

Education

Olin College of Engineering

Bachelor of Science in Electrical and Computer Engineering, 3.81 GPA

May 2018

Experience

Wanderu Inc.

Software Engineer

April 2019 - Present

Junior Software Engineer

July 2018 - April 2019

- Designed and implemented a graph algorithm for optimizing the PageRank of the internal linking of city-to-city travel pages. Optimized graph has over 200K nodes and 5M edges.
- Designed and implemented a recommendation system for user trips. Used in email blasts to over 1M users.
- Designed and implemented a translation CMS for supporting custom content on over 1.9M pages across 7 locales.
- Developed a causal inference system using CausalImpact to measure the effect of site-wide changes on session growth.
- Implemented a Request For Comments (RFC) system for getting feedback on system architecture plans.

Amazon Robotics

Software Engineering Intern

Summer 2017

- Member of eight person team developing proof-of-concept robot for warehouse automation using ROS.
- Designed and implemented a sensor-specific point-cloud filtering algorithm to reduce noise.
- Designed and implemented a data visualization system in C++.

Onshape

Software Engineering Intern (FeatureScript Team)

Summer 2016

- Designed and implemented various geometric algorithms for built-in functions for the FeatureScript language.
- Designed and implemented an advanced autocomplete algorithm for online code editor.
- Challenges included optimizing code, geometric algorithms and text algorithms.

Audience Inc., Multisensory Algorithm Intern

Software Consultant

Fall 2015 - Spring 2016

Multisensory Algorithms Intern

Summer 2015

- 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.

Olin Electric Motorsports (fSAE Electric Team)

Firmware Developer

2015 - 2018

- Firmware Lead from 2015 through fall of 2017 for 40-person electric vehicle club designing Formula Electric racecars for the Nebraska SAE competition. Developed software system for distributed CAN network.

Projects

(more at github.com/byronwasti)

Spreadsheet CLI

In-terminal spreadsheet application with dependent cells and basic programming language.

#Hashtag Gloves - Tweeting Smart Gloves

Featured nationally on news outlets such as Buzzfeed and Gizmodo for hackathon project on tweeting gloves.

Open Source Smart Watch

Designed PCB and wrote firmware for a custom Smart Watch. Arm Cortex-M4 processor with firmware in Rust.

Quantum Computer Simulator in Python

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

Skills

Fluent in Rust, Python and Git. Competent in C, C++ and Javascript. Familiar with Haskell and Elm. Backend development, systems development, full-stack development and firmware development. Circuit and PCB design (Kicad).