

Rafael Rodrigues

Senior Mobile Engineer

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Profile

Senior Mobile Engineer with over a decade of experience building cross-platform applications across healthcare, communications, and education. I specialize in delivering end-to-end mobile products using React Native, Flutter, and native iOS/Android, with deep expertise in Bluetooth integrations, wearables, real-time features, and GraphQL-driven APIs. I approach engineering like a product owner—clarifying requirements, designing scalable architectures, iterating quickly, and shipping polished experiences to the App Store and Play Store.

Skills

- Languages:** JavaScript, TypeScript, Dart, Objective-C, Java, Kotlin, Python, Swift
- Frameworks:** React Native, Flutter, Ionic
- Library:** Jest, Junit, Mockito, XCTest, TestFlight, Fastlane, Espresso
- Practices:** Agile/Scrum, Microservices, CI/CD automation, MVC/MVVM
- Others:** AWS S3/SNS/SQS, Google Play Store, Apple App Store

Professional Experience

E Health Inc

Jun 2023 - Nov 2025

Lead Mobile Engineer (React Native, Flutter, Swift, Kotlin, GraphQL)

Gold River, CA

- Designed and developed a React Native mobile platform for remote patient monitoring, integrating wearable device data (heart rate, glucose, sleep tracking) and real-time alerts for doctors, which improved patient engagement and reduced manual reporting.
- Integrated Bluetooth and Wi-Fi capabilities into mobile applications using Kotlin for Android and Swift for iOS, enhancing connectivity and device interaction.
- Collaborated with cross-functional teams to deliver high-quality native mobile applications, ensuring smooth performance across various Android and iOS devices. Implemented advanced networking features in native iOS applications using Swift, including RESTful API integration and offline data caching, leading to enhanced app reliability and user satisfaction.
- Managed app store deployments and utilized TestFlight for beta testing, gathering feedback from over 1,000 testers, which reduced post-launch issues and improved user satisfaction.
- Decreased customer acquisition costs by integrating Firebase Analytics, providing valuable insights for the marketing team that enhanced targeting strategies and improved campaign performance.
- Reduced manual deployment time and increased release predictability by automating build and deployment processes with Fastlane and custom Python scripts.
- Enhanced test automation and reliability in React Native and Flutter environments by employing advanced testing frameworks such as Jest, Mocha, and XCTest, contributing to higher test coverage and fewer bugs.
- Designed and implemented GraphQL APIs to optimize data querying for mobile applications, significantly reducing data transfer overhead and enhancing app performance on both iOS and Android platforms.
- Leveraged the Expo framework to rapidly develop and deploy cross-platform mobile applications, utilizing its managed workflow, pre-built APIs, and streamlined deployment process to create native-like experiences that improved application responsiveness across iOS and Android platforms.
- Designed and implemented robust, scalable APIs that integrated with mobile applications to provide secure access to backend services and data, enhancing user experience by delivering responsive and reliable features across platforms.
- Automated CI/CD pipelines using Jenkins, reducing deployment time and improving release predictability.
- Integrated GraphQL with React Native and Flutter to create efficient data-fetching mechanisms, improving app responsiveness and reducing API response times.
- Integrated Jenkins with Fastlane for seamless build and release management, ensuring consistent app quality across multiple environments.
- Built user interfaces, implemented features, and optimized performance using Angular, enhancing user engagement and application efficiency.
- Implemented Ansible for mobile backend server configurations, improving deployment consistency and reducing manual setup errors.
- Improved team productivity and project tracking by using Microsoft Teams and Jira, facilitating seamless communication and coordination of project milestones across distributed teams, resulting in timely deliveries.

HealthCare Support

Dec 2017 - May 2023

React Native Engineer (React Native, Flutter, DynamoDB, AWS Lambda, GraphQL)

Maitland, FL

- Designed and developed a cross-platform health monitoring application using React Native for seamless functionality on both iOS and Android, enhanced with Kotlin for Android-specific features, resulting in a scalable and maintainable code architecture
- Led beta-testing phase using TestFlight and Google Play Beta, incorporated user feedback to refine the application, increasing user satisfaction prior to release
- Designed and implemented serverless API architectures using cloud-based services like AWS Lambda, API Gateway, and DynamoDB, enabling scalable, cost-effective, and highly available backend solutions to power mobile and web applications.
- Automated infrastructure provisioning using Ansible playbooks, leading to an improvement in deployment efficiency
- Developed a schema-first approach in GraphQL to ensure clear and efficient communication between frontend and backend teams, resulting in streamlined API design and development.
- Designed and developed a voice-based social networking platform using Java for Android and Objective-C for iOS, which increased user engagement by enabling community discussions via voice commands and shifting away from traditional text-based inputs. Implemented voice recognition algorithms and optimized user interface for seamless voice interaction
- Developed and maintained common core feature libraries related to audio playback using Gradle, CocoaPods, and Carthage, which standardized audio components across the team and decreased integration time for new developers by 20%.
- Developed cross-platform mobile applications using Cordova, leveraging its ability to create native-like experiences across iOS, Android, and Windows platforms.
- Developed an e-learning mobile application with Flutter, establishing a unified codebase for iOS and Android, while employing Swift to integrate native iOS features, which enhanced the user experience and streamlined development processes
- Conducted comprehensive A/B testing to identify the most effective UI/UX designs, which increased conversion rates by 15% in the first three months following launch.
- Conducted comprehensive testing for GraphQL APIs using Jest, ensuring robust functionality and identifying potential bottlenecks early in development.
- Leveraged GraphQL subscriptions to implement real-time features in mobile apps, such as live updates and notifications, ensuring seamless and interactive user experiences.
- Orchestrated the integration of AWS SNS for efficient push notification management, achieving over 99% delivery rates and significantly enhancing user engagement.

Mobile Programming LLC

Feb 2012 - Oct 2017

Mobile Developer (Swift, Kotlin, React Native, GraphQL, Jest)

Fort Lauderdale, FL

- Directed the development of an instant messaging app, utilizing Kotlin for Android and Swift for iOS to maximize performance and leverage platform-specific features.
- Implemented end-to-end encryption using the Signal Protocol in the instant messaging app, significantly enhancing data security and user privacy, and ensuring compliance with stringent GDPR and CCPA standards.
- Developed comprehensive unit test suites using frameworks like Jest and Enzyme to ensure the reliability and maintainability of complex mobile and web application codebases, catching bugs early and enabling confident refactoring.
- Migrated legacy RESTful APIs to GraphQL-based architecture, improving flexibility and scalability of backend services, while reducing the number of API calls.
- Implemented comprehensive testing protocols, including unit, integration, and UI automation tests with Espresso for Android and XCTest for iOS, significantly boosting the app's reliability and user experience.
- Converted legacy Objective-C code to Swift, improving code readability and maintainability while ensuring backward compatibility.
- Leveraged Firebase for analytics and crash reporting, which helped monitor app performance and user behavior, reducing crash rates and enhancing app stability.
- Introduced the use of containerization with Docker and Kubernetes in the app development lifecycle, which facilitated a more efficient, scalable, and consistent deployment process across all environments, cutting down integration issues and speeding up release cycles.
- Enhanced cross-functional team collaboration using Agile methodologies, employing Jira for project management and Slack for daily communications, which improved team productivity and project transparency.

Education

University of North Florida

Aug 2007 - May 2011

Bachelor of Science, Computer Science