

Available: January – August 2020

Education

Northeastern University, Boston, MA

September 2016 – May 2021

Khoury College of Computer Sciences, Bachelor of Science in Computer Science

Courses: Programming Languages | Computer Systems | Networks | Algorithms | Graphics | Object Oriented Design

Honors: GPA 3.6 / 4.0 | Honors Program | Dean's List

Activities: Club Roller Hockey (Treasurer) | Fundamentals of Computer Science Teaching Assistant (4 years)

Computer Knowledge

Languages: Python | Swift | Objective-C | Java | C | Racket | Kotlin | JavaScript / TypeScript | Haskell | HTML | CSS

Tools: iOS SDK | Firebase | Fastlane | CocoaPods | Android SDK | JUnit | Matplotlib | Testrail | WebGL

Work Experience

Starry, Boston, MA

January – August 2019

Systems Integration & Validation Engineer Co-Op

- Developed and implemented new features and bug fixes for internal software used across the company. Regularly worked with Linux, configured networks, managed embedded systems, improved continuous integration, and automated test results.
- Designed and built a testbed for reproducing critical issues observed in our radios. Controlled 32 access points and Raspberry Pis through custom software using Python and Linux. Successfully scaled prototype, recognized problems, and saved weeks of work.
- Contributed new features and bug fixes for test orchestration frameworks that dynamically run and report test results in Python. Refactored internal applications for company wide use with full unit test coverage and documentation.
- Implemented new testing requirements on production radio testbeds. Added support for measuring various RF components, graphing performance results, integrating new hardware components, and verifying the testbed's integrity in Python.

ASICS Digital / Runkeeper, Boston, MA

January – July 2018

Mobile Engineer Co-Op

- As a member of a seven-person team, added features and fixed reported bugs in iOS, watchOS, and Android versions of the Runkeeper mobile application using Swift, Objective-C, and Java.
- Refactored existing training plan screens and developed a new UI for a better user experience on iPhone. Migrated untested, legacy, Objective-C code to Swift using MVP design and unit testing.
- Updated the login and signup flows to comply with GDPR for the iPhone app. Created new email opt-in screens to give existing users the option to sign up for important emails, complete with unit testing.
- Implemented a new A/B testing workflow for experimental features in the iOS app using Optimizely. Added an experiment giving new users a free trial of Runkeeper Go, leading to better conversion rates and full integration on iOS and Android.
- Developed patches for application crashes, timing optimizations, unified font, color, interface, and animation changes.
- Created an iPhone app using ARKit to view runs on a 3D map in the real world, winning People's Choice for our hackathon.

Green Tomato Grill

August 2018 – Present

Mobile Application Developer

- As a freelance developer, designed, developed, tested, and deployed mobile applications for iOS and Android to facilitate ordering, catering, location information, and menu options for Green Tomato Grill restaurants.
- Built intuitive restaurant location map with Swift and MapKit on iOS, and Kotlin and Google Maps SDK on Android.
- Implemented analytics and crash reporting features using Google Firebase and Crashlytics to track conversions and metrics.

Personal Projects

- **LazyMan:** Developed iOS, macOS, tvOS, web and Chromecast apps to directly play any live or archived NHL or MLB game. Pulls from NHL and MLB public APIs for storing and proxying game data, and is programmed in Swift, Python, and JavaScript.
- **Personal Homelab:** Configured a Dell PowerEdge R710 server using Proxmox, pfSense, FreeNAS, Ubuntu, and Docker for firewall/routing, storage, development, continuous integration, VPN, and game servers for family, friends, and personal use.

Activities & Interests

H-F Operation Snowball / Cebrin Goodman Teen Institute

2014 – Present

- As coordinator, directed, managed, and led numerous multi-day anti-drug and alcohol leadership programs for teens in Illinois.

Cooking | Tacos | Running | Hockey | Virtualization | Open Source Software | Networking | Hardware