

Eric Syu

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Education:

B.S, Mathematics-Computer Science
UC San Diego

Expected Graduation Date: June 2018

Related Coursework:

Design and Analysis of Algorithms and Systems, Components and Design of Digital Systems,
Advanced Data Structures, Computer Organization and Systems, Object Oriented Design.

Technical Proficiency:

Java, C++, C, ARM, UNIX, Github, Arduino

Created a blog to showcase my robotics projects at <http://syuslab.blogspot.com/> as well as a personal webpage at <http://syueric1102.github.io>

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:

Binary Search Tree in C++

https://bitbucket.org/eric_syu/pa1_bst_in_c

- *C++ implementation of binary Search Tree, constructs binary search tree given a large file of actors and returns whether or not a certain actor is present in the tree. Also able to return size and height of BST.*

Huffman Encoder/Decoder C++

https://bitbucket.org/eric_syu/pa2_huffman

- *Compresses/decompresses text files by using encoding scheme represented by building Huffman Trees.*

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.*

6 Degrees of Kevin Bacon C++

https://bitbucket.org/eric_syu/pa4_6_degrees

- *C++ implementation of trivia game that looks for shortest connection between Kevin Bacon and another actor in terms of movies they are casted in using shortest path algorithm.*

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.*

FRC Robotics Competition Rookie Award

2011

- *Collaborated with a team of 10 to create a robot capable of playing basketball*

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.*