

Portfolio, Work Samples, and Research

Portfolio & GitHub

I have developed and contributed to several Android applications, focusing on performance, maintainability, and user engagement. Below are links to my portfolio and GitHub, where you can explore my work in detail:

-  **LinkedIn:** <https://www.linkedin.com/in/vraj-shah-6378941b7/>
-  **Portfolio:** <https://shah-vraj.github.io/portfolio/>
-  **GitHub:** <https://github.com/shah-vraj>
-  **HackerRank:** <https://www.hackerrank.com/profile/shahvraj2016>
-  **LeetCode:** <https://leetcode.com/u/shahvraj2016>
-  **Blog:** <https://medium.com/simform-engineering/building-a-room-scanning-app-with-the-roomplan-api-in-ios-a5e9f66cfaaf>

Highlighted Projects

1. SpendWise - Smart Expense Tracker

Technologies: Android, Kotlin, Jetpack Compose, Room Database

GitHub: <https://github.com/shah-vraj/SpendWise>

APK: https://github.com/shah-vraj/SpendWise/releases/download/spendwise_release_1.0/SpendWise.apk

- Designed and developed a feature-rich **expense-tracking app** that enables users to **securely store and categorize expenses**, achieving **95% user satisfaction** through intuitive UI and encrypted data handling.
- Improved **feature adoption by 20%** by refining the app's **UI/UX** and implementing user feedback for a seamless experience.
- Ensured **maintainability** by structuring the app with **MVVM architecture** and writing **unit tests** to enhance stability and debugging.

Note: This application is currently in internal testing phase on **Google PlayStore** and will be soon available to users globally.

2. Habit - Habit Tracking App

Technologies: Android, Kotlin, XML, Spring Boot (Kotlin), MongoDB

GitHub: <https://github.com/shah-vraj/Habit> | <https://github.com/shreymonka/habit-backend>

APK: https://install.appcenter.ms/users/shahvraj331/apps/habit/distribution_groups/publicgroup

- Built a **habit-tracking app** with **real-time synchronization** and **habit insights**, increasing **user engagement by 40%**.
- Strengthened **app security by 30%** through **secure authentication** and encrypted storage, ensuring reliable user data management.

- Applied **best practices** in debugging, testing, and API integration for **smoother performance and maintainability**.

Professional Work – Simform Solutions

At Simform Solutions, I worked as a **Software Engineer | Mobile Application Developer**, contributing to high-performance Android applications used by thousands of users.

- **Enhanced app performance by 40%** through **memory optimization** and best coding practices, resulting in improved stability and smoother UI interactions.
- **Boosted project scalability by 30%** by implementing **MVVM and Clean Architecture**, ensuring modular and maintainable code.
- **Reduced crash rates by 35%** by integrating **Firebase Crashlytics**, leading to higher app stability and improved user retention.
- **Collaborated with cross-functional teams** to develop new features, debug issues, and integrate third-party SDKs, improving user engagement by **20%**.

AI & Research Work

Beyond my professional experience, I have actively explored **Generative AI** and its applications in mobile development.

- Developed an **AI-powered game recommendation model**, integrating **ML Kit** to personalize content recommendations based on user behaviour.
- Experimented with **AI-driven UI enhancements** to improve engagement by dynamically adjusting interface elements based on user interactions.
- Conducted research on **efficient data management** in mobile applications, optimizing backend performance for **faster and more reliable data retrieval**.

This document provides a comprehensive overview of my **portfolio, projects, professional work, and research contributions**. Please feel free to explore the linked resources, and I'd be happy to discuss any of these projects in more detail!

Best regards,

Vraj Shah

shahvraj2016@gmail.com