# Vraj Shah

# Objective

Enthusiastic and detail-oriented Master of Applied Computer Science student seeking a Software Developer Co-op internship. Bringing strong proficiency in **Objective-C** and **Swift**, a solid grasp of **Object-Oriented Design**, and experience with **UIKit**, **SwiftUI**, **REST API integration**, **Git flow**, and **A/B testing**. Passionate about developing innovative, customer-centric mobile solutions that drive business decisions and enhance user experience.

# 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

# Work Experience

**Simform Solutions** 

Dec 2021 - Nov 2023

 $Software\ Engineer\ |\ Mobile\ Application\ Developer$ 

Ahmedabad, India

- Developed and maintained native iOS applications using Swift and Objective-C by applying advanced object-oriented design principles, resulting in a 40% improvement in code efficiency and maintainability.
- Engineered responsive and adaptive user interfaces by leveraging UIKit and SwiftUI with AutoLayout, dynamic type, and accessibility features, which increased user engagement by 40%.
- Integrated robust RESTful API calls using URLSession and Combine, implementing asynchronous networking and comprehensive error-handling strategies that improved data reliability and enhanced customer satisfaction by 30%.
- Optimized app performance and stability by using Xcode Instruments (Time Profiler, Allocations, and Leaks) to diagnose and fix memory leaks and rendering issues, reducing crash rates by 35%.
- Streamlined dependency management and source control through the adoption of Swift Package Manager and effective Git branching strategies, boosting CI/CD process efficiency by 30% and reducing integration issues.
- Implemented automated testing with XCTest and XCUITest frameworks, establishing rigorous unit and UI test suites that reduced post-release defects by 25% and ensured a consistent, high-quality user experience.
- Collaborated cross-functionally with product managers, designers, and QA engineers to design and deploy A/B tests for new feature iterations, leading to a 30% increase in feature effectiveness and improved user retention.
- Developed local persistence and cloud synchronization layers by integrating Core Data and CloudKit, ensuring seamless offline functionality and continuous data availability for enhanced user experience.

#### **Projects**

# Smart Shopping Companion App

- Built an iOS app integrating SwiftUI, UIKit, and REST APIs to provide personalized cashback deals and product recommendations.
- Conducted A/B testing to optimize recommendation accuracy, improving user engagement by 15%.
- Implemented Core Data for offline persistence, enhancing app reliability during low network conditions.

#### Local Deal Finder App

- Developed a location-based iOS app using MapKit, geofencing, and push notifications for real-time deal alerts.
- Designed a swipeable UI using UIKit for interactive browsing, improving user experience.
- Optimized API requests and caching strategies, increasing app rendering speed by 20%.

#### Gamified Expense Tracker App

- Created a gamified iOS app with SwiftUI and Core Data to reward users for achieving savings goals.
- Integrated REST APIs for real-time currency conversion and visualized spending patterns with animated charts.
- Enhanced engagement with biometric authentication and badge system, boosting user retention by 25%.

# Blog

### Building a Room Scanning App with the RoomPlan API in iOS

Learn how to implement the RoomPlan API in your application in two different ways. Also, learn how to obtain an attractive custom 3D model out of the static 3D model generated by RoomPlan.

Link: Medium

# **Technical Skills**

Programming Languages: Kotlin, Swift, Objective-C, Java

Mobile Development: Android (Kotlin, Jetpack Compose), iOS (Swift, UIKit, SwiftUI)

API Integration: Proficient in working with REST APIs (OkHttp, Retrofit for Android; Alamofire for iOS)

UI/UX Design: Experience with UI/UX strategies, including UIKit and SwiftUI for intuitive and responsive design

 $\textbf{Version Control \& Collaboration:} \ \ \text{Git}, \ \ \text{GitHub}, \ \ \text{GitLab}, \ \ \text{Git Flow}, \ \ \text{Branching Strategies}$ 

Dependency Management: Swift Package Manager (SPM), CocoaPods (iOS), Hilt (Android)

Tools & Technologies: Xcode, Android Studio, Instruments (iOS Debugging), Postman

**Problem Solving**: Strong debugging skills and familiarity with performance analysis tools (Instruments for iOS, Android

Profiler)

Data Structures & Algorithms: Proficient in core data structures and algorithmic problem solving