Alexander Edge

A senior iOS engineer with experience in leading or working alongside mobile development teams in startups, small and medium-sized enterprises, and large corporations. A strong communicator and self-styled "product-focused engineer", he approaches solving problems from the perspective of the user and can offer valuable insights on product / engineering tradeoffs.

<u>Guardian News & Media</u>, Senior iOS Engineer (Contract) – Jan 2020-March 2020

Transformed a proof of concept for a WKWebView to native communication bridge using <u>Apache Thrift</u> into production-ready code. Contributed to a cross-team project to adopt server-side rendered articles inside native apps.

- Created documentation and sequence diagrams for the Thrift-based bridging layer.
- Performed technical spikes into caching, advertising, analytics, and accessibility for server-side rendered articles.
- Added <u>protocol multiplexing and Swift 5 support</u> to the open-source project.

Novoda, Senior iOS Engineer (Contract) – November 2019-December 2019

Worked alongside another engineer (pair-programming) on an Internet of Things (IoT) framework based on MQTT.

- Used reactive programming experience to make the existing codebase more readable, maintainable, and testable.
- Increased the unit test coverage and created documentation for framework consumers.

<u>Guardian News & Media</u>, Senior iOS Engineer (Contract) – May 2019-November 2019

Re-joined the team working on The Guardian iOS app. In addition to day-to-day maintenance and migration from Objective-C to Swift, I was responsible for:

- Improving scroll performance by over 25%
- Integrating video advertising, resulting in additional revenue
- Assisting in the development of a Kotlin Native shared library
- Devising a strategy to adopt "dark mode" on both Android and iOS
- Adding support for <u>IAB consent string management</u> for user advertising preferences

<u>ustwo Studios</u>, Senior iOS Engineer (Contract) – April 2019

Joined a small team to re-build an existing RxSwift-based health app prototype using a new design direction. I proposed using container view controllers to allow multiple developers to work on the same screens with minimal overhead. The final build was delivered ahead of schedule.

<u>Guardian News & Media</u>, Senior iOS Engineer (Contract) – Jan 2019-March 2019

Worked with the apps team on their award-winning The Guardian and The Guardian Digital Edition apps. Activities undertaken during my tenure include:

- Adding self-sizing elements to UICollectionView
- Fixing long-standing crashes
- Improving WKWebView loading performance on older devices
- Building UI prototypes
- · Peer code reviews
- Pair programming

New Look, Lead iOS Engineer (Contract) – Jan 2018-Nov 2018

Worked with the New Look organisation to build and lead an Agile development team. Inheriting a live app built using RxSwift and the MVVM architecture, I helped the team:

- Devise a strategy for tackling technical debt whilst delivering new features and maintaining test coverage
- Reduce total lines of code by 35% and remove multiple external dependencies
- Improve the App Store rating from one star to over four stars
- Improve coding standards by conducting regular code reviews
- Leverage the coordinator pattern to simplify view controller management

ustwo Studios, Senior iOS Engineer (Contract) – May 2017-Nov 2017

Member of a four-person iOS team working on In Control Remote, for Jaguar Land Rover. Responsibilities include requirements gathering, estimation, development, testing, and peer review. The project used Agile/Scrum methodology in combination with behaviour-driven development (BDD). Tools / technologies used include XCTest for unit & UI testing, web-sockets, RxSwift and MVVM.

Postsnap, Senior iOS Engineer (Contract) - 2015-Present

Worked on an existing iOS app for creating customised greeting cards, postcards, announcement cards, and invitations.

- Identified and debugged data loss issues caused by concurrent Core Data use
- Followed a divide-and-conquer approach to refactoring a large codebase
- Compiled a UX report, the findings of which were the foundations of a re-design
- Implemented Apple Pay for guest checkout
- Built a modular text editor supporting multiple fonts, colours, and text styles which is used in two other company apps

European Sports (Personal Project) – 2016-2017

Reverse-engineered Eurosport Player iOS app to build tvOS version, in Swift, for personal use.

- Used Charles Proxy to intercept API traffic
- Created a dynamic framework containing Core Data model and API handling using NSURLSession

• Built a tvOS app around the framework allowing live streaming and on-demand video content

Curator, iOS Engineer (Contract) - 2014-2015

Worked on an iOS app for collecting, organising and presenting images, websites and text. Curator was featured in the App Store and is installed on point-of-sale iPhones throughout stores in the UK.

- Used UITraitCollection API to add adaptive layouts for portrait and landscape on iPad that paved the way for a launch on iPhone
- Added interactive and non-interactive transitions between grids
- Designed and developed a Core Data sync API using Parse as a back-end

Peeps, Co-founder – 2014-2018

Worked with a designer to launch a messaging app based around sending 10-second video clips between groups of users. Clips are played back in chronological order

- Used adaptive layout API for the iPhone 6 and 6 Plus, employing UICollectionView
- Designed a custom SMS-based system for verifying users based on Twilio REST API
- Implemented high-compression H.264 / MPEG-4 AAC video recording using AVFoundation
- Wrote server-side business logic in Javascript for Parse (now Parse-server running on Heroku)
- Added custom view controller animations using UIViewControllerAnimatedTransitioning APIs
- Added iOS 10 notification extension for viewing video messages on Watch

Education

• University of Bristol, UK — Master of Electronic & Communications Engineering, 2004–2008