Alvin Ma

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OBJECTIVE

To obtain an entry level position in the field of Electrical Engineering and/or Computer Science and further improve my skills and knowledge.

EDUCATION

BS Electrical Engineering and Computer Science, GPA: 3.17/4.00
San Jose State University, San Jose CA, expected 12/2017

Relevant Coursework: Circuit Design, Data Structures, Digital Design, Circuit Board Testing, Error Debugging, Object-Oriented Programming, System Simulation

SKILLS & CERTIFICATIONS

Technical: Atmel Studio, AutoCAD, Debugging, Electronics Design and Soldering, FPGA, Linux, Microsoft Office, Microprocessor (Atmel SAM D20, Arduino), Microsoft Visual Studio, Networking, Programming (Assembly, C, C++, C#, MatLab, Python, Java), Solid Works, Statistics, Troubleshooting, uVision5, Verilog, Web Development (HTML, CSS, JavaScript), Xilinx

RELEVANT PROJECTS

Calculator Design with Embedded Systems, Spring 2016
• Programmed a scientific calculator in C programming language using Atmel Studio IDE and SAMD20 Microcontroller
• Configured keypad with a voltage matrix using transistors and voltage inputs to create specific button functionality
• Created De-Bouncing feature to avoid multiple button press while displays are constantly up

Restaurant Reservation Application, Fall 2015 – Summer 2016
• Programmed a restaurant reservation application in Java that scheduled and reserved specific tables
• Created application's reservation system based on a round robin algorithm
• Implemented a GUI for customer's selection and ease to use

Path Following Hovercraft, Fall 2015 – Summer 2016
• Designed and implemented a hovercraft using an Arduino microcontroller
• Used C programming language to keep sensors and fan rotations in sync of the path
• Took in consideration of keeping budget low and efficiency high
• Resulted with a hovercraft capable of tracking and following a given path

Java-Based Maze Game, SJSU, Fall 2014
• Led a team of five in creating a computer application game in Java programming language
• Designed and implemented a Rogue-like Maze game with implementation of different Object-Oriented strategies
• Resulted with a working application that ran smooth and playable with no errors

Design and Build of RC Airplane, Peralta Engineering Club Project, Fall 2013 – Spring 2014
• Worked in a group of five and took the role of circuit design and system controls
• Designed and implemented a circuit board that controls the flaps of the airplane wings, propeller, and motors for the wheels
• Implemented connection between receiving controller and RC plane
• Resulted with the plane to take flight and maintained levitation

ACTIVITIES/AWARDS

Member, Peralta Engineering Medicine and Science Club, August 2013 – June 2014

Member, Institute of Electrical and Electronics Engineers (IEEE), August 2010 – present

Member, Game Dev Club, January 2015 – present

Member, Computer Science Club, January 2015 – present

Member, Tau Beta Pi (TBP) Engineering Honors Society, August 2015 - present