

# Andy Liang

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## TECHNICAL SKILLS

**Proficient Languages** Swift, Objective-C, C, C++, Racket (Scheme), Java, JavaScript, Python  
**Platforms and Tools** UIKit, SwiftUI, macOS Catalyst, Xcode, CocoaPods, Realm  
**Design Tools** Sketch, Figma, Adobe XD, Adobe Photoshop

## WORK EXPERIENCES

### Apple

May – Aug 2019 / Jan – Apr 2020

UIKit & SwiftUI Engineer, Co-op – Cupertino, CA

- Collaborated with the Human Interface Design Team on refreshing and modernizing **UIPageControl**.
- Designed new **UIPageControl** image customization and interaction APIs for iOS & iPadOS 14.
- Implemented new Context Menu APIs for **SwiftUI** shipping with the iOS & iPadOS 13 SDK.
- Prototyped experimental Drag and Drop interactions on iOS & iPadOS using **SwiftUI**.
- Assisted developers from around the world in UIKit, SwiftUI, and macOS Catalyst labs at WWDC 2019.

### Splunk

Sep – Dec 2018

Native iOS, Software Engineering Co-op – San Jose, CA

- Architected, designed, and prototyped a business analytics Splunk iPad app using **Swift**.
- Iterated through many **UX design** patterns to take full advantage of the larger iPad Pro form factor.
- Implemented annotations feature with precise Apple Pencil drawing support using **CoreGraphics**.
- Developed internal SDKs using **Swift**, **VIPER**, and **CocoaPods** to modularize app-building process.

### Yahoo! Inc. / Oath Inc.

May – Aug 2017 / Jan – Apr 2018

iOS Software Engineering Co-op – Sunnyvale, CA

- Developed the **next-gen streaming protocol** for the iOS Flurry Analytics SDK using **Objective-C**.
- Utilized the **Actor concurrency model** to achieve modular architecture for reduced SDK size.
- Implemented revenue analytics, custom app groups, and iPad support for the official Flurry app.

## PROJECTS

### Sigma Planner – iOS

Sep 2015 – Present

<https://apps.apple.com/app/sigma-planner/id1106938042>

- Created a student task planner with **Realm** and **CloudKit** data sync with over 62,000 downloads.
- Implemented an iPad interface with productivity features like trackpad and multi-window support.
- Reached the App Store Top 10 Charts for the Education category in multiple-countries.

### Blurry – iOS/macOS

Jun 2017 – Present

iOS: <https://apps.apple.com/app/blurry/id1254612844>

Mac: <https://apps.apple.com/app/blurry/id1482686361>

- Built an iOS and macOS (**Catalyst**) app that allows users to apply gaussian blur to their photos.
- Utilized **Grand Central Dispatch** to continuously process image blurring efficiently.

## EDUCATION

### Honours Bachelor of Computer Science

Sep 2016 – Dec 2020

University of Waterloo – Waterloo, ON

- **Achievement:** Won First Place in contest for building most-optimized WLP4 (C-like) compiler.