Nathaniel Parizi
Senior Mobile App Developer

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❖ SUMMARY

I'm a Senior Mobile Developer with **15** years of experience in designing, developing, and maintaining mobile applications. I'm very proficient in both iOS & Android platforms. I've a strong background in agile environments and enjoy collaborating with teammates.

❖ SKILLS

Programming	Swift, Kotlin, Java, Dart, Javascript/Typescript, Objective-C, Python/Node.js
Frameworks	UIKit, SwiftUI, Android Jetpack, Compose UI, Flutter, React Native, Ionic, Cordova, Capacitor, Node.js, PhoneGap, Spring Boot, GraphQL
Database	SQLite, Room, CoreData, Firebase Firestore, Realm, PostgreSQL/MySQL, Redis
Tools	Xcode, Android Studio, Visual Studio Code, Git, Jira/Trello, Figma/Sketch, Postman, Docker, Fastlane
Cloud Services	Firebase, AWS Amplify, Google Cloud Platform (GCP), AWS Lambda, Azure Mobile Apps, Apple CloudKit, S3/Cloud Storage, Amazon SNS/Google FCM
Automated Testing	Junit/Mockito, XCTest, Espresso, Appium, Selenium, Detox, Firebase Test Lab, Jenkins/CircleCI, SonarQube, Ionic Testing Utilities, Firebase Test Lab
Others	App Center, Crashlytics, Redux/Mobx, RxJava/RxSwift, Proguard/R8, Hilt/Dagger, Koini, Agile/Scrum, RESTful APIs & GraphQL, UI/UX design collaboration, Version Control Systems (Git, Github, Bitbucket, Gitlab), CI/CD pipelines, Capacitor Plugins, jQuery

❖ EDUCATION

University Of North Georgia, Dahlonega, GA – *Master's Degree in Computer Science*

University Of North Georgia, Dahlonega, GA – *Bachelor's Degree in Computer Science*

❖ CERTIFICATIONS

- ✓ Apple Certified iOS App Development
- ✓ Swift Developer Certification
- ✓ Google Associate Android Developer (AAD) Certification
- ✓ Android Advanced Developer Certification
- ✓ Flutter Developer Professional Certification
- ✓ Certified Mobile Security Tester (CMST)

❖ EXPERIENCE

AXIM Global Strategies Group, Raleigh, NC – *Senior Mobile Developer*
Jul 2017 – Sep 2024

- [Mobile Projects: QVC, REI, SpotaFriend, Lark]
- Built **iOS & Android** mobile applications for Healthcare and Saas platform, focusing on integration with external hardware devices.
- Developed cross-platform mobile applications with Apache Cordova and integrated native SDKs with Cordova plugins for features like push notifications, geolocation, and camera access, and enhanced app startup time through the Cordova plugin customization.
- Customized Ionic components to enhance UI and implemented real-time data synchronization using Ionic Storage, Firebase, and SQLite for offline-first apps, and integrated device capabilities (camera, geolocation, push notifications) using Ionic Native plugins.
- Developed multiple cross-platform mobile applications using Flutter and Dart and optimized app performance, reducing load times by 40% through effective use of Flutter's state management and implemented custom widgets and integrated complex animations.
- Enhanced unit testing and integration testing coverage (Mockito, Flutter Test) and implemented CI/CD pipelines for Flutter apps using GitHub Actions and Fastlane, and managed migration projects, transitioning legacy native apps using Swift/Kotlin to Flutter.
- Integrated native functionalities using Capacitor Plugins and developed Capacitor plugins to handle client requirements like native file system access, and background services with native SDKs, and optimized the app performance using Capacitor's lazy loading.
- Implemented global state management using Redux & Redux-Saga, and built UI components using TypeScript and React Native, and integrated RESTful APIs & GraphQL endpoints and used React Native Animations & Reanimated for transitions and gestures.
- Utilized Expo SDK to access native device features, such as camera, push notifications, and file system, without writing the native code, across both iOS and Android, and implemented Expo's OTA updates, through App Store and Play Store approval process.
- Refactored the legacy code from Java to Kotlin and integrated Kotlin Coroutines for managing background tasks & asynchronous operations, by replacing older threading models like AsyncTask and Handler, and utilized Jetpack Compose reducing the need for XML-based layouts and enhanced app performance through effective use of Kotlin's null safety features and NullPointerException.
- Refactored legacy Objective-C code to Swift, using Swift's concise syntax, optionals, and safety features, and used SwiftUI to build apps that achieved a consistent 4.8+ rating on the App Store, and built robust networking layers using URLSession and Alamofire.

- Developed SDKs using Kotlin (Android) and Swift (iOS), and optimized SDKs for performance & memory usage, and implemented versioning & backward compatibility features, upgrading SDKs without breaking existing integrations, and implemented automated testing pipelines using JUnit, XCTest, and Espresso for continuous integration and validation, ensuring the SDKs remained stable.
- Used Figma design systems to maintain consistency across project, and implemented dynamic layout based on Figma prototypes.
- Implemented distributed system using Java Spring Cloud for microservice communication, and designed SQL & NoSQL databases (e.g., MySQL, PostgreSQL, MongoDB) and worked with Java Persistence API (JPA), Hibernate for ORM, caching strategies like EHCache and utilized Java Streams and Lambdas and implemented unit testing and integration testing using JUnit 5 and Mockito.
- Implemented real-time notifications & chat feature using Socket.IO in conjunction with Node.js, and built middleware in Express.js to handle API authentication & authorization using JWT, and integrated third-party services like Firebase, Stripe, & Google Maps.
- Developed UI components using Angular and Ionic's UI library, and implemented Angular services to interact with RESTful APIs, and used Angular's Reactive Forms & FormBuilder and integrated Cordova plugins for mobile features within Angular application.
- Implemented Android apps using Android Studio, implementing MVVM architecture with LiveData & ViewModel, and used Object-Oriented Programming (OOP) principles and built RESTful APIs integration using Retrofit & OkHttp, handling complex data parsing with JSON & XML and worked with the third-party libraries and APIs such as Google Maps API, Firebase, and Payment Gateways.
- Ensured that mobile apps adhered to ADA accessibility standards and conducted WCAG 2.1 & WCAG 2.0 audits on mobile apps, and built mobile apps handling sensitive payment information in compliance with PCI DSS, ensuring secure data transmission via SSL/TLS encryption, and implemented authentication and authorization mechanisms, including OAuth 2.0 and MFA, to protect PII.
- Developed personalized mobile experience using Adobe Experience Manager (AEM) and integrated Adobe Target with mobile app to create and deliver A/B tests and used Adobe Analytics to track and measure the user interactions across the mobile application.
- Built cross-platform mobile apps using Xamarin.Forms & C#, and integrated third-party services like Firebase, Google Maps, and payment gateways using .NET Standard Libraries, and implemented performance optimizations by profiling app performance using Xamarin Profiler & Visual Studio App Center, and integrated with Azure App Services for backend storage and real-time data sync.
- Built Android mobile games using Unity, Unreal Engine, and integrated backend API to support real-time multiplayer gaming, using RESTful APIs & WebSockets and implemented IAP SDKs for game monetization using Google Play Billing API, and integrated ad SDKs (AdMob, Unity Ads) for monetization, ensuring smooth ad delivery while maintaining game performance & user experience.
- Built Netflix Game Controller app, across both iOS and Android platforms, and developed mobile interfaces using Swift (iOS) and Kotlin (Android), integrating game controller functionality with Netflix's ecosystem, and implemented WCAG 2.1 compliance in app.
- Developed cross-platform desktop applications using Electron & React.js, and integrated third-party services like Stripe and Twilio.
- Built the client-facing web applications using React.js and Redux, and implemented unit testing with Jest, Cypress and Enzyme.
- Deployed application infrastructure on AWS using EC2, S3, Lambda, API Gateway, and RDS, and implemented auto-scaling and load balancing using AWS ELB and Auto Scaling Groups, and implemented serverless architecture using AWS Lambda service.

Google, Madison, WI – *Senior Mobile Developer*
Jul 2014 - Jun 2017

- [Mobile Projects: Kroger, Humana, Purple Couch, Howl to Home, PictPoint]
- Developed hybrid mobile apps using Cordova & Ionic framework and built Cordova plugins to integrate with the external hardware (Bluetooth, NFC) and native libraries, and implemented offline storage solutions using Cordova SQLite and the local storage APIs.
- Integrated native features using Ionic Native to interact with hardware like Bluetooth, camera, and GPS, and deployed Progressive Web Apps (PWA) using Ionic, and ensured CI/CD pipelines for both Android and iOS platforms using Ionic Appflow and Fastlane.
- Lead a mobile development team to a Flutter-first approach for Android & iOS and maintained clean architecture patterns (MVVM, Clean Architecture) in multi-module Flutter applications and implemented automated UI testing using Flutter Driver, and Appium.
- Integrated Capacitor's native bridge layer to access Bluetooth, NFC, & biometric authentication, and developed Capacitor plugins for in-house applications, and implemented Capacitor build process to streamline the app's deployment on both Android and iOS.
- Implemented state management solutions using Redux Toolkit & Thunk, and integrated third-party SDKs (Firebase, Google Maps, and Push Notifications) into React Native applications, and built CI/CD pipeline for React Native apps using Fastlane and Bitrise.
- Used Expo's Build Service to streamline building and publishing of iOS & Android binaries, automating build & deployment process to Apple App Store & Google Play Store, and integrated Expo's Location API for real-time location tracking & geolocation features.
- Designed app's architecture using Kotlin's sealed classes and data classes, and integrated Kotlin Flow for reactive data streams, and migrated existing Android projects from RxJava to Kotlin Coroutines and utilized using JUnit, Espresso, and MockK in Kotlin.
- Implemented Swift Concurrency using async/await for improved asynchronous programming, and built UI components using UIKit and SwiftUI, and integrated Core Location and MapKit frameworks to provide real-time geolocation services and custom mapping solutions, and migrated from RxSwift to Combine, used XCTest and Quick/Nimble frameworks for writing unit and integration tests.
- Built SDKs in TypeScript for React Native and JavaScript for web integrations, and developed APIs for integrating SDKs with third-party services like Google Analytics, Firebase, and Mixpanel, and optimized SDKs through lazy loading and memory management.
- Used Adobe XD component system and converted Adobe XD designs into web components using HTML5, CSS3, and JavaScript.
- Built a real-time event processing system using Apache Kafka & Java and integrated REST APIs for third-party payment gateways, ensuring secure transactions using OAuth 2.0 and JWT (JSON Web Tokens), and optimized database performance through use of Java Persistence API (JPA), Hibernate, & custom SQL queries, and implemented multithreading and concurrency control in Java.
- Built real-time features like live updates & push notifications, using Socket.IO in Node.js and used Mongoose to manage MongoDB database, and secured API endpoints using OAuth 2.0, and built microservices using Node.js & Express.js for the critical features.
- Designed modular architecture in Angular, using NgModules and integrated state management using NgRx for application state.

- Developed Android app using Android Studio, advising clients on implementing MVVM architecture and worked with RESTful web services and integrated JSON/XML data using Retrofit and Volley, and integrated third-party APIs and libraries such as Stripe API for in-app payments, Firebase Authentication for user login, and Google Maps for location services, & expanding app functionality.
- Worked closely with security teams to encrypt all sensitive data stored on mobile devices (e.g., PII and payment information), using AES-256 encryption, ensuring compliance with PCI & PII standards, and complied with HIPAA regulations, building secure mobile solutions for healthcare clients by implementing PHI safeguards, ensuring that the storage adhered to GDPR & CCPA guidelines.
- Developed mobile application that delivered personalized content & experiences by integrating AEM with Adobe Target, and built integration between mobile app and Adobe Analytics, and built content module using AEM's Experience Manager Mobile features.
- Built .NET MAUI mobile app, enabling unified cross-platform across iOS, Android, and Windows, using single codebase in C# and .NET 6, and used .NET MAUI's Visual State Manager, and Dependency Injection via .NET Core and Xamarin DependencyService.
- Created Android mobile games using Unity with focus on API integration for multiplayer functionality, real-time leaderboards, and player matchmaking, and developed SDKs for integration with third-party analytics - GameAnalytics, Google Analytics for Firebase.
- Built and optimized the high-performance web applications using React.js, and integrated RESTful APIs and GraphQL endpoints.
- Led migration of entire infrastructure from on-premise to Azure, and implemented microservices architecture on Azure Kubernetes Service (AKS), and managed CI/CD pipelines with Azure DevOps, reducing through automated testing, containerization (Docker).

Google, Madison, WI – *Mobile Developer*

Sep 2010 - Jun 2014

- [Mobile Projects: [JCPenny](#), [Allegiant](#), [Rainn](#), [Mindprogress Resor](#), [Loople](#)]
- Implemented plugin architecture to extend Cordova's functionality and optimized the existing Cordova applications by identifying memory leaks and improving CPU efficiency, and set up CI/CD pipelines for Cordova apps using tools like Jenkins and Fastlane.
- Worked on creation of hybrid apps using Ionic & Apache Cordova, and developed Ionic plugins for accessing hardware interaction for NFC, Bluetooth, and background services, and conducted modern performance profiling and debugging using Ionic DevTools.
- Designed Capacitor plugins to interact with barcode scanners, Bluetooth devices, and background geolocation, and optimized app lifecycle management using Capacitor, used Capacitor's compatibility with native UI components with better touch responsiveness.
- Developed Redux middleware for managing side effects and optimized React Native apps by applying performance profiling and optimizing the reconciliation process in React, and used TypeScript to build type-safe components, while maintaining code quality.
- Designed Android apps with focus on clean architecture using Kotlin for all modules and developed custom Kotlin networking layer using OkHttp and Retrofit, and built Kotlin RecyclerView adapters and views, and used Kotlin Multiplatform to share business logic.
- Implemented RESTful API clients using Swift's Codable protocol for JSON parsing and used Core Data & SQLite for local storage, and built real-time features using WebSockets & Combine, and implemented Swift's memory management features, such as ARC.
- Designed push notification SDKs using Kotlin & Swift, enabling integration with Firebase Cloud Messaging (FCM) and Apple Push Notification Service (APNs), and optimized SDKs for network efficiency by implementing the caching strategies & request batching.
- Developed web applications using HTML5, CSS3, and Tailwind CSS, and implemented pixel-perfect designs, ensuring integration of visual elements using SCSS and used Tailwind CSS and developed CSS components using Sass/SCSS and implemented BEM (Block, Element, Modifier) methodology and integrated Bootstrap 5 for rapid development of grid layouts and pre-built components.
- Developed EJB (Enterprise JavaBeans) components for distributed applications, and designed SOAP & RESTful web services for enterprise systems, and optimized database interactions by implementing custom JDBC connections and using connection pools.
- Integrated WebSockets into Node.js & Express.js applications, and optimized backend APIs to improve response times for mobile applications by using database indexing & query optimization in PostgreSQL, ensuring compatibility with React Native and Flutter.
- Designed Angular hybrid mobile apps and integrated external APIs using Angular's HttpClient and handled data synchronization.
- Architected cloud solutions using Google Cloud like Compute Engine, Cloud Storage, Cloud Functions and implemented Google Kubernetes Engine (GKE) for container orchestration, and deployed monitoring solutions using the Google Cloud's Stackdriver.