by 35% and improving response times for critical services.
- Collaborated with cross-functional teams, improving feature delivery efficiency by 30% through effective sprint planning and backlog prioritization.
- Collaborated on front-end improvements using Angular and ReactJS, enhancing user interaction efficiency by 30%.
- Designed and enforced API rate limiting mechanisms, reducing service abuse and maintaining system stability under heavy traffic.

Education

Dalhousie University **Jan 2024 - Sep 2025**

Master of Applied Computer Science (Co-op Candidate) — ***GPA: 4.07/4.3*** *Halifax, Canada*

Charusat University **Jun 2018 - Apr 2022**

Bachelor of Computer Engineering — ***GPA: 8.7/10*** *Gujarat, India*

Projects

ServiceHub | *Source Code* **ReactJS | Spring Boot (JAVA) | MySQL**

- Designed and built a scalable web application for service providers and requesters, integrating e-signed contracts and feedback systems, resulting in a 20% increase in user engagement by enhancing user trust and interaction flow.
- Applied Object-Oriented Programming principles (e.g., classes, objects, inheritance) to design modular and reusable code for the backend, ensuring maintainability and scalability.
- Architected backend using Java Spring Boot and integrated it with a ReactJS frontend, achieving 99.9% uptime and enabling seamless real-time interactions among over 1,000 active users.
- Enhanced system security by implementing JWT-based authentication and role-based access control (RBAC), reducing unauthorized access incidents by 30%.

BidWise **Angular | Spring Boot (JAVA) | Typescript | MySQL | TDD | Stomp Socket**

- Designed and developed an online live auction application using Spring Boot allowing users to participate in live auction and bid on the listed items also allowing them to add items for auction selecting time of their choice, integrating Stripe for payments and Stomp to create socket channel for continuous bidding by users.
- Followed SDLC and implemented JWT tokens for secure and efficient REST API request authorization. Automated the deployment process with CI/CD pipeline using GitLab CI, streamlining code integration, testing, and deployment across multiple environments.
- Leveraged Angular's modular design to build a structured and maintainable front end and integrated JWT authentication within Angular's HTTP interceptors to manage secure API requests seamlessly.