

EXPERIENCE

- 2017–Now **Senior iOS Engineer**, Product Experience Team
Snap Inc.
- Team lead on rapid prototyping of new ideas
 - Perform investigation in to new concepts, rewrites, refactoring
 - Provide guidance on platform and architectural best practices
- 2015–2017 **Maps Software Engineer**, Apple Maps
Apple Inc.
- Independently developed and distributed an internal app to help engineers manage development environments. Used across the company and included in New Employee Orientation (“Xcode Dashboard”, available on tools.apple.com)
 - Primary owner of the Maps Extensions architecture in MapKit and Maps
 - Worked closely 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 **Lead engineer**, WWDC app
Apple Inc.
- 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
- 2013–2015 **Evangelist**, Developer Relations
Apple Inc.
- 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
- 2010–2013 **UIKit Framework Engineer**, iOS Apps & Frameworks
Apple Inc.
- Re-architected UIDatePicker to support all calendrical systems and all locales
 - Wrote native pull-to-refresh implementation (UIRefreshControl), working closely with HI team
 - Fixed bugs in system-provided widgets, such as UIProgressView and UIButton
 - Actively involved in cross-team API design and review
- 2009–2010 **Mac Software Engineer**
Mozy
- 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 **Independent Developer**
2017–Now
- In the top 0.05% of all-time contributors on stackoverflow.com
 - Authored [DDMathParser](#), a highly-extensible library for parsing text into mathematical expressions
 - Authoring [Chronology](#), a safe and correct date/time library for Swift
 - Active in the Swift Evolution process on forums.swift.org
 - Developed several iOS apps, including the 1.0 version of [Mactracker](#)

TEACHING, MENTORING, & PRESENTATIONS

ONGOING **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 software creation process

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 **Advanced NSOperations**

Apple Inc.

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

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 **Internationalization Tips & Tricks**

Apple Inc.

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

2010–2013 **Teaching Assistant**, Cocoa Camp

Apple Inc.

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

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

WWDC 2011 **iOS Printing System**

Apple Inc.

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

MACTECH **The Power of Predicates**

CONF 2010

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

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 reading Science Fiction, Fantasy, and Mystery novels

Heavily invested in Brandon Sanderson’s writing

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