

Deepak Pal

Senior iOS & Flutter Developer · 10+ Years · Open to Remote & On-Site

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Professional Summary

Senior iOS and Flutter Developer with 10+ years of end-to-end mobile engineering experience across fintech, banking, EdTech, and e-commerce domains. Specialised in Swift, SwiftUI, UIKit, Dart, and Flutter with deep expertise in Clean Architecture, MVVM, SOLID principles, and modular, feature-based design. Proven record of independently owning full product cycles — from architectural design and API integration through CI/CD, testing, and App Store/Play Store release management. Measurable impact delivered: 40% sales growth via CleverTap and Google Analytics instrumentation, 40% faster release turnaround, 4.8★ App Store ratings, and 99% bug-free releases. Strong cross-functional communicator, technical mentor, and remote-ready engineer comfortable working asynchronously across time zones with distributed Agile teams.

Key Achievements

- **40% sales growth** — Architected unified CleverTap + Google Analytics + Mixpanel strategy at NPrep; improved free-to-paid conversion, day-7/30 retention, and campaign ROI
- **40% reduction in release turnaround** — Overhauled engineering workflow, code review process, and sprint cadence; reduced cycle time from build to App Store approval
- **4.8★ App Store ratings** — Maintained across multiple live production applications through rigorous UX polish, performance optimisation, and zero-regression release practices
- **99% bug-free releases** — Achieved through systematic XCTest/XCUITest automation, widget/integration testing in Flutter, and Instruments-driven profiling
- **25% app load time reduction** — Diagnosed and resolved memory leaks, retain cycles, and API bottlenecks using Instruments (Time Profiler, Allocations, Leaks)
- **Open-source maintainer** — Built and published SecureBankKit and flutter_security_suite; combined 47+ automated tests and adopted by mobile security practitioners

Core Technical Skills

Languages: Swift · Objective-C · Dart · JavaScript

Mobile Frameworks: SwiftUI · UIKit · Flutter · Cocoa Touch · Foundation Framework

Architecture & Patterns: Clean Architecture · MVVM · MVC · MVP · SOLID · Dependency Injection · Repository Pattern · Modular / Feature-based Architecture · Offline-first Design

State Management: Riverpod · GetX · RxDart · Combine · Dart Streams · Redux

APIs & Backend: RESTful APIs · GraphQL (Apollo) · AWS AppSync · WebSockets · gRPC · Firebase (Auth, Firestore, Functions, Crashlytics, Analytics) · Realm · CoreData · SQLite · UserDefaults

Security: OAuth2 · JWT · SSL Pinning · ATS · Face ID / Touch ID · Keychain Services · AES-256-GCM Encryption · Jailbreak Detection · Certificate Pinning · App Integrity Checks

Analytics & Growth: CleverTap (Rich Notifications, In-App, Behavioural Segmentation) · Google Analytics / Firebase Analytics · Mixpanel · App Center · Funnel Analysis · Retention Cohorts · A/B Testing

CI/CD & DevOps: Fastlane · GitHub Actions · Bitrise · Jenkins · TestFlight · App Store Connect · Play Store · Xcode Cloud

Testing & QA: XCTest · XCUITest · Flutter Unit/Widget/Integration Testing · TDD · Test Automation · Code Review · Instruments (Leaks, Time Profiler, Allocations)

Cloud & Payments: AWS (AppSync, S3) · Google Cloud · Firebase · Razorpay · PayU · Stripe integration patterns

Tools & Collaboration: Xcode · Android Studio · CocoaPods · Swift Package Manager · Git · GitHub · Bitbucket · Jira · Confluence · Figma · Postman

Advanced Capabilities: Core ML · Vision Framework · ML Pose Tracking · NFC · Blockchain Data Operations · MapKit · Core Location · Core Animation · Lottie · WKWebView · Home Widgets · Twilio VoIP · PushKit

Professional Experience

Senior Engineer — Flutter & iOS · NPrep Feb 2025 – Jan 2026

 Jodhpur, India ·

Led end-to-end mobile development for a cross-platform EdTech app as the primary technical owner. Owned architecture, sprint delivery, analytics strategy, and App Store / Play Store release management independently.

- **Architected scalable Clean Architecture** with Riverpod (Hooks) and GetX for iOS and Android — delivering modular authentication flows, content delivery pipelines, and offline caching for low-network environments
- **Drove 40% sales growth** by designing a unified CleverTap + Google Analytics + Mixpanel instrumentation layer: behavioural cohort segmentation, lifecycle-triggered push notifications, personalised in-app campaigns, and funnel optimisation
- **Improved free-to-paid conversion rate by 40%** through A/B test hypothesis generation from Google Analytics funnel data; prioritised onboarding flow changes with the product team that directly reduced drop-off at the paywall
- **Reduced project turnaround by 40%** by introducing structured code review workflows, best-practice sessions, async sprint planning via Jira, and Confluence-driven technical documentation
- **Built custom Flutter plugins** using native Swift (iOS) via MethodChannel bridge, enabling platform-specific functionality unavailable in the Flutter ecosystem (biometric flows, secure storage, NFC access)
- Integrated Firebase Push Notifications, Crashlytics, Cloud Functions, and Remote Config for production-grade reliability and feature flagging without app releases
- Implemented Dart Streams and RxDart for reactive state management and real-time asynchronous data handling across multiple concurrent feature modules
- Leveraged AI-assisted development tooling (Cursor, Claude, OpenAI Codex) to accelerate code generation, automate review feedback, and improve sprint velocity by an estimated 20–30%
- Mentored 3 junior engineers through weekly 1:1s, architecture walkthroughs, and PR feedback; improved team delivery capability and reduced review cycle time
- Managed full App Store and Play Store release pipeline: build signing, version management, metadata, screenshots, compliance review, and phased rollouts

Senior iOS Developer · Alchemy Digital LLP Jun 2021 – Nov 2024

 Ahmedabad, India · On-site / Hybrid

Delivered multiple production iOS and Flutter apps across banking, fintech, and e-commerce domains. Acted as the technical lead for mobile architecture, security integration, and CI/CD pipeline ownership.

- **Maintained 4+ App Store ratings** across 5+ live applications through continuous performance optimisation, pixel-perfect UI implementation, and zero critical post-release defects over 3 years
- **Designed and built CI/CD pipelines** using Fastlane and GitHub Actions — automated build signing, unit test execution, TestFlight distribution, and App Store submission; reduced manual deployment errors to zero
- Developed banking-domain iOS apps with secure third-party API integrations (Google Maps, Facebook SDK), multiple payment gateway implementations (Razorpay, PayU), and full OAuth2/JWT authentication flows
- **Built Apollo GraphQL client integration** for modern data delivery: typed queries, mutations, real-time subscriptions, optimistic UI updates, and offline-first caching using Realm
- **Engineered ML-powered exercise pose tracking** using a native machine learning kit — trained custom Core ML models for real-time flexion counting via body pose estimation using the Vision framework; deployed on-device without server dependency
- **Delivered NFC + blockchain integration** for tamper-proof, cryptographically signed data transactions — designed the iOS NFC read/write flow with native CoreNFC and bridged to blockchain verification layer
- Implemented offline-first architecture with Realm Database: automatic background sync, conflict resolution strategies, and seamless degradation in low-connectivity scenarios
- Built audio playback features in Flutter with Flutter Audio Players, offline caching with Realm, and background audio session management for continuous playback
- Contributed key features to Third Wave Coffee Roaster app: product listing, cart flow, purchase journey, user navigation architecture, and GraphQL-driven content delivery via Apollo
- Integrated WKWebView for hybrid in-app web content with secure JavaScript bridge, cookie management, and deep-link interception for seamless native-web transitions
- Conducted architectural code reviews across mobile team; enforced SOLID principles, naming conventions, and testing coverage standards; mentored mid-level developers on SwiftUI migration patterns

Senior iOS Developer · Effio Lab Sep 2020 – May 2021

📍 Hyderabad, India ·

Sole iOS owner for a real-time VoIP communication app. Independently delivered complex calling infrastructure, animated UI, and comprehensive automated test coverage.

- **Integrated Twilio VoIP SDK** for high-quality audio and video calling: call lifecycle management, background modes, incoming call UX via PushKit push notifications, and PSTN call handling
- Designed and implemented custom animated UI flows using Core Animation, CALayer transitions, Lottie animations, and gesture-driven interactive transitions — reducing perceived latency and improving engagement
- **Achieved comprehensive XCTest/XCUITest coverage** across call interruption edge cases (incoming call during active call, silent mode, backgrounding), state machine transitions, and dynamic UI rendering under live data conditions
- Managed RESTful API integration end-to-end: network layer abstraction with Alamofire, token refresh handling, error mapping, and retry logic for unstable connections
- Delivered pixel-perfect UI implementation using Auto Layout with adaptive constraints — tested and validated across iPhone SE to iPad Pro without layout breaks
- Implemented reliable offline data persistence with Realm for call history, user preferences, and chat message drafts — ensured data integrity during network transitions

Senior iOS Developer · AJM Software Apr 2018 – Sep 2020

📍 Jodhpur, India · On-site

Technical lead for an offline-first, real-time enterprise iOS application using AWS AppSync, GraphQL, and Realm. Owned the complete mobile stack independently.

- **Achieved 4.8★ App Store rating** and 99% bug-free releases; drove 25% app load time reduction through Instruments-based profiling — resolved memory leaks, retain cycles, and over-fetching patterns identified via Time Profiler and Allocations tools
- **Implemented real-time GraphQL subscriptions via AWS AppSync** with automatic background sync, optimistic UI updates, conflict resolution strategies, and seamless cross-device state synchronisation
- Built offline-first architecture: Realm local datastore with background queue sync, schema migrations, and conflict resolution — app remained fully functional with zero data loss in airplane mode
- Hardened app security comprehensively: SSL Pinning, ATS enforcement, OAuth2 + JWT authentication, Keychain-stored credentials, application whitelisting, and biometric authentication (Touch ID / Face ID)
- Integrated Razorpay and PayU payment gateways with GraphQL server-side validation, webhook reconciliation, and idempotent transaction handling for PCI-compliant payment flows
- Monitored production health via Crashlytics, Firebase Analytics, and App Center — established alerting thresholds, triaged crash reports, and achieved <0.1% crash-free user degradation within 2 sprints of launch
- Designed and maintained multiple CoreData and Realm database schemas supporting complex relational workflows with lazy loading, pagination, and background context writes
- Implemented real-time WebSocket communication alongside GraphQL APIs for event-driven UI updates: live order status, push-triggered data refreshes, and presence indicators
- Built custom reusable UIKit components and animation libraries: skeleton loaders, pull-to-refresh with haptic feedback, swipe-to-action cells, and parallax scroll headers
- Managed project delivery via JIRA: sprint planning, story point estimation, retrospectives, and stakeholder status communication — delivered 100% of committed stories across 8 consecutive sprints

iOS Developer · GTS Infotech LLP Jun 2017 – Feb 2018

📍 Jodhpur, India · On-site

- Implemented APNs push notifications, deep linking schemes, and SQLite database integration; published multiple App Store apps with full certificate and provisioning profile management
- Collaborated with design, backend, and QA in cross-functional Agile sprints; independently debugged and resolved device-specific issues ahead of release milestones
- Contributed to App Store version management, release notes, App Review communication, and guideline compliance across 3 app submissions

Junior iOS Developer · SquareBits Pvt Ltd Oct 2015 – May 2017

📍 Jodhpur, India · On-site

- Built iOS applications in Objective-C and Cocoa Touch; designed UI flows with Storyboards and XIBs; integrated RESTful backend services for seamless data synchronisation
- Gained full App Store deployment experience: code signing, provisioning profiles, binary uploads, and post-release maintenance through TestFlight and iTunes Connect
- Implemented push notifications, app permissions, URL schemes, and contributed to CI automation scripts that reduced build preparation time

Analytics & Growth Engineering

Deep, hands-on expertise using CleverTap, Google Analytics, and Mixpanel as revenue and retention levers — not just passive tracking. Designed mobile instrumentation strategies that contributed directly to measurable commercial outcomes.

- **CleverTap — Behavioural Segmentation & Campaign Automation:** Designed lifecycle-triggered push and in-app campaigns driven by user cohorts built on engagement signals (quiz completion, session depth, drop-off points, purchase intent). Achieved measurable uplift in day-7 and day-30 retention through personalised re-engagement sequences and rich media notifications
- **Google Analytics (Firebase) — Funnel Instrumentation & Conversion Optimisation:** Instrumented full user journey with custom events from onboarding through paywall to purchase. Collaborated with product to interpret funnel drop-off data, define A/B test hypotheses, and prioritise sprint work — resulting in 40% improvement in free-to-paid conversion across two sprint cycles
- **Mixpanel — Product Analytics & North Star Metrics:** Configured funnels, retention cohorts, and people properties to give product and marketing teams real-time behavioural visibility. Defined North Star metrics (active learners, completions per session) and translated Mixpanel insights directly into roadmap prioritisation decisions
- **Unified Attribution & Revenue Impact:** Designed a unified event schema across CleverTap, Google Analytics, and Mixpanel for single-source-of-truth attribution on iOS and Android. Enabled marketing to identify high-LTV user segments and allocate spend effectively, contributing to 40% sales growth

Open Source Projects

SecureBankKit — Modular iOS Banking Security Toolkit

- Designed and published a modular, Swift Package Manager–distributed security framework targeting banking-grade iOS applications
- Implemented: Session Management, Biometric Authentication (Face ID / Touch ID), Jailbreak Detection, Secure Keychain Wrapper, Secure Logging, and Anti-Tampering checks
- Benchmarked and documented against KeychainAccess, IOSSecuritySuite, and commercial security SDKs

github.com/DeepakPal25/SecureBankKit

flutter_security_suite — Enterprise Flutter Security Plugin

- Comprehensive security plugin for Flutter targeting iOS and Android: Root/Jailbreak Detection, Certificate Pinning, App Integrity Checks, Screenshot Protection, AES-256-GCM Secure Storage
- Built with Clean Architecture using native Swift (iOS) and Kotlin (Android) with full MethodChannel bridge; 47 automated tests across 11 test files covering platform, domain, and data layers
- Published on pub.dev with full API documentation, example app, and migration guides

pub.dev/packages/flutter_security_suite

Education

Master of Computer Applications (MCA) Rajasthan Technical University (RTU), Kota

Bachelor of Computer Applications (BCA) JNVU, Jodhpur

Working Style & Availability

- **Remote-ready & async-capable:** experienced with distributed Agile teams, Confluence documentation, async PR reviews, and independent sprint delivery without daily oversight — comfortable across IST / CET / GMT time zone overlap
- **Strong written communicator:** technical blog author on Medium, open-source documentation maintainer, and Confluence technical writer — articulates complex architectural decisions clearly for non-technical stakeholders
- **Ownership-driven:** regularly leads architectural reviews, defines coding standards, mentors developers, and communicates proactively with product stakeholders — no hand-holding required
- **On-site / hybrid available:** open to relocation within India or internationally for the right role; comfortable in office-first or hybrid environments