**Tilak Sai Koniki**

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* IOS developer with 10 years of Software development experience.
* Leveraging iOS programming languages and frameworks, we consistently delivered high- rated apps for prestigious institutions.
* Streamlined development processes through tools like GitHub Actions, Bitrise and other CI/CD integration tools.
* Integrated macOS services and frameworks such as Core Data, Core Animation, and AVFoundation to extend app functionality.
* Deep understanding of iOS frameworks such as UIKit, SwiftUI, Core Data, AVFoundation, and Core Animation.
* Developed and maintained feature-rich iOS applications with complex user interfaces and seamless performance across all supported devices.
* Integrated C++ libraries and components within Native iOS applications to leverage existing codebases and enhance performance-critical features.
* Optimized performance-critical sections of iOS applications using C++ for tasks such as image processing, mathematical computations, and real-time data processing.
* Expertise in Apple’s Unit/ UI test framework and accessibility support.
* Developed comprehensive unit tests using XCTest for critical components of the application, resulting in a 30% reduction in bugs reported post-release.
* Implemented UI tests with XCUITest, covering key user flows, which improved the app's stability and user experience.
* Wrote automated tests using Swift for both iOS and macOS applications, ensuring cross-platform functionality and consistency.
* Expertise in source code management using tools like GIT, AccuRev and Rational Team Concert.
* Achieved higher maintainability and modularity by implementing MVVM+C, enabling easier feature updates and bug fixes.
* Collaborated closely with UI/UX designers to translate user requirements and design mockups into intuitive, user-friendly iOS applications.
* Conducted user research and usability testing to gather feedback and iterate on designs, ensuring that the final product meets user needs and expectations.
* Expertise in managing dependencies using Swift Package Manager, CocoaPods and JFrog Artifactory.
* Worked on integrating VeriFone’s e355 pos device to Native iOS app.
* Have working experience in third party frameworks like RxSwift, Resolver, MX, ObjectMapper, Alamofire, CocoaLumberjack, Quick and Nimble
* Worked on Google maps API, Dropbox API and Amazon Web Services (AWS).
* Experienced in maintaining CoreData and querying SQLite DB.
* Experience in developing backend Push notification services using PNS framework.
* Expertise in integrating Adobe App Measurement for mobile analytics, Fabric and CA Mobile App Analytics.
* Expertise in Software Development Life Cycle (Waterfall and Agile methodology).
* Good working knowledge of design patterns like MVC, MVVM, VIPER, Widget, Singleton, Façade, Decorator and Adaptor.
* Good working knowledge on Imperative and Declarative programming paradigm.
* Working knowledge on Java and Python
* Have delivered a total of 8 apps to the App Store as part of the development team.

**EDUCATION, TRAINING, CERTIFICATION**

Master’s in business Analytics, Texas A&M University Commerce, USA.

**TECHNICAL ENVIRONMENT**

**Skills:** SwiftUI, Swift, Combine, Resolver, Objective-C, Java, Python, XcodeGen, XCTest, XCUITest, CocoaPods, Swift Package Manager, JFrog Artifactory, OOP, Journey Architecture, MVVM, VIPER, Git, GitHub Workflows and Actions, Bitrise, Jenkins, Azure, Tomcat Apache, SQL Navigator, SQL Developer, Toad, Postman, JIRA, Pulse Secure, Mobile Iron, VeriFone e355 POS device, Device Anywhere

**PROFESSIONAL EXPERIENCE:**

**Southern California Edison Jul 2022 - Present**

**Sr. IOS Developer**

* Developed view controllers using both code and Interface Builder, including Storyboards.
* Implemented Facebook-style menu bars.
* Managed navigation elements like navigation controllers, bars, and tab bars.
* Designed and developed the application based on user requirements and design specifications.
* Utilized storyboards and auto layouts for app development.
* Employed Swift 5.5 and SwiftUI with the Cocoa Touch Framework, balancing performance, and safety.
* Worked closely with web developers to integrate React.js components into hybrid applications, providing guidance and support.
* **integrated third-party libraries** and APIs within ReactJS to extend the functionality of Native iOS applications, including payment gateways and social media integrations.
* Utilized Cocoa and AppKit frameworks to create native macOS applications with rich and intuitive user interfaces.
* Integrated GraphQL for efficient data fetching, reducing network calls and improving app performance.
* Utilized the Combine framework to implement reactive programming patterns, allowing for more efficient and streamlined handling of asynchronous data streams in iOS applications.
* Implemented data binding between UI components and data models using RxSwift and RxCocoa, ensuring automatic UI updates in response to changes in the underlying data.
* Integrated RxSwift with networking libraries like Alamofire to handle network requests and responses reactively, simplifying asynchronous operations and error handling.
* Conducted thorough testing and debugging to ensure application stability and performance across various macOS versions.
* Integrated network requests and responses within the MVC architecture, ensuring efficient data fetching and synchronization.
* Authored detailed documentation and architectural guidelines for team members, ensuring consistent implementation of the MVVM+C architecture.
* Developed Native iOS applications using VIPER to ensure a clean separation of logic and UI components, allowing for independent development, testing, and maintenance of each module.
* Skilled in device firmware testing.
* Created interactive prototypes and wireframes using tools like Sketch, Figma, or Adobe XD to visualize and validate design concepts before implementation.
* Collaborated with stakeholders to iterate on prototypes, refining the user experience based on feedback and usability testing results.
* Created a navigation-based app using UI TabBar.
* Maintained and enhanced legacy C++ codebases integrated into iOS applications, ensuring compatibility with modern development practices and frameworks.
* Developed custom C++ frameworks and modules for specific application needs, such as encryption, compression, and networking.
* Employed test-driven development (TDD) practices in the MVVM context to write unit tests for ViewModels, ensuring robust and reliable application logic.
* Collaborated with designers, product managers, and other developers to define requirements and translate them into MVVM-based solutions.
* Developed and maintained comprehensive unit tests for iOS applications, ensuring high code coverage and reliability.
* Architected the RCDIConnectivity library to handle various network connectivity scenarios, including offline mode, background sync, and real-time updates.
* Built a photo grid View Controller using Collection views.
* Integrated backend communication via RestKit and object mappings.
* Applied Core Animation and Core Graphics.
* Implemented push notifications.
* Developed applications using Swift 5.5 and SwiftUI.
* Used GitHub for code version control.
* Optimized app speed and memory management using Instruments.
* Handled both enterprise and App Store releases.
* Enhanced application performance by refining and optimizing SQL queries.
* Conducted unit, functional, and user acceptance testing to ensure project quality.
* Managed build and deployment strategies.
* Led project phases and provided warranty support for applications.
* Coordinated all testing phases and worked with the Performance team to set a baseline for the new application.
* Collaborated with security and firewall teams to ensure application accessibility.

**Caterpillar, Elmonte, CA. Jun 2019 - Jun 2022**

**IOS Developer**

* Employed agile development cycles, TDD techniques, and conducted code reviews to ensure code reliability.
* Utilized Swift extensively and worked with Cocoa frameworks.
* Created navigations between views using UI Navigation Controller, UI Gesture Recognizer, and UI Popover Controller.
* Worked with NS Managed Object Context, NS Managed Object Model, and NS Persistent Coordinator for implementing Core Data.
* Implemented MVC and MVVM design architecture, utilizing Cocoa design patterns, delegation, protocols, and categories.
* Conducted code reviews to ensure adherence to MVVM+C principles and best practices, fostering a collaborative and high-quality development environment.
* Used auto layout constraints to support different orientations and screen sizes.
* Customized Navigation Bars and Tab Bars for multiview applications.
* Published applications on the App Store and pushed updates after each sprint release.
* Designed the complete MVC/MVVM flow for the application, including UI components and controllers for iPhone.
* Used NS Operations, GCD, and Blocks for multi-threaded development and asynchronous service calls.
* Integrated macOS-specific features such as Touch Bar, Notification Center, and Services to enhance the functionality and user experience of macOS applications.
* Utilized macOS frameworks like AVFoundation, MapKit, and Metal to incorporate multimedia, mapping, and graphics capabilities into applications.
* Developed unit and integration tests using XCTest to ensure the reliability and correctness of macOS application logic.
* Utilized GraphQL to streamline API interactions, significantly reducing data fetching times and improving app responsiveness.
* Worked closely with product managers, designers, and other developers to define requirements and translate them into macOS application features.
* Integrated Combine with SwiftUI to manage the flow of data and state in declarative user interfaces, creating responsive and dynamic applications.
* Actively participated in the RxSwift community by contributing to open source projects, reporting issues, and sharing knowledge through blog posts and presentations.
* Utilized VIPER architecture to build scalable and maintainable iOS applications, enabling the addition of new features and functionalities with minimal impact on existing code.
* Designed an Intelligent Asynchronous Cache Manager to separate UI code from service call code.
* Developed critical tools like customized navigation bars, page controls, and scroll views.
* Extensively used frameworks such as SQLite, UI Kit, Core Foundation, Core Data, UN Notifications Center, AV Foundation, Map Kit, and Google Maps.
* Presented graphs using UIKIT and SwiftUI with UI View Controller Representable protocols.
* Implemented complex UI components and animations using SwiftUI.
* Implemented custom UI components and layouts to meet specific design requirements.
* Worked extensively on table view controllers, creating customized table view cells based on client requirements.
* Prefetched data for different views to ensure smooth screen transitions.
* Followed a work data flow principle for design and development.
* Handled web service calls, and XML and JSON parsing as part of the project.
* Added animations between UI Views for smooth transitions and enhanced user experience.
* Collaborated with the backend team to display data in the correct format on devices.
* Used User Defaults for storing login credentials and Fortify for application security.
* Worked closely within a cross-functional team of testers and developers.
* Provided onsite debugging support when required.
* Used GIT for code checkouts and updates, and managed code merges using Source Tree and Dev Ops.
* Created pull requests and participated in code reviews.

**Citi Bank, Hyderabad. Oct 2017– Nov 2018**

**IOS Developer**

* Enhanced an existing app using Objective-C in Xcode.
* Refactored to consume RESTful web services and utilized NSJSONSerialization for parsing JSON responses.
* Set up push notifications through Parse.
* Debugged and fixed app issues causing unexpected behaviors.
* Employed continuous integration for test automation.
* Utilized Localytics for tracking and analyzing in-app behavior.
* Created UI/UX with XIBs and programmatic layout per design specifications; later refactored to use AutoLayout constraints with iOS 7 updates.
* Integrated new features and functionality as specified in design requirements.
* Developed technical documentation.
* Tested new features and provided feedback on third-party frameworks like advertising and analytics.
* Incorporated user feedback into the design and development process, continuously iterating on the UI/UX to address pain points and improve usability.
* Utilized analytics and user behavior data to inform design decisions and prioritize feature enhancements.
* Managed video and audio playback using Core Media.
* Conducted testing, debugging, and minor feature enhancements throughout the app.
* Developed custom UI/UX using Storyboards, XIBs, and Auto Layout constraints following design team specifications.
* Added functionality for performing downloads in the background.
* Improved app compatibility for iOS 8 and enhanced features for offline use.
* Used RESTful web services for various tasks and data downloads, parsing JSON data from responses.

**Sonos, Hyderabad, India Jun 2013 –Sep 2017**

**App Developer**

* Utilized MapKit and CoreLocation alongside RESTful web services to enable users to order food for pick-up through the app.
* Collaborated closely with the design team, providing feedback to enhance the mobile ordering functionality.
* Developed UI/UX based on design team wireframes, using Storyboards and AutoLayout constraints for UI development.
* Worked with the services team to integrate new and updated RESTful web services, primarily focusing on mobile ordering functionality.
* Tested and resolved issues with various features and functionalities throughout the app.
* Diagnosed and resolved bugs reported via Crashlytics by examining the codebase and using the Xcode debugger.
* Added support for iBeacon to connect with store and restaurant locations.
* Upgraded all Swift 1.0 code to Swift 1.2 and maintained a dual codebase with Objective-C for legacy support.
* Used Git for version control and reviewed pull requests to ensure code quality, adherence to best practices, and thorough testing.
* Leveraged the Kiwi framework for testing.
* Developed and expanded an internal framework/SDK to encapsulate functionality and share across different platforms, including iOS (iPhone, iPad), watchOS, and Ford Sync.
* Modified build jobs to fully utilize CocoaPods for Mockingjay integration.
* Worked in an Agile environment and used JIRA for ticket tracking and sprint management.
* Delivered code using Jenkins for Continuous Integration.
* Utilized AutoLayout throughout Interface Builder with Xib and Nib files to ensure the application looked great on all device sizes.
* Designed and developed custom UI using XIB files, following wireframes from the UX team.
* Used AVFoundation to handle barcode and QR code scanning for products.
* Invoked RESTful web service calls using NSURLConnection and GCD to fetch information regarding menu options from web services.
* Parsed backend communications with JSONSerialization and placed the data into model objects.
* Used the RESTkit library to make server connections and handle authentication challenges.