Joseph Roque

# Skills and Technologies

Languages: Swift, TypeScript, Python, Ruby, Objective-C, Kotlin, SQL

Technologies: SwiftUI, UIKit, Combine, React Native, TCA, Ruby on Rails, GraphQL, XCTest, Xcode

## **Experience**

## **React Native Developer**

AtoB (Remote)

Feb 2022-Apr 2023

- Bootstrapped AtoB's flagship **React Native** app for drivers with a small team
- Built and integrated client-side authentication, networking stack, and UI components
- Ensured robustness through unit and integration testing, with Jest and React Native Testing Library
- Overhauled **Tailwind** design system to white-label our **React** frontend for key partners
- Built new backend authentication logic with with **Ruby on Rails**, smoothly transitioning 20,000+ mobile users from email to passwordless SMS auth
- Responsible for rollout, monitoring, and addressing feedback for AtoB's React Native apps

## Senior iOS Developer

Slack (Remote)

Jul 2021-Feb 2022

- Improved various performance metrics in the app, including reducing foreground and background memory usage, CPU usage spikes, disk writes, and launch time
- Used Xcode Instruments, discovered and resolved a bug, reducing frequent spikes in CPU usage by 15%
- Aided in transition from xcodebuild to a Bazel supported workflow
- Acted as "Security Champion" for the iOS infrastructure team, participating in weekly security tutorials, and responsible for identifying potential security risk in new iOS projects

## Senior iOS Developer

**Shopify** (Remote + Ottawa, Canada)

Jan 2018-May 2021

- Built reusable components and frameworks with **Swift** used across Shopify's suite of native mobile apps
- Explored brownfield **React Native** experiences, enabling React web developers to build features in mobile
- Launched the Shop app, used by millions of people for package tracking, with React Native
- Identified and resolved multiple high impact Out of Memory crashes using **Xcode's memory profiling tools**, resolving thousands of weekly crash occurrences
- Worked as part of a small team to design and implement a **React Native architecture** which Shopify mobile developers now use as a baseline for all mobile apps
- Acted as iOS expert embedded in the React Native team, writing native modules to avoid unnecessary dependence on third party modules, and maintaining CI environment

## **Personal Projects**

#### Approach, for 5 Pin Bowling

https://github.com/autoreleasefool/approach

Jan 2015-Present

- Actively developing a native **iOS** and **Android** app to track bowling statistics
- Recently launched to the App Store in September 2023, and first launched to Google Play in April 2015
- Built with modern, native UI libraries including **SwiftUI** and **Compose**
- Presents dozens of statistics through graphs built with SwiftUI and MPAndroidChart + Vico
- Uses a modern Composable Architecture and MVVM architecture, with exhaustive test coverage

## Hive for iOS

https://github.com/autoreleasefool/hive-for-ios

Jan 2020-Dec 2020

- Built a performant engine and UI for of one of my favorite board games, using a full stack **Swift** environment
- Utilizing Apple frameworks to build the client, including SwiftUI, SpriteKit, and ARKit
- Experimenting with the Swift backend framework, Vapor, and using WebSockets for communication

## Education

University of Ottawa 2013-2017