
EXPERIENCE

2017–Now
Snap Inc.

Senior iOS Engineer, Product Experience

- Co-owner of core “Stickers” feature of Snapchat app
- Perform investigation in to new concepts, rewrites, refactoring
- Provide guidance on platform and architectural best practices

2015–2017
Apple Inc.

Maps Software Engineer, Apple Maps

- Independently developed and distributed an internal app to help engineers manage development environments. Used across the company and included in New Employee Orientation
- Primary owner of the Maps Extensions architecture in MapKit and Maps
- Worked with AppKit team to develop the “Tabbed Windows” feature in macOS Sierra
- Regularly interfaced with third-party extension providers; communicated bugs, provided and received feedback, prioritized feature work
- Actively involved in cross-team API design and review

2013–2015
Apple Inc.

Evangelist, Developer Relations

- Advised 3rd-party developers on best practices to adopt latest technologies
- Directed dozens of sessions at the annual World-Wide Developer Conferences, which included organizing weekly rehearsals, providing guidance on slides, and critiquing presentation delivery
- Closely involved with the initial release of multiple high-profile technologies, such as Swift, CloudKit, HealthKit, ResearchKit, HomeKit, and WatchKit
- Hosted regular cross-functional meetings for HomeKit, HealthKit, and CloudKit teams
- Worked closely with HomeKit team to ensure API conformed to platform conventions
- Helped developers adopt pre-release APIs for marketing promotions, screenshots, and on-stage demos
- Independently contributed code to CloudKit to more efficiently and flexibly validate user-provided data
- Actively involved in cross-team API design and review

Lead engineer, WWDC app

- Incrementally modernized app codebase over three years
- Worked closely with Swift and WatchKit teams to dog-food technologies in the app. The app shipped as the world’s first hybrid Objective-C and Swift app
- Moved app backend from a custom in-house service to CloudKit
- Wrote and maintained several internal tools to help streamline publishing content
- Helped several teams use the app as demo material in WWDC sessions

2010–2013
Apple Inc.

UIKit Framework Engineer, iOS Apps & Frameworks

- Re-architected UIDatePicker to support all calendrical systems and all locales
- Wrote native pull-to-refresh implementation (UIRefreshControl), working closely with UI designers
- Fixed bugs in system-provided widgets, such as UIProgressView and UIButton
- Actively involved in cross-team API design and review

2009–2010
Mozy

Mac Software Engineer

- Rewrote interface for version 2.0 to facilitate a more user-friendly experience
- Wrote tools to automate unit testing, localization, packaging, and static analysis of production code

2003–2010
2017–Now

Independent Developer

- In the top 0.05% of all-time contributors on stackoverflow.com
- Authoring [Chronology](#), a safe and correct date/time library for Swift
- Authored [DDMathParser](#), a highly-extensible library for parsing text into mathematical expressions
- Active in the Swift Evolution process on forums.swift.org
- Developed several iOS apps, including the 1.0 version of [Mactracker](#)
- Currently developing “Heathen”, an iOS app to better navigate the Utah DABC product inventory

PRESENTATIONS

CURRENT

[A Better MVC](#)

- Applying the principles of decomposition to view controllers can vastly simplify app architecture without compromising app features

[The Laws of Magic](#)

- An investigation in to how the laws that govern well-formed magic systems in works of fiction equally apply to the art of software creation

Building Awesome Technical Presentations

- An overview of how to effectively communicate technical information in a presentation
- Includes many “tips and tricks” on bending Keynote to your will

Environmentally Friendly Apps

- Being aware of all the environments in which an app is run drastically affects how you approach building it

WWDC 2015

Apple Inc.

[Advanced NSOperations](#)

- An in-depth exploration of the WWDC app architecture
- Provided extensive sample code that has become the basis for multiple popular open source projects
- Popularly regarded as one of the best sessions of that year’s conference

IOS 7 TECH
TALKS, 2013

Apple Inc.

Architecting Modern Apps Pts 1 & 2, Architecting Modern iOS Games

- Highly technical presentations covering 64-bit adoption and maintaining backwards compatibility through proper code architecture

WWDC 2012

Apple Inc.

Internationalization Tips & Tricks

- A look at properly dealing with localized strings, dates, numbers, and images in an iOS app

WWDC 2011

Apple Inc.

iOS Printing System

- Developed sample code and delivered live on-stage demo on using the iOS printing APIs

MACTECH

CONF 2010

The Power of Predicates

- A review of NSPredicate, an overlooked but powerful part of the Cocoa frameworks

TEACHING & MENTORING

2014–Now

Admin, [UtahDevelopers.org](#)

- Admin of the Utah iOS & Mac Developers slack group (550+ local Apple developers)
- Help organize get-togethers, monthly meetings, and casual meet-ups
- Actively participate answering questions
- Currently investigating forming a non-profit organization around the group

2011–2015

Sunday School Instructor, LDS Church, Santa Clara, CA

- Taught bi-monthly 45-minute classes to 50+ adults
- Adapted teaching methods to fit content, changing congregation demographics, etc

2010–2013

Apple Inc.

Teaching Assistant, Cocoa Camp

- Helped Apple Developer Publications teach iOS development to university professors and students

2008–2010

Co-Founder & President, BYU CocoaHeads, Provo, UT

- Organized weekly meet-ups (“NSCoder Night”) and monthly instructional meetings
- Presented frequently on Cocoa topics

EDUCATION

2010 Bachelor of Computer Science, Brigham Young University, Provo, UT

OTHER

Proficient in conversational Spanish

Extremely opinionated on [date-and-time calculations](#) and parsing mathematical expressions

Loves science fiction, fantasy, and mystery fiction

Heavily invested in Brandon Sanderson’s writing

Still impatiently waiting for Patrick Rothfuss’s sequel to *The Wise Man’s Fear*