

Khachatur Hakobyan

Senior / Staff iOS Engineer
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PROFESSIONAL SUMMARY

- Senior / Staff iOS Engineer with **12+ years** of professional iOS engineering experience since January 2014; expert in advanced architecture and system design; Bachelor's degree in Computer Science & Applied Mathematics.
- Delivered **20+ iOS applications and projects** in Swift, Objective-C and C++ across fintech, encrypted messaging, event ticketing, commerce and education, with a focus on performance, scalability and maintainable architecture.
- **iOS Team Lead at four companies**: owned architecture decisions, mentored junior engineers, and set code review, pull request and CI/CD standards while collaborating across engineering, product and QA.
- At Crypmoji, delivered a working **encrypted-messaging MVP in 4 days** that contributed to a reported **\$500K seed-funding outcome**, and resolved a year-long Swift-C++ memory defect, avoiding an estimated **1–2-year rewrite**.
- Measured results: **40% fewer authentication defects**, **2× faster feature delivery** and **60% less code duplication** at KSF; **5–6× faster ticket validation**, **over 90% fewer validation errors** and **98% test coverage** at Xamlab.
- Built reusable frameworks that accelerated teams: a custom iOS calendar framework (**up to 7× faster** calendar-feature development at MegaProgramming) and a storyboard-based UI framework (**70% less adaptive-screen development time** at WiredMates).

WORK EXPERIENCE

KSF Technologies AG | Senior iOS Engineer
Zurich, Switzerland · Remote · Full-time

Nov 2021 – Present

- Re-architected the authentication and login system using OOP, POP, SOLID principles, and SOA, eliminating design anti-patterns and establishing a modular, testable architecture that **reduced authentication-related defects by 40%**, **doubled feature delivery speed (2×)**, and improved release reliability.
- Designed and developed a reusable Core SDK integrating Keychain, Core Data, application settings, and dialog services, **reducing code duplication by 60%**, shortening development cycles by weeks, and accelerating cross-team delivery through standardized infrastructure.
- Contributed to Sony Music Artist Portal, Sony Music Studio, Sony Music GTA, and Optiqo INSTA, developing custom interactive financial charts, shared application components, and native Core NFC inspection functionality while modernizing Swift and Objective-C codebases.

Crypmoji | iOS Team Lead (Senior iOS Engineer)
Los Angeles, California, United States · On-site · Full-time

Feb 2021 – Nov 2021

- Defined and aligned the engineering team on 3 technical delivery strategies—simulation, full integration, and phased MVP—delivering a live **encrypted messaging demo in 4 days**, expanding functionality within approximately 6 days, and directly contributing to a reported **\$500K seed-funding outcome** and 3 investor follow-up meetings.
- Diagnosed and resolved a year-long Swift-C++ interoperability and memory-management defect by correcting unsafe object ownership and pointer handling, avoiding a complete system rewrite and saving an estimated **1–2 years of engineering effort** while restoring application reliability.
- Led a modular Swift modernization and custom iOS keyboard extension, mentoring 2 junior iOS engineers in SOLID principles, POP, clean architecture, code reviews, and cross-language integration while strengthening engineering collaboration and team culture.

WiredMates | iOS Team Lead (Senior iOS Engineer)
Los Angeles, California, United States · On-site · Full-time

Mar 2020 – Feb 2021

- Architected a reusable storyboard-based iOS UI framework using UIKit, IBDesignable, and IBInspectable, reducing adaptive screen development time by **70% (10 to 3 hours)** and improving UI delivery efficiency by over 200% (approximately 3.3× faster).
- Engineered secure payment integrations with Stripe and Apple Pay, reducing **checkout time by 70%** through optimized payment flows and encryption while improving the application's purchasing experience.
- Mentored junior iOS engineers in SOLID principles, reusable components, and code reviews; introduced standardized pull request practices adopted within approximately 1 month, improving collaboration, code quality, and architectural consistency.

Xamlab | iOS Team Lead (Senior iOS Engineer)
Los Angeles, California, United States · On-site · Full-time

Jan 2019 – Mar 2020

- Architected and led modernization from Xamarin/C# to native Swift, implementing modular MVVM architecture, POP, and automated unit testing, achieving **98% test coverage** and improving maintainability and scalability.
- Redesigned ticket validation into a streamlined QR scanning workflow, accelerating **ticket validation by 5–6×** and reducing **errors by over 90%**, contributing to a reported historical **5.0 App Store rating**.
- Established CI/CD pipelines with Azure DevOps, standardized pull request reviews, and mentored junior engineers in clean architecture, automated testing, and reusable components, improving release reliability and cross-team delivery.

Arm-BoldMind | iOS Engineer → iOS Team Lead (Promoted)
Armenia / Los Angeles, California, United States · Hybrid · Full-time

Jan 2017 – Jan 2019

- Engineered and delivered **6+ iOS applications** using Swift, Objective-C, UIKit, MVC/VIPER architectural patterns, Core Data, and real-time socket communication, developing scalable applications across education, ecommerce, delivery, and marketplace platforms.
- Collaborated with multiple engineering teams across 2–3 concurrent projects, strengthening reliability through root cause analysis, crash debugging, and code refactoring; subsequently **earned promotion from iOS Engineer to iOS Team Lead**.
- Led iOS architecture and independently developed PropertyTrader and Edy, while introducing reusable components and backend-driven UI configuration across client projects; mentored engineers in maintainable application architecture and development practices.

PicsArt Armenia | iOS Engineer
Yerevan, Armenia · On-site · Full-time

Mar 2016 – Jan 2017

- Strengthened advanced iOS engineering expertise over 11 months through hands-on defect resolution, root cause analysis, crash debugging, and performance optimization within a large-scale photo-editing application.
- Completed 6 months of intensive specialization in Objective-C and image processing, applying memory management, code refactoring, and framework analysis to diagnose defects and develop maintainable, performance-focused iOS solutions.
- Investigated and resolved crashes, memory-management issues, and native image-processing defects involving Objective-C, C++, and Objective-C++, strengthening cross-language interoperability, application stability, and low-level troubleshooting capabilities.

MegaProgramming | iOS Engineer

Jan 2014 – Mar 2016

Yerevan, Armenia · On-site · Full-time

- Designed and developed a custom iOS calendar component with native Calendar synchronization, replacing restrictive third-party dependencies and reducing comparable feature development time by up to **86% (7× faster)**.
- Developed and delivered **3 production iOS applications and 1 reusable software library** using Swift, Objective-C, UIKit, Core Data, Firebase, and RESTful APIs, improving reusability, maintainability, and software performance.
- Built reusable components across two CarWash iOS applications, reducing comparable feature development time by approximately **50% (2× faster)** while implementing location-based bookings, customized Google Maps routing, and Apple MapKit integration.

Ministry of Defense of the Republic of Armenia | Remote Systems & Electronics

Operations

May 2011 – Jan 2014

Armenia · On-site · Full-time

- Inspected, maintained, and repaired **100+ remote-controlled electronic target systems** operating at distances of up to 2,000 meters, applying troubleshooting, fault diagnosis, and preventive maintenance to maintain operational readiness.
- Operated centralized control systems and provided technical support during training exercises involving approximately 100–150 personnel, ensuring reliable target equipment operation and rapid defect resolution.
- Engineered a custom long-distance lighting solution that improved low-visibility **maintenance efficiency by up to 4×**, reducing repair times and equipment downtime during nighttime operations.

EDUCATION

Yerevan State University | Bachelor's, Computer Science & Applied Mathematics

Sep 2010 – Sep 2017

Earned a bachelor's degree in Computer Science and Applied Mathematics, establishing a rigorous foundation in mathematical analysis, discrete mathematics, algorithms, data structures, and computer architecture. Developed mathematical reasoning, computational problem-solving, and systems-level programming skills through C, C++, Assembly, Lisp, and SQL, building core competencies applicable to complex software and engineering systems.

Harvard University | CS50 — Introduction to Computer Science (course)

Sep 2024 – Aug 2025

Completed Harvard University's CS50: Introduction to Computer Science, strengthening expertise in algorithms, data structures, memory management, and computational problem-solving. Applied these concepts through CS50 Touch, an iOS project incorporating Core Data persistence and API integration, connecting computer science fundamentals with practical software engineering and application development.

Meta | iOS Developer Professional Certificate

Sep 2023 – Sep 2024

Earned the Meta iOS Developer Professional Certificate through a 12-course program covering iOS application development, Swift, Advanced Swift, SwiftUI, UI/UX design, version control, and data management in iOS. Expanded cross-platform development skills through JavaScript, React, and React Native, while completing capstone coursework and technical interview preparation focused on software engineering and problem-solving.

TECHNICAL SKILLS

Programming Languages: Swift, Objective-C, C++, Objective-C++, C, Xamarin/C#

iOS Frameworks & SDKs: UIKit, iOS Application Development, Core Location, Google Maps SDK for iOS, Auto Layout, SDWebImage, Storyboards, Custom UI Components, Push Notifications, Facebook Login SDK, Firebase Cloud Messaging, Google Sign-In, MapKit, ALPValidator, Core NFC, End-to-End iOS Application Development, EventKit, Google Places SDK, IBDesignable, IBInspectable, Image Processing, iOS App Extensions, iOS Framework Development, MMDrawerController, Reusable UI Components, Reusable UI Framework Development, Third-Party SDK Integration

Architecture & System Design: iOS Software Architecture, Modular Architecture, SOLID Principles, MVC, Protocol-Oriented Programming, Code Refactoring, Dependency Injection, Object-Oriented Programming, Reusable Components, Application Modernization, Code Maintainability, Interface-Based Design, Legacy Code Modernization, Separation of Concerns, Service Abstraction, Swinject, Cross-Language Interoperability, MVVM, Reusable SDK Development, Software Maintenance, Swift–Objective-C Interoperability, Application Integration, Architecture Decision-Making, Code Reusability, Native Library Integration, Reactive Programming, Reusable Library Development, Swift–C++ Interoperability, Legacy Code Analysis

Networking & Persistence: Real-Time Communication, RESTful API Integration, Core Data, Alamofire, C#.NET Backend Integration, Data Persistence, API Integration, Socket.IO, Caching Strategies, Data Synchronization, Image Caching, PromisesSwift, RealmSwift, SignalR, Socket Programming, SwiftyJSON

Testing & Delivery: Testable Architecture, Unit Testing, Azure DevOps, CI/CD, System Testing, UI Testing

Security & Performance: User Authentication, Memory Management, Authentication Architecture, Keychain Services, Performance Optimization, Root Cause Analysis, Secure Storage Architecture, Crash Debugging, Memory Safety, Software Reliability, Debugging, Cryptographic Library Integration, Email Authentication, Firebase Crashlytics, Secure Payment Processing

Leadership: Technical Leadership, Engineering Mentorship, Code Reviews, Cross-Functional Collaboration, Technical Documentation

Payments & Product Integrations: Location-Based Services, Stripe, Apple Pay, Custom Data Visualization, Interactive Charts, Payment Integration, QR Code Scanning, Delivery Tracking

Embedded Systems: Hardware–Software Integration, Embedded Programming, Control Systems, Electronics Diagnostics, Embedded Systems, Equipment Maintenance, Fault Diagnosis, Hardware Troubleshooting, Remote Monitoring and Control, System Reliability, Technical Problem-Solving, Lighting System Design