Austin Xu

Local Address:

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Objective

Meticulous electrical engineering student with hardware test and design experience seeking to apply my classroom and project experience to either designing or verifying analog, digital, or mixed signal systems.

Education

University of Michigan

Ann Arbor, MI

Bachelor of Science in Electrical Engineering

GPA: 3.972/4.0

December 2018

Awards & Honors: William J. Branstrom Freshman Prize Recipient [Fall 2015], College of Engineering Dean's List [Fall 2015, Winter 2016, Fall 2016], University Honors [Fall 2015, Winter 2016, Fall 2016]

Relevant Coursework:

Digital Integrated Circuits

Intro to Signals and Systems

Probabilistic Methods in Engineering

[EECS 312]
Programming and Introductory Data

[EECS 216] Intro to Logic Design [EECS 301] Intro to Circuits

Structures [EECS 280] [EECS 270]

[EECS 215]

Experience

Radiation Detection and Measurements Group, Research Assistant

October 2016 – present

- Optimized the preamplifier portion of an analog gamma ray sensing circuit to reduce noise and minimize capacitance through iterative simulation.
- Developed and simulated various schematic versions of the circuit with Altium Designer.
- Collected data used to determine positions of radiation concentration from an emission source using a scintillator and a silicon photomultiplier (SiPM). Used raw data and Matlab to plot positions of radiation concentration.

University of Michigan Computer Aided Engineering Network, Web Publisher

May 2016 – October 2016

- Automated the management of form input data with Google Apps Scripts to streamline administrative processes, such as budget requests and server and database requests.
- Researched Linux container based web application development platforms (Docker) as a potential alternative to web applications currently being developed within CAEN.

ENGR100 Final Project, Electrical Engineering Lead, Documentation Lead

March 2016 – *April* 2016

- Led sub-team in charge of design and implementation of Remotely Operated Vehicle (ROV) electrical systems.
- Integrated electrical control system and soldered control box in order to maximize ROV speed and maneuverability.
- Led sub-team documenting project progress. Reviewed and edited team reports and presentation to ensure effective communication with project supervisors.

Human Powered Submarine Student Project Team, Electrical Engineering sub-team September 2015 – May 2016

- Soldered printed circuit board (PCB) and integrated submarine electrical control systems to ensure proper maneuverability of submarine.
- Developed and debugged program in collaboration with peers which executed SPI data transfer between rotary position sensor and Teensy microcontroller.

Activities and Leadership

University of Michigan

Eta Kappa Nu- Beta Epsilon, IEEE Honor Society SWAM Club, Member

September 2016 – present

 $September\ 2015-present$

Skills

Languages spoken: German (professional working capacity, 6 years of experience, 1 month abroad).

Programming Languages: Experience with Verilog, C++, Matlab, Javascript. Applications: Experience with Altium Designer, Multisim, Quartus, LabVIEW.