

EDUCATION

University of Washington

Seattle, WA | Graduating June 2016

BS in Electrical Engineering

- Concentration: Embedded Systems & Software Development
- EE GPA: 3.7

Relevant Coursework:

- Java Programming I & II
- Data Structures & Algorithms
- Web Programming
- C/C++ Programming & Bash Scripting
- Embedded Systems
- Computer Networks
- Computer Architecture
- Digital Circuit Design I & II
- Control Systems
- Devices and Circuits
- Circuit Theory

SKILLS

- Java | C/C++ | HTML | CSS | JavaScript
- PHP | XML | AJAX | Web APIs
- Bash Scripting w/Linux | Git
- Real Time Operating Systems (RTOS)
- x86 Assembly | MIPS Assembly
- Verilog | Quartus | ModelSim | LTSPICE
- MultiSim | Matlab | LabView
- Com Protocols: TCP | UDP | UART | CAN Bus | ARINC 429

WORK EXPERIENCE

Product Engineer Intern | Honeywell Aerospace (June 2015 – September 2015)

- Developed weather radar software to record, playback, and visualize weather data in real time. (C/C++)
- Created Automated Software Testing platform through Linux Environment (Bash Scripting)
- Work in an agile team of engineers to develop, test, and improve avionics systems.
- Developed and tested avionics hardware including Integrated Multi-Mode Receivers and Communication Management Units where I took part in the product development lifecycle (RF Circuits, ARINC 429 Com protocol).

UW EcoCar Engineer (September 2014 – Present)

- Developing software for an open source vehicle infotainment platform that communicates with vehicle hardware to deliver a cutting edge user experience. (Embedded C, RTOS, CAN, JavaScript)
- Utilizing my knowledge of embedded systems and power electronics, I work in a team of engineers to develop a Chevrolet Camaro into an eco-friendly hybrid vehicle.

Undergraduate Research Assistant | UW EE Dept (January 2014 – December 2015)

- 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.

PROJECT EXPERIENCE

Web Design: (HTML, JavaScript, CSS)

- <http://eeshan.londhe.com>
- <https://be.a.cloudgeni.us/>
- Link-It! Web App: Developed a web app to teach new computer science students the fundamentals of a data structure, Linked Lists

Pipelined CPU:

- Designed a fully functional 5 stage Pipelined MIPS CPU. Converts inputted C code into MIPS assembly, Machine Code then executes instructions in hardware. (Verilog, Assembly, C)

Bluetooth Controlled Autonomous RoboTank:

- Programmed an ARM based TI Stellaris Microcontroller using knowledge of Real Time Operating Systems to drive a Bluetooth controlled autonomous tank that fully avoids collisions. (Embedded C)
 - *Manual Mode*: Developed master/slave software to control the microcontroller to drive the tank via Bluetooth.
 - *Autonomous Mode*: Programmed the tank to move autonomously and avoid all collisions. See it live: <https://youtu.be/dcReAuvuEgM>

Arduino Wi-Fi Garage Door Opener:

- Implemented from scratch an Arduino system to control my garage door. I hosted a private web page on my local network that I can access to open/close the garage door.