Sawyer Vaughan

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▶ Education

Olin College of Engineering
Electrical and Computer Engineering 2017
GPA: 3.74
Ray Meester Scholarship and National Merit Scholarship
Twenty thousand dollar annual Olin Merit Scholarship

▶ Work

Response Care
Android Developer

I developed services for nurses at senior care facilities. I worked with their server-side application and their Android app in order to add functionality to their service.

Boolio
Co-Founder and Lead iOS Developer

I am the lead iOS developer and co-founder of Boolio, a social questions application. Boolio enables users to ask binary questions, which are displayed in a feed for other users. Users can vote on questions quickly, enabling high interaction and quick feedback for the question's poster. Find out more at boolio.io. Boolio was programmed in Swift.

Games for Pebble
App Developer

I programmed Games for Pebble, an app for the Pebble family of smartwatches. The app, programmed in C, features seven games for users. The chess game features a complex artificial intelligence which uses a minimax algorithm to determine the best move, while still being small enough to fit in the Pebble's limited memory space. The app has been downloaded over 24,000 times, and has been featured in Pebble's app store.

Insper   São Paulo, Brazil
Education Consultant

I traveled to Insper, a well-regarded business university in São Paulo, Brazil, to participate in curriculum development for their brand new engineering program. I helped develop two courses: "Software Design", where students learn to code in Python, and "Internet of Things", where students learned to use Twitter to control the Intel Galileo board.

Onshape   Cambridge, MA
iOS Developer Intern

I am an iOS development intern at Onshape. Onshape is a company that is revolutionizing CAD. They have the first and only full-cloud 3D CAD system. I am working on their iOS applications to enable users to CAD on the go, on their phone or tablet.

▶ Leadership and Teaching

Boy Scouts · Eagle Scout   July 2013
I earned the Eagle Scout award after organizing and leading fellow Scouts to renovate an observation blind at Barr Lake State Park. We replaced the roof with sheet metal, painted the interior, and planted a variety of trees and bushes. The project totaled 180 hours of community service.

Android Development   Fall 2015
I taught Android Development as a class for Olin students. By the end of the class, students with no Android or Java experience produced complete applications. We taught students Java and Android concepts such as the Android framework, interacting with the web, and using databases.

▶ Projects

SAE Mini-Baja Competition Team
I work on the drivetrain and electrical sub-teams of the Phoenix Racing Mini Baja team at Olin College. For the drivetrain sub-team, I took charge of a total redesign of the chainbox's tensioners, and was involved in assembly and fabrication of our team's chainbox. For the electrical sub-team, I worked on the team's website in order to increase publicity and funding for the team, as well as working on an on-car GPS sensor system to detect the lap times of the car. Next year, I will be in charge of maintaining and redesigning the team's website

Mobile Prototyping
I used the Spotify Android SDK to program a collaborative playlist app for Android in Java called "PartySpot". Users could synchronize music playback, and suggest songs to the playlist's host. We used a remote database to store the current song and suggestions. All of the phones playing music were notified when a song changed, and they would synchronize their music playback.

Computer Architecture
I developed a Field-Programmable Gate Array (FPGA) guitar. We simulated the circuitry necessary to generate the guitar with Verilog, and then used that to program the FPGA. The user can use switches to "strum" and the FPGA generates the proper frequency. The FPGA also had an auto-play mode, where the FPGA would play the song "Sweet Child o' Mine".

▶ Skills

LANGUAGES	FRAMEWORKS
Swift	Android Development
Python	iOS Development
Java	node.js
JavaScript	Git
C	Web Development
Objective-C	Flask