# Jonathan Heglin Senior iOS Engineer

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#### **PROFESSIONAL EXPERIENCE**

Andersen Inc. — New York, NY

February 2022 - March 2023

Senior iOS Engineer

- Created a hardware accelerated based encoding Streamer platform for IP Cameras on embedded NVIDIA Jetson
  Nano device that was 75% faster than software encoding methods.
- Designed, built, tested and deployed an iOS client application using SwiftUI and Combine following MVVM patterns, increasing development and testing speed by 50%.
- Engineered a custom low latency player using AVFoundation integrated with Gstreamer wrapper for Swift to play an incoming stream with a latency under 200 ms.

**Skills:** Swift, Xcode, SwiftUI, Combine, MVVM, AVFoundation, Gstreamer, Ffmpeg, SwiftSocket, CI/CD, Concurrency, HLS Streaming, Git, Fastlane, DevOps, Data Structure, XCTest, XCUITest, RTSP, HTTP, UDP, TCP, C++, Qt, Bash, mysql, Memory graph debugger, Xcode Instruments, GCD

**Poparide** — Vancouver, Canada

April 2020 - January 2022

Lead iOS Developer

- Involved in the whole process from idea to deployment of first version of a Ride-sharing application for iOS and Android platforms using MVVM design pattern in a tight 8 months deadline.
- Integrated Firebase for real-time driver/passenger matching, increasing successful matches by 15%. Over 80% of passengers matched in under 60 seconds due to Firebase's real-time data.
- Implemented accessibility features including VoiceOver and multilingual support, increasing blind user engagement by 20% and expanding international reach multiple languages.
- Spearheaded the technical iOS team utilizing Agile and Scrum methodology to streamline collaboration and communication, results on a 20% increase in team efficiency and a 15% reduction in project duration.
- Implemented a CI/CD pipeline using Gitlab to improve the versioning process by 75%. Fastlane framework also used in order to test, sign and deploy new versions on Appstore on regular timeline.
- Link: https://apps.apple.com/ca/app/poparide/id1045332129

**Skills:** Swift, Ulkit, MVC, MVVM, Cocoa touch, Restful-Api, Git, Multi-threading, Async Await, Core Animation, Core Graphics, NoSQL, Agile Framework, Unit test, XCTest, XCUITest, Voice over, Digital accessibility, Realtime database, Firestore, Push notifications, Trello

iBuildApp — California, CA

March 2017 - March 2020

iOS Engineer

- Created an automation service for testing and signing and deploying applications on an enterprise AWS-hosted Appstore with help of Fastlane framework within 8 months.
- Integrated with AWS to fetch application listings, download new applications, verify user credentials and sending push notifications using AWS mobile SDK.
- Developed a microservice that decreased application customization by 70% in order to inject dependencies like dylib or deb files to existing binary files of applications.

 Achieved a scalable and secure architecture by leveraging AWS services that allowed the App-store to scale as business needs changee.

**Skills:** Swift, Fastlane Spaceship, core Data, CI/CD, OTA, RestFul-API, linux, Dependency injection, SOLID principles, Ruby, Bash, AppKit, Automation, Cognito, S3, Deep learning, Big data, Ruby, PHP, Kubernetes, Kafka, Postman, Dependencies, Tuist, SPM

## **Digitrax** — Nashville, TN

March 2015 - February 2017

iOS Developer

- Collaborate in redesign of an iOS Karaoke application which plays a vocal-less music and records user's vocal simultaneously to create an awesome music, in 1 year.
- Recommended and applied optimized GraphQL queries reduced network payloads by 30%, improving load times and user experience.
- Carried out djustable text sizing for enhanced accessibility, increasing engagement 28% for low vision users.
- Leveraged AVAudioEngine pipeline architecture to accelerate development of streaming audio playback and recording features by 1 month.
- Reduced the size of final song about 90% Converting recorded stereo song format from WAV to mp3 using FFmpeg and Lame framework

**Skills:** Swift, UIKit, AVAudioEngine, Cocoa touch, Core Audio, API gateway, Ffmpeg, Lame, Alamofire, Restful-API, Crashlytics, Compression, AVCapture, Core Data, Core Animation, Core Text, MVC, OperationQueue, Azure, Dynamic Type, GraphQL, CircleCI, Jira, Data Structure, Workspace, Optimized Programming

## **Upwork** — USA, California

May 2013 - February 2015

iOS Developer

- Developed an iOS offline map application for transportation using ArcGIS runtime framework that lets the user to navigate through streets when internet connection drops within 3 months.
- Planned real-time navigation by collecting speed and location data, improving routing accuracy 35%. Enabled determining precise user location and optimal route calculation.
- Optimized real-time route rendering by implementing a shortest path search algorithm, reducing route calculation time by 40%. Leveraged CoreGraphics to display optimal routes, improving user satisfaction by 30%.
- Improved offline map navigation, allowing users to navigate with high accuracy after downloading map data for a single city or state and storing its metadata using coreData and preprocessing map layers with metadata.

**Skills:** Swift, Objective-C, ArcGIS, Caching data, Navigation, Tracking, Telematics, Core Graphics, GoogleMaps SDK, Esri Map layers, Core Location, Core motion, Algorithms, Activity Tracking

### **EDUCATION**

**Helsinki University** *Bachelor of Computer Science* 

**FINLAND** 

2008 - 2012