Byron Wasti

917 683 2209
byronwasti.com
byron.wasti@gmail.com

Education

Olin College of Engineering
May 2018
Candidate, Bachelor of Science in Electrical and Computer Engineering
3.81 GPA

Experience

Rockwell Automation, Collaborative Robotics Research Capstone
Fall 2017-Present

- Member of five person team designing and developing proof-of-concept wearable that leverages emotional intelligence for collaborative robotics.
- Practiced human-centered design with numerous codesigns.

Amazon Robotics, Software Engineering Intern
Summer 2017

- Member of eight person team developing proof-of-concept robot for warehouse automation.
- Developed software using ROS, wrote software for point-cloud manipulation and filtering, and designed and implemented a large-scale, flexible software system in C++.
- Designed sensor-specific point-cloud filtering algorithm.

Onshape, Software Engineering Intern on the FeatureScript Team
Summer 2016

- Designed and implemented various built-in functions for the FeatureScript language.
- Invented and implemented novel autocomplete algorithm for online code editor.
- Challenges included optimizing code, geometric and text-based algorithm development, and working with a large code-base.

Olin Electric Motorsports (fSAE Electric Team)
2014-Present

- Senior Engineer of 40 person electric vehicle club designing Formula Electric racecars for Nebraska SAE competition. Firmware Lead from 2015 through fall of 2017.
- Designed PCBs, wrote firmware, designed large-scale electrical systems, and taught new members about electrical and firmware design.

Audience Inc., Multisensory Algorithm Intern
Summer 2015-Spring 2016

- Built Machine Learning classifiers, developed backend for ML pipeline, developed tools for automating data post-processing and developed software for interfacing wirelessly with Android devices using TCP sockets.

Projects

MIMO Digital Communication Using USRPs
Member of 4 person team which acheived a transmission range of about 12 inches, with an error rate of under 10%.

Designed Adaptive-Biasing Differential Amplifier
Simulated and characterized in LTSpice. Adaptive-biasing was achieved using MOSFET Subtraction sub-circuit for slew detection.

Quantum Computer Simulator in Python
Simulation of 5 fundamental Quantum Logic gates: X, Y, Z, Hadamard and CNOT.

#Hashtag Gloves - Tweeting Smart Gloves
Featured nationally on news outlets such as Buzzfeed and Gizmodo for hackathon project on tweeting gloves

Self-Tuning Guitar Attachment
Member of 5 person team that built a portable device which tunes a guitar automatically. Responsible for Firmware.

Chip-8 Emulator
Designed and implemented an emulator for the Chip-8 instruction set using Rust and Sdl2.

Skills

Proficient in C, C++ and Rust. Competent with Python, Javascript and Git. Familiar with Haskell
Backend development, systems development and firmware development
Circuit and PCB design (Kicad)
CAD software (Onshape, Solidworks, Blender and OpenSCAD)