

Strengths

Adaptable Analytical Articulate
Cooperative Communicator
Dedicated Efficient Hard Working
Innovative Leader Organized
Proactive Strategic Thorough

Technical Skills

Amazon Alexa Circuit Design Eclipse
Arduino FPGA Git Illustrator
Laser Cutting Mathematica Linux
Microsoft Suite MATLAB SFTP
Photoshop Presenting Soldering

Programming Languages

Angular Assembly Bash C/C++
CSS HTML Java Javascript
jQuery LaTeX MySQL NodeJS
PHP Python Spice Verilog

Interests

Internet of Things Control Systems
Embedded Systems Machine Learning
Nanodevices Operating Systems
PCB Design Wireless Communication
Quantum Computation Signal Processing

Education

University of Colorado Boulder

Graduation Date: May 2019

Cumulative GPA: 3.836

- » B.S. Electrical and Computer Engineering
- » B.A. Astrophysics

Professional Experience

Arrow Electronics Inc.

Jun 2017- Aug 2017

Applications Engineering Intern

- » Designed fully functional IoT network for maximizing office and warehouse productivity by monitoring the environment of the facility
- » Developed solutions to minimize trash waste in the company through real-time trash production monitoring

Fiske Planetarium

Jan 2017- Present

Presenter, Program Developer and A/V Expert

- » Designed and presented custom shows to the public about science fiction realism
- » Worked with other team members to create mind blowing audio and visual effects
- » Operated proprietary Digital Sky II planetarium software to inspire and educate audiences of all ages to the beauty of the universe around us

University of Colorado Boulder

Aug 2016- May 2017

Optical Experimentation Facilitator

- » Utilized an argon-ion laser to devise an affordable method for super resolution lithography
- » Developed chemical photoresists and developers to minimize interference line spacing
- » Designed graphical user interface to autonomously run experiment and calculate results
- » Operated scanning electron microscope to view high resolution images of samples

DN2K

Jan 2016- Aug 2016

Software Engineering Intern

- » Wrote Jasmine unit tests on existing modules of the application to develop its sustainability
- » Collaborated to develop an effective plan of implementation for Spring Security
- » Designed contact form to submit client data to MailChimp and Salesforce databases to improve unification of user experience

Assistive Technology Partners

Nov 2014 - May 2017

Webmaster

- » Improved web pages to create a more intuitive and effective online environment
- » Re-organized and digitalized filing and records system
- » Increased program efficiency through collaboration on department projects

ETH Zürich

June 2014 - July 2014

Research Assistant

- » Formulated hypotheses with team regarding expected behavior of radiation pressure
- » Iterated data trials with He-Ne laser and crystal tuning fork
- » Organized data and performed calculations to develop conclusions for publication

Honors and Awards



Boettcher
Alternate



Valedictorian
HRHS



National AP
Scholar



Eagle Scout



Engineering
Honors Program