Vraj Shah

Objective

Passionate software engineer with expertise in full-stack development, Android, and iOS applications. Skilled in designing scalable solutions and optimizing performance across frontend and backend technologies. Seeking a co-op opportunity to contribute to fast-paced software development initiatives while expanding my expertise in cloud-native microservices architecture.

Technical Skills

Programming Languages: Kotlin, Swift, Java, JavaScript, TypeScript, Python, C# (Basic)

Frontend development: ReactJS, Angular, HTML5, CSS3, Bootstrap, TailwindCSS

Backend development: Node.js, Spring Boot (Java/Kotlin), REST APIs, Python (ETL, Data Processing)

Databases: MySQL, MongoDB, SQLite, PostgreSQL

Cloud & DevOps: AWS, Firebase, GitHub Actions, GitLab CI, Docker, Kubernetes

Testing & Version Control: JUnit, Mockito, Espresso, Cypress, Git (GitHub, GitLab)

Tools & Frameworks: Retool, AWS Amplify, CI/CD Pipelines, Agile Kanban

Soft skills: Strong communication, Problem solving, Teamwork and collaboration, Adaptability, Attention to detail, Critical thinking, Time management, Ability to learn continuously

Work Experience

Simform Solutions Dec 2021 - Nov 2023

Software Engineer

Ahmedabad, India

- Developed and maintained full-stack applications using Kotlin, Swift, ReactJS, and Node.js, delivering high-performance solutions that enhanced user experience and engagement.
- \bullet Designed and implemented RESTful APIs using Spring Boot and Node.js, improving API response times by 35% through optimized query handling and caching mechanisms.
- Led the integration of SQL (MySQL, PostgreSQL) and NoSQL (MongoDB) databases, ensuring efficient data storage and retrieval, reducing query latency by 30%.
- Built CI/CD pipelines with GitHub Actions and GitLab CI, automating deployments and reducing production deployment time by 50%.
- Refactored legacy codebases and resolved technical debt issues, increasing maintainability and reducing bug occurrences by 40%.
- Worked in an Agile Kanban environment, collaborating with cross-functional teams to deliver features iteratively with continuous testing and integration.
- Monitored application performance using AWS CloudWatch and optimized server-side processing, leading to a 20% reduction in infrastructure costs.
- Debugged and resolved production issues using log analysis and tracing, improving system uptime and reliability.

Education

Dalhousie University

Jan 2024 - Sep 2025

Master of Applied Computer Science (Co-op Candidate) | GPA: 4.07/4.3

Halifax, Canada
Jun 2018 - Apr 2022

Charusat University
Bachelor of Computer Engineering | GPA: 8.7/10

Gujarat, India

Projects

 ${\bf Service Hub} \mid \mathit{Source} \ \mathit{Code}$

 $\mathbf{ReactJS} \mid \mathbf{Spring} \ \mathbf{Boot} \ (\mathbf{JAVA}) \mid \mathbf{MySQL}$

- Developed a scalable web application using ReactJS, implementing modular UI components for a seamless user experience. Integrated lazy loading and performance optimizations, reducing page load time by 40%.
- 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.

K8s Microservices | Source Code

Spring Boot (Kotlin) | Kubernetes | Docker | CloudBuild

- Implemented Kubernetes-based microservices architecture, creating a highly available system with two Spring Boot containers, ensuring secure communication and fault tolerance between services.
- Deployed microservices using Kubernetes and automated deployment processes with CloudBuild, improving deployment speed and scalability by 40%.
- Worked with Docker containers to facilitate easy application deployment, increasing the speed of testing and production cycles while ensuring a consistent environment across development and production.

ETL on Tweets Data | Source Code

 $ETL \mid OpenCSV \mid MySQL \mid GCP$

- Built a distributed transaction system using Java, enabling dynamic redirection of queries across multiple MySQL VMs in GCP, supporting seamless ETL processes for efficient data processing and real-time interactions.
- Implemented horizontal and vertical data fragmentation techniques for a distributed MySQL database ("SocialMedia"), optimizing query performance and ensuring scalability in a cloud-based environment.
- Integrated and processed a large dataset of tweets from Kaggle, automating the ETL pipeline and enhancing system reliability, while ensuring robust and scalable backend architecture that aligns with distributed database management best practices.