Eric Syu

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Education:

B.S, Mathematics-Computer Science UC San Diego

Expected Graduation Date: June 2018

Related Coursework:

Theory of Computation (CS105), Design and Analysis of Algorithms and Systems (CS101), Components and Design of Digital Systems (CS140), Advanced Data Structures (CS100), Components of Design of Digital Systems (CS30), Object Oriented Design (CS12).

Technical Proficiency:

C++, C, Javascript, Java, ARM, UNIX, Git, Arduino, Raspberry Pi, PHP, Html/Css Personal webpage @ http://syueric1102.github.io, including a blog that showcases my robotic projects @ http://syuslab.blogspot.com/

Experience:

UT Dallas Research Internship

Summer 2015

 Designed and implemented code to decode and use I2C signals for NI MyRio and Arduino to build a human control interface for COMEX, a robotic exoskeleton designed to help get paralyzed patients back on their feet.

Siemens Taiwan Summer Internship

Summer 2013

 Worked in projects to help the Taipei 101 building and a local hospital to reach energy saving standards and receive LEED energy saving certification.

Projects:

Homemade 3D Printer

http://syuslab.blogspot.com/2016/10/homemade-3d-printer.html

- I designed and built a homemade 3D Printer from scratch using recycled motors; kept costs extremely low by sourcing recycled parts and materials without compromising quality.
- Held online workshop for fellow university students who are also interested in creating their own 3D printers.
- Printed parts for fellow students including laptop stands, models, mechanical part replacements, etc.

Stratos

https://devpost.com/software/stratos

- Designed and prototyped a physical weather visualizer using a Raspberry Pi, water pump, LED lights, and mister to simulate forecasted weather conditions
- Built front end to pull weather data using simpleWeather.js and communicate with Raspberry Pi backend apache server with php

Autocompletion in C++

https://bitbucket.org/eric_syu/pa3_autocomplete

 Builds a dictionary using multiway tries and allows autocompletion by returning valid words when a part of a word is entered.

Awards:

Best Final Project, UCSD COGS 8 Hands On Computing

2016

 Designed, programmed, and built an Arduino beverage dispensing robot that pumps drinks into cups placed on sensors, won best project out of 20+ individuals.

Leadership:

Team Co-Captain, Vex Robotics

2011-2014

 Constructed robots and programmed them to complete certain tasks and to compete in the Vex Robotic Competition, specialized in overseeing mechanical function and design.