Vraj Shah

+19029941436 | shahvraj2016@gmail.com | linkedin.com/in/vraj-shah | github.com/shah-vraj | portfolio | Blog

Objective

A results-driven software engineer with expertise in **Android, iOS, and full-stack development**. Passionate about building innovative solutions from the ground up, I have strong proficiency in **JavaScript, Python, and backend systems**, along with a track record of shipping products that solve real-world problems. Looking to leverage my skills to contribute to the growth and success of NationGraph in an in-person role.

Technical Skills

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

Frontend Development: ReactJS, Next.js, Angular, HTML5, CSS3, Bootstrap, NPM

Backend Development: Node.js, Spring Boot (Java/Kotlin), RESTful APIs, Python (ETL & Data Processing)

Databases: MySQL, MongoDB, SQLite, SQL Server, Oracle

Cloud & DevOps: AWS, Azure, Firebase, CI/CD Pipelines (GitHub Actions, GitLab CI)

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

Web Performance Optimization: Lighthouse Audits, Lazy Loading, Caching

UI/UX: Figma, Wireframing, Accessibility (WCAG)

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 optimized Android and iOS applications** using Kotlin, Swift, and Jetpack Compose, **improving app performance by 40%** and reducing load times by 25%.
- **Designed scalable backend services** with Spring Boot (Java/Kotlin) and Node.js, **improving API efficiency by 35%,** enabling seamless multi-user interactions.
- **Led the integration of SQL and NoSQL databases** (MySQL, MongoDB), **boosting data retrieval speeds by 30%** and ensuring robust transaction management.
- **Implemented MVVM and Clean Architecture**, increasing code maintainability and scalability by 30%, enabling faster feature rollouts.
- **Streamlined CI/CD pipelines** using GitHub Actions and GitLab CI, **reducing deployment time by 50%** and enhancing release efficiency.
- **Conducted unit testing** with JUnit, Mockito, and Espresso, **reducing bug occurrences by 40%** before production deployment.
- **Enhanced application security** by integrating authentication and authorization mechanisms, **reducing vulnerabilities by 60%.**
- **Designed and optimized SQL queries** for relational databases, improving system efficiency and performance.

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**

- 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 | OpenCSV | MySQL | 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.