

Work Experience

- Ball Aerospace – *Embedded Software Engineer* (Oct 2017 – Present)
 - Developing mission-critical flight software in large C++ codebase
 - Writing scripts in Python and Ruby for testing and automation
 - Founder and head of department-wide monthly newsletter
 - Spearheading C++ modernization efforts for the department
 - Pushing department towards a more data-driven culture
- Microsoft – *Product (Program) Manager* (Aug 2016 – Jun 2017)
 - Visual Studio: C++ Language Services, Windows - Sensors
 - Developed technical design documents and specs for engineering initiatives
 - Used data and telemetry to gain insights to drive design decisions
 - Improved customer feedback cycle for verification of new features and designs
 - Identified developer and OEM pain points, and resolved by creating documentation
- LASP – *Student Software Engineer* (May 2015 – May 2016)
 - Laboratory for Atmospheric and Space Physics
 - Developed mission operations software for satellite flight
- Forge Corp. – *Intern* (May 2014 – Aug 2014)
 - Worked with team of other engineers on a classified DOD project
 - Designed, tested, implemented, and integrated hardware
- CU-Boulder – *Resident Assistant (RA)* (Aug 2013 – May 2015)
 - Supported 38 undergraduate residents in honors residence hall
 - Responded to emergencies and crises

Education

- University of Colorado-Boulder (May 2016)
 - Bachelor of Science; Electrical/Computer Engineering; Dean's list; 3.8 GPA

Technical Skills

- Programming: C++, C, Python, MATLAB, SQLite, embedded systems, RISC assembly, operating systems (Unix/Linux/Windows), memory mapped I/O, machine learning basics. Strong grasp of computer architecture.
- Electrical Engineering: Experience with design and analysis of analog circuits, with deep theoretical understanding of linear systems and digital signal processing. Practical experience with surface mounts soldering and lab equipment familiarity. Knowledge of RF.

Engineering Projects

- Radio Agnostic Phased Array – designed, tested, built, and implemented antenna base station for controlling fixed-wing UAV for Capstone senior design project. Primarily focused on embedded software in C++
- WritAble – Improved effectiveness of embedded algorithm for a pen designed to help special needs children improve their writing skills
- Cache Simulator – wrote a multi-level processor cache simulation in C++
- Music Genre Categorizer – hand-rolled categorizer using extracted music features in MATLAB