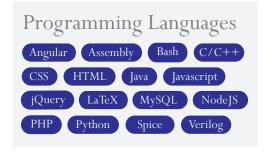
Jacob Melonis













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



Alternate







Scholar



