

EDUCATION

University of Washington

Seattle, WA | Expected June 2016

BS in Electrical Engineering

- EE GPA: 3.7
- Concentration: Embedded Systems

Relevant Coursework:

- Circuit Theory
- Signals & Systems
- Digital Circuit Design
- Devices and Circuits
- Java Programming
- Bash Scripting & C Programming
- Web Programming

SKILLS

- Java | C | HTML | CSS | JavaScript
- Git | Verilog | FPGA programming
- Quartus | ModelSim | LTSPICE
- MultiSim | Bash Scripting w/Linux
- Matlab | Analog Circuit Design
- LabView | Digital Circuit Design

OBJECTIVE

I am seeking a summer internship where I can apply my engineering knowledge and improve my skill set through working with teams who are building the future.

WORK EXPERIENCE

UW EcoCar Electrical Engineer (September 2014 – Present)

- Using C programming and embedded systems, I am creating a system to measure state of charge.
- I design the battery pack and charging system for our car using knowledge on power electronics and embedded systems.
- Led a team of engineers to design electrical models of the subcomponents in the battery pack charging system using Matlab, Simscape, and Simulink.

Undergraduate Research Assistant | UW EE Dept (January 2014 – Present)

- Responsible for creating PCB designs using EAGLE CAD, implementing them in lab, and testing circuit boards to see if they perform the intended task using oscilloscopes, DMM's, function generators, and LTSPICE software.
- Developed a Low Dropout Power Regulator from scratch to regulate the power supply to an expensive circuit board. The board is now protected from high voltage, high current, and has reverse current protection.

Grants Management Assistant | UW BioE Dept (Aug 2013 – Jan 2014)

- Responsible for analyzing budgets and creating budget projections based on educational grants received.

PROJECT EXPERIENCE

School HW/SW Projects:

- Morse Code: (Verilog)
 - Programmed to the FPGA board a Morse code translating system that allows the user to input a valid Morse code, and outputs the corresponding alphabet.
- Tug of War: (Verilog)
 - Programmed to the FPGA a game where two users can play Tug of War on the FPGA board using buttons and multiple LED's.
- Memory Manager: (C)
 - Created a memory management system that implements the malloc and free operations in C.

Arduino Wi-Fi Garage Door Opener:

- Implemented from scratch a circuit with my Arduino to control my garage door. I hosted a private web page on my local network at home that I can access to open and close the garage door.

Link-It! Web App:

- At the Dubhacks hackathon, I built an educational web app game to teach new computer science students the fundamentals of a Data Structure, Linked Lists. (Using HTML, JS, CSS)
- The app allows the player to re-arrange linked list nodes represented in a visual format to achieve the correct ordering of the nodes.

Xubuntu 12.10 Linux Crypto-currency mining:

- Purchased 3 AMD Radeon 9500 GPU, motherboard, CPU, RAM, and retrofitted it into a well-ventilated crate. I generate 1 litecoin (about \$25) in revenue per day.
 - Built cgminer from source@github, scripted it to restart automatically in case of outage
 - Setup SSH for remote monitoring it from iPhone SSH client app