ALESSANDRO LOI

+1 (206) 206-9919 | thealessandroloi@gmail.com | Seattle, WA | linkedin.com/in/alessandroloi | buzcodes.github.io/

PROFESSIONAL SUMMARY

Lead Software Engineer with 13+ years of experience in mobile app development, specializing in building mobile SDKs, IoT solutions, and high-impact products. Scaled teams from 1 to 10+ engineers and led a previous company to a successful exit. Currently developing AI-powered wound care systems and fluorescence-based diagnostic technologies.

PROFESSIONAL EXPERIENCE

Tissue Health Plus
Lead Software Engineer, Mobile   *2024 - Present*
- Leading R&D team for mobile-based wound care solutions.
- Developing AI-powered wound assessment cross-platform mobile SDK, powered by a C++ image pipeline, OpenCV, native Swift LiDAR camera interface, and cross-platform Flutter deployment, achieving 98% accuracy in tissue analysis.
- Integrated computer vision pipeline for tissue classification leveraging smartphone sensors (LiDAR, camera) with Deep Neural Networks, enabling real-time clinical decision support with 85% faster processing than previous solutions.
- Built mobile SDK (iOS and Android) with BLE connectivity to interface with proprietary medical device that uses fluorescence imaging, diffuse reflectance, and range finding to quantify bacterial load, reducing assessment time by 20 minutes per patient.
- Collaborating with clinical teams to validate AI systems in real healthcare environments.

Keyless
Lead Software Engineer, Mobile   *2020 - 2023*
- Designed and implemented biometric authentication system integrating smartphone camera for identity verification.
- Led a cross-functional front-end team (iOS, Android, Web) to ship 10 features within 8 months.
- Designed and built iOS SDK with advanced sensor integration, improving app performance by 80%.
- Built real-time data processing systems for biometric authentication and behavioral pattern recognition using C++ frameworks.
- Recruited, trained, and mentored 10+ mobile, web and QA engineers.

Oddschecker
Software Engineer, iOS   *2019 - 2020*
- Developed a crucial component of the iOS Betting App, contributing to 75% of company revenue.
- Refactored legacy code from Objective-C to Swift, resulting in a 99% crash-free app.
- Implemented automated testing frameworks, reducing bug reports by 60%

BautifulBox
Lead Software Engineer, iOS   *2019 - 2019*
- Designed and developed IoT solutions connecting mobile devices with sensor hardware for pet behavioral pattern recognition
- Created CES demonstration systems for sensor-based consumer products, generating 75% increase in customer inquiries
- Built real-time data synchronization between mobile apps and IoT devices using Bluetooth Low Energy.

YaAR
Head of Engineering - Co-Founder   *2016 - 2018*
- Co-founded AR startup developing a browser-based AR Framework.
- Pioneered real-time sensor data processing for spatial computing and computer vision in web-based applications.
- Directed a diverse 22-member team across 4 countries, building a strong team culture.

Various Software Engineering Positions   2012 - 2016
- Developed and launched 15+ iOS Apps and MVPs, from gaming to social networks.

EDUCATION

City University of Seattle
Master's, Computer Science

University of Cagliari
Bachelor's, Computer Science

SKILLS

Programming Languages: Swift, Objective-C, C/C++, JavaScript, Python, Java, Ruby, Kotlin, GraphQL
Frameworks: SwiftUI, UIKit, RxSwift, CoreData, Combine, CoreBluetooth, GCD, ARKit, MapKit, Flutter, React Native
Architectures: MVVM, MVC, TCA, VIPER
Tools: AWS, GCP, Git, Firebase, TestFlight, Fastlane, Xcode, Gitlab, Github, Figma, CI/CD
Soft Skills: Cross-platform, Unit Testing, Kanban, Design Patterns, Encryption, OAuth, Agile, Scrum, JSON