

# Reid Main

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Toronto, Ontario, Canada

## Summary of Qualifications

- 14+ years developing apps using Swift, Objective-C, and UIKit for iOS 3 through 17.
- Founding member of Uber's Mobile Platform team who oversaw the modularization of Uber's iOS architecture which allowed it to scale from 10 engineers to over 180 in just 20 months.
- Deep familiarity with iOS networking ranging from code generation of models and services from IDLs (such as Protobuf and Thrift) to real-time streaming via web sockets and gRPC.
- Proficient at gathering analytics and logging data to enable real-time monitoring of apps in production environments and ensure that they are always healthy and reliable.
- Leveraging unit, snapshot, and integration tests in continuous integration environments at scale to catch crashes and bugs before they reach production.
- Strong track record of onboarding and mentoring junior engineers to become confident, self-sufficient individual contributors.

## Experience

### Staff Software Engineer

June 2022 to Present

[Square](#) • Toronto, Ontario • FinTech • 20,000+ Employees

- Member of the Mobile Performance & Reliability team.

### Senior Software Engineer II

October 2020 to April 2022

[Instacart](#) • Toronto, Ontario • Groceries • 2,000+ Employees

- Integrated gRPC into the shopper iOS app to prevent the creation of error-prone network services.
- Wrote a custom Protobuf plugin for [Apple's SwiftProtobuf framework](#) to generate idiomatic Swift 5 code.
- Migrated over 50% of daily network traffic in the shopper iOS app to gRPC.
- Helped standardize the processes of internationalization and localization across all of Instacart's apps.

### Senior Software Engineer

January 2019 to October 2020

[Uber](#) • San Francisco, California • Ride Sharing • 20,000+ Employees

- Integrated gRPC into the rider iOS app to decrease latency of on-trip updates.
- Improved developer experience of custom tooling that generates Swift code from backend Thrift files.
- Responsible for onboarding mobile engineers to Uber's RIB architecture.
- Oversaw the deprecation of iOS 9, 10, and 11.
- Assisted in the migration of all iOS apps to Uber's in-house dependency injection solution, [Needle](#).

## **Member of Technical Staff**

July 2018 to December 2018

[Anchorage](#) • San Francisco, California • Digital Asset Custody • 20+ Employees

- Helped ship the soft launch of Anchorage's consumer iOS app.
- Leveraged Apple's Secure Enclave to facilitate cryptographically secure transactions between the iOS app and offsite hardware security modules.

## **Senior Software Engineer**

June 2016 to July 2018

[Affirm](#) • San Francisco, California • FinTech • 200+ Employees

- Lead iOS engineer. Responsibilities included architecting the iOS app, establishing coding best practices, and mentoring junior engineers.
- Adapted reactive programming practices to improve code encapsulation and testability.
- Led migrations to Swift 3 and 4.
- Maintainer of the mobile team's continuous integration environment.

## **Senior Software Engineer**

September 2014 to June 2016

[Uber](#) • San Francisco, California • Ride Sharing • 2000+ Employees

- Founding member of the Mobile Platform team whose central mission was to modularize Uber's iOS architecture which allowed it to scale from 10 engineers to over 180 in just 20 months.
- Core contributor to the networking layer. Standardized how engineers interacted with the backend to prevent the creation of brittle, boilerplate code. Primarily achieved through a transformation library that enabled safe conversions of network responses to local model objects (similar to Gson).
- Collaborated with UX designers on a UI component library that allowed iOS engineers to quickly and easily replicate a standardized Uber design across all of its apps.
- Advocated for increased unit and snapshot test coverage and assisted in the set up and maintenance of a continuous integration environment.

## **Senior Software Engineer**

November 2012 to September 2014

[theScore](#) • Toronto, Ontario • Sports Reporting & Statistics • 100+ Employees

- Led a team of four developers working on [theScore's iOS app](#).
- Rewrote the app's networking and data layers to leverage modern technologies and design practices.
- Collaborated with UX designers to iterate on the app's existing design and functionality.
- Worked with Ruby on Rails developers to ensure REST API endpoints were easily and efficiently consumed by theScore's mobile apps.

## **Education**

### **Honours Bachelor of Computer Science (Co-op)**

September 2003 to August 2008

[University of Waterloo](#) • Waterloo, Ontario