BRIAN LIN

Software & Embedded Systems Engineer | (408) 921-9880 | pblin@umich.edu | brianpoanlin.com

EDUCATION

University of Michigan | Ann Arbor, MI — Expected Graduation: April 2021

Computer Engineering, Bachelor of Science in Engineering - GPA 3.5

- Focuses: *Embedded Systems, Computer-Based Control Systems*
- Key Coursework: *Data Structures and Algorithms (EECS 281), Embedded Systems (EECS 373), Computer Organization (EECS 370), Control Systems and Analysis (EECS 460)*

EXPERIENCE

Apple | Cupertino, CA — June 2020 — Present

Software Engineering Intern, Sensing and Connectivity (CoreMotion - Health)

- Architect, develop, and test clinical proctoring tools that communicate with low level system sensor services to monitor and validate data collection to minimize critical data loss for high profile studies
- Lead scoping conversations with engineering managers and stakeholders to prioritize feature implementation
- Summer 2020 commitment

Apple | Cupertino, CA — January 2019 – August 2019

Software Engineering Co-Op, Field Diagnostics Tools and Systems Engineering

- Architected, developed, and deployed software that drive iPhone inspection fixtures in factories and repair centers while working closely with hardware vendors to meet the production timeline
- Designed MacOS and iOS software that perform diagnosis of Apple iOS products with Swift and Objective-C
- Prototyped basic circuits to integrate sensors into hardware I/O boards and controllers
- Effectively communicated engineering requirements, documented scope, and demonstrated technical achievements in front of management to ensure successful global deployment

Weight Watchers (WW) | New York, NY — May 2018 – August 2018

iOS Software Engineering Intern, User Authentication and Onboarding

- Built software in Agile development sprints with Swift to maintain the top-ranked WW App by accepting tickets, estimating point values, and preserving code livability with continuous integration tools
- Worked with designers and compliance officers to ensure feature implementations are secure and accessible to all
- Engaged in code reviews with senior engineers, created formal pull requests, and frequently submitted builds for quality assurance testing to deliver successful biweekly updates to the iOS App Store

Emerging Technologies Group | Ann Arbor, MI — January 2018 – Present

Software Developer, iOS Augmented Reality Development and Research

- Program flexible, scalable augmented reality frameworks for iOS to enable easy scene creation, vivid animations, and accurate asset placements within a simulated space
- Engineer augmented reality and marker solutions inside designated buildings within the College of Engineering to revolutionize the indoor tour experience

Independent iOS Development and Hackathons | Various Locations — July 2011 - Present

Software Developer, Team Based Short Term Projects

- Engineer innovative solutions and demonstrate effective proof of concept in short periods of time
- Recognized at PennApps XV (Best Education Hack, 1517 Grant, Top 10), PennApps XVII (Top 30), MHacks X (Best Financial Hack), and Hacking Generation Y (Best NoSQL Database)
- Recognized Apple WWDC Scholarship Recipient for creativity and demonstration of knowledge with the iOS SDK

SKILLS

Software C++ | C | Objective-C | Swift | Assembly | Agile & Scrum | MATLAB | React Native | Python | Source Control

Hardware Verilog | FPGA | ARM Based Processors | Quartus | Logical & Electrical Circuits | Control Systems

RECENT PROJECTS

Smart Garage | Embedded, iOS — May 2020

- Reconfigure an existing Lift Master garage system to enable Wi-Fi control from an iOS device by modifying the control and power circuits
- Utilize an ARM Cortex-M3 chip to perform SPI communication with an ethernet chip to securely send and receive TCP packets with the host iOS app for user interactions

Bridge | React Native (iOS, Android, Web) — March 2020 - Present

- Redesign student-recruiter interactions using web sockets to establish in person digital card exchanges to foster more organic conversations and allow the students to drive the conversations
- Integrate Zoom video conferencing and custom queue management to create a smooth virtual career fair experience