

Kyle Musco

Arlington, VA • 610-787-0426 • kyle@kylemusco.com

PROFESSIONAL EXPERIENCE

Beacon AI *Senior iOS Engineer*

January 2022 - Present

- Lead iOS developer for Beacon's AI copilot that provides advisories to improve performance and safety, assists with route planning and optimization, displays radio transcriptions, and aids in checklist completion
- Built iPad application using MVVM-C architecture, Swift, and SwiftUI
- Implemented websocket based chat feature allowing pilots to communicate with support via text
- Designed protocol based networking layer using URLSession to mock websocket connections for testing
- Developed session replay feature that plays back network requests and user interactions to create a repeatable debug environment using Core Data and S3
- Visualized FAA maps, route plans, and real-time location data using Mapbox
- Automated process of georectifying FAA maps and converting to Mapbox format (Python, S3, SQS)
- Wrote unit, UI, and integration tests using XCTest, XCUITest, and FBSnapshotTest frameworks
- Established CircleCI pipeline for regression testing and Test Flight deployment
- Wrote system design documentation to translate product ideas into specifications before implementation
- Served as EM for backend, web application, and design teams for 5 months in addition to iOS role
- Responsible for defining interview guidelines, conducting system design interviews, and on-boarding

Orbit Logic *Software Engineer*

March 2018 - January 2022

- Lead iOS, Android and backend developer for SpyMeSat (Objc-C, Swift, Java, Kotlin, Node.js, MongoDB)
- Developed augmented reality feature for viewing satellites as they pass overhead (Swift, ARKit)
- Designed location monitoring as a service product which aggregates satellite imagery archives to alert users of new imagery for their locations of interest, increasing imagery sales by 65% in 2021 (Node.js)
- Lead Air Force SBIR to detect frack sites in satellite imagery with 70% accuracy (OpenCV, Python)
- Designed REST API to support web client and 3rd party integration for SpyMeSat (Node.js)
- Integrated Stripe payment SDK for iOS and Android
- Automated QA process by creating unit, interface and integration tests (XCTest, Espresso, Postman)
- Maintained production servers hosted through Amazon Web Services (EC2, S3, DocumentDb)
- Maintained CI server for uploading builds to the App Store and Google Play, and automated testing (Jenkins)

PROJECTS

Navigator

- Laboratory management web and iOS application for MRG Laboratories, a grease and oil analysis company
- Provides customers with real-time status updates and analysis reports through a dashboard
- iOS app scans barcodes to load sample information, no longer requiring manual data entry
- Developed REST API for lab equipment to post results to Navigator when tests complete
- Hosted on Amazon Web Services (Elastic Beanstalk, EC2, RDS, S3)
- Used by companies such as Boeing, Honda, Volkswagen, Hershey, and the US Army
- Reduced company's software expenses from \$2000 to under \$100 per month

SKILLS

- iOS: Swift, SwiftUI, Objc-C, Combine, Core Data, Mapkit, Mapbox, ARKit, VisionKit, UIKit, StoreKit
- Other Languages: Node.js, Python, Java, C#
- Testing Frameworks: XCTest, Espresso, Postman, Selenium
- Cloud Platforms: AWS, Heroku

EDUCATION

York College of Pennsylvania

- Computer Engineering, May 2017