Daniel Thorpe PhD, BEng Hons

I am an engineer with over 10 years experience developing for Apple's platforms. My expertise in Objective-C, Cocoa and iOS development is broad. I started writing Swift immediately after its announcement, and have since been developing with it almost exclusively.

Open Source Contributions

In total, to date, my open source frameworks have had over ~450K downloads and are used in ~3000 apps.

ProcedureKit (previously Operations)

ProcedureKit is a Swift framework offering rich and powerful classes for using NSOperation classes. The project started in June 2015 and has progressed steadily in terms of features, code quality, documentation, contributions and adoption. It has been used in over 1000 apps, with ~200,000 downloads, and 24 contributors.

Money, FX

Money is a framework for working with money and currency as strong value types in Swift. It supports full decimal arithmetic, strong currency types, localised description, and foreign currency exchange. I created this project as an exercise to learn elements of Swift.

TaylorSource, YapDatabaseExtensions & ValueCoding

These three projects work in combination to power table and collection views from a database. The goal is to provide data sources which are easily decoupled from presentation and model layers, with a focus on specialised generic protocols and value types.

Professional Experience

Lead iOS Engineer, Sky UK, January 2016 - November 2016

I began contracting at Sky as the lead of a new feature team building the iPhone version of their new flagship product: Sky Q. This is Sky's new set-top-box home media offering, with a companion iOS app. At this time, the iOS team on this project had begun to scale up. My mandate was to start up a new team to deliver the core proposition on iPhone, which we achieved one sprint ahead of estimates.

In April 2016, I began to provide broader technical leadership and direction. Largely this has been through increased communication with managers and senior team developers. This effort has created a structured process for design, development and testing of features. Additionally, I have advocated for, and helped deliver improved CI tooling and process automation. The project supported almost 40 developers at its peak to deliver two distinct product propositions in multiple markets from the same codebase.

Independent Contractor, Open Source contributor, May 2015 - December 2015

After building an app in Swift, I wanted to share some of my techniques with other developers. During this period I created the open source projects discussed above. Additionally I also began contracting for some small clients, primarily working on customer relationship management applications for enterprise using CloudKit.

Software Engineer, Yakatak, June 2014 - May 2015

I joined Yakatak, a sports data startup, to build their social messaging app revolving around live sports data, news and sticker messaging. I designed and built the app from scratch in Swift 1.0. The networking layer uses web-sockets with Thrift protocols with promise-based higher level APIs. Beyond UIKit, the app also featured a rich in-app sticker store utilising StoreKit and UIKitDynamics.

iOS Lead, Badoo, January 2013 - June 2014

After three months at Badoo, I was promoted to iOS Lead and responsible for all iOS products. In this role I made significant enhancements in key areas. I improved the development and testing process to support

branches, automation and continuous integration. I developed real-time app performance metrics and displays. This gave the team rich and direct feedback on their work. Most importantly, I fostered a team culture of technical excellence and best practices. This organically led to an ethos of test-driven development, architectural review, pair-wise programming and open-source contributions. In turn this allowed us to engineer a platform infrastructure on top of which new applications have since been created.

iOS Developer, Badoo, October 2012 - December 2012
I joined the Badoo team to develop the iPad version of their product. Primarily I was responsible for creating screens using UICollectionView style interfaces, but in iOS 5. Additionally I was able to help the team refactor significant areas of technical debt in the application's data models.

Technical Founder, 300 Notes, June 2012
I built the minimal viable product for an iPhone app for the Primrose Hill area. The app is novel in that it forms an exclusive location based social network for a community. We demonstrated the app to locals in August 2012 and received very positive reactions on how it could enrich their local neighbourhood.

Mobile Platform Developer, BraveNewTalent, October 2011 - May 2012
I joined BraveNewTalent to design and develop the social network's native mobile apps. My role expanded from developing the iOS apps to designing and writing significant parts of the platform's API from scratch.

Founder, Blinding Skies Limited, August 2009 - August 2011
I founded Blinding Skies to create software products primarily for the iOS and Mac platforms. Our first app, You Owe Me originally for the Mac was released for iPhone in June 2011. The app enabled its users to record financial transactions that they make within a group. Transactions automatically synchronised to keep participants informed.

R&D Engineer, Artistic Licence, full-time January 2010 - August 2010, + sporadic client work

School of ECS, University of Southampton, October-March 2005/06/07

IAM Group, School of ECS, University of Southampton, Summer 2004/05

Education

University of Southampton, Doctor of Philosophy, 2009
My PhD, titled *On Shape Mediated Analysis of Spatiotemporal Phenomena,* focused on predicting the future activity of any space-time varying phenomenon that occurs naturally, such as forest fires or the nation-wide incidence of influenza. This was achieved using computer vision, image processing, pattern recognition and statistical modelling.

University of Southampton, 2005
BEng Electronic Engineering 1st Class Hons

Trinity School, 1992 - 2001
A Levels in Electronics (A), Maths (B) and Physics (B).
10 GCSEs including Maths (A), Physics (B), Chemistry (B), Biology (B), English Language (A*) and English Literature (A*)

Referrals

Available on request for character, employment and education.