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**, **macCatalyst**, 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 macCatalyst 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.
- Streamlined outdated testing solutions used by the QA team into one single unified application.

PROJECTS

Sigma Planner – iOS
Sep 2015

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

- Designed and created a student task planner with **Realm,** with over 50,000 downloads in one year.
- Reached Education Top Charts on the App Store in 2017, including **Top 5 Charts** in **7 countries**.

Blurry – iOS/macOS
Jun 2017

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
(Expected) Sep 2016 – Dec 2020

University of Waterloo – Waterloo, ON

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