Alexander Barcenas

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Education

B.S., Computer Science, UC San Diego   Graduation Date: June 2018   GPA: 3.74

Skills

Computer Languages: C++ (Proficient), Swift (Proficient), Java, C
Tools: Git, Vim, Xcode, GDB

Experience

Cube Satellite (SEDS, UCSD) - *Software Engineer*   **(10/2015 - present)**
  - Developing software in C++ that will operate a cube satellite for NASA's CubeQuest Challenge.
  - Won third place in NASA's Ground Tournament-2 beating other universities and companies.
  - Collaborating with other subteams in order to understand needed software functionality.
  - Implementing control systems algorithms used for manipulating the cube satellite's orientation.
  - Researched and learned from academic papers about software utilized by other cube satellites.
  - Designed the cube satellite's software structure and created a UML class diagram for the design.
  - Wrote and revised cube satellite software documentation used in submissions sent to NASA.

Computer Science and Engineering Tutor   **(9/2016 - present)**
  - Mentoring students on the basics of object oriented design and data structures.
  - Assisting students with compilation and runtime errors in C++, C and Java.
  - Helping students decompose program specifications and follow style requirements.

iOS App Development   **(7/2016 - present)**
  - Developed and released two iOS apps that serve as informational references for popular games.
  - Utilizing table and collection views in order to present information on both iPads and iPhones.
  - Updating apps to integrate with any changes made to the technologies used in the apps.
  - Working with Google's AdMob service as a method of app monetization.

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.
  - Managed changes made to the project code base through code reviews and testing.

Relevant Coursework (Planned completion by Summer 2017)

Completed:
  - Advanced Data Structures (CSE 100)
  - Software Engineering (CSE 110)
  - Design and Analysis of Algorithms (CSE 101)
  - Computer Organization and Systems
    Programming (CSE 30)

Ongoing:
  - Theory of Computability (CSE 105)
  - Human-Computer Interaction Design (CSE 170)

Planned:
  - Introduction to Modern Cryptography (CSE 107)
  - Networked Services (CSE 124)