# **Alexander Barcenas**

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#### Education

B.S., Computer Science, UC San Diego Graduation Date: June 2018 GPA: 3.76

**Computer Languages** 

Proficient: C++, Swift Familiar: Java, C, Python, HTML, CSS, Javascript

**Experience** 

### Amazon Lab 126 - Software Development Engineer Intern

6/2017 - present

- Working within the Alexa Voice Services division, responsible for implementing product features for Amazon Alexa.

## **UCSD CSE Department -** CSE Tutor

9/2016 - 6/2017

- Mentoring students on the basics of object oriented design, data structures, and software engineering.
- Assisting students with the process of diagnosing compilation and runtime errors in C++, C and Java.
- Helping students decompose program specifications and follow style requirements.
- Providing guidance to students during labs that teach them new concepts and technologies.

#### Students for the Exploration and Development of Space, UCSD - Software Engineer

10/2015 - 10/2016

- Developed software in C++ that will operate a cube satellite for NASA's Cube Quest Challenge.
- Won third place in NASA's Ground Tournament-2 beating other universities and companies.
- Collaborated with other subteams in order to ensure that the software met all of their needs for the mission.
- Researched and learned from academic papers about software utilized by other cube satellites.
- Designed the cube satellite's software structure and constructed a UML class diagram for the design.
- Wrote and revised cube satellite software documentation used in submissions sent to NASA.

## **Projects**

Tic Tac Toe Mania 12/2016 - 1/2017

- Developed and released an iOS app that allows users to play tic tac toe games against another person or a computer.
- Implemented artificial intelligence using minimax with alpha-beta pruning for both tic tac toe and ultimate tic tac toe.
- Used touch gesture recognizers in order to allow users to interact with and make moves on the tic tac toe boards.
- Working with Google's AdMob platform to monetize the app by displaying banner and interstitial ads.

POGOGUIDE 7/2016 - 12/2016

- Developed and released an iOS game guide app for Pokemon Go that is used daily and has been installed 500 times.
- Utilized table and collection views in order to present information and tools for the games.
- Implemented a tool that evaluates Pokemon matchups and displays all favorable Pokemon matchups for gym battles.

#### **Verimark** - Project Manager

3/2016 - 6/2016

- Oversaw nine other students during the development of an document e-signing application.
- Upheld project deadlines resulting in the second highest project score out of 20 student teams.
- Conducted code reviews and testing which led to successful implementation of basic app functionality.

# **Completed Coursework**

- Advanced Data Structures (CSE 100)
- Software Engineering (CSE 110)
- Design and Analysis of Algorithms (CSE 101)
- Human-Computer Interaction Design (CSE 170)
- Computer Networks (CSE 123)
- HCI Programming Studio (COGS 121)
- Programming Languages (CSE 130)
- Computer Operating Systems (CSE 120)