Gerardo Hidalgo-Cuellar

Relevant Experience

Software Engineer, Intern @ LASP (Laboratory for Atmospheric & Space Physics)

May - Nov 2015 // Boulder, CO

- Increasing efficiency and speed of data bussing systems from different science oriented satellites
- Creating better user interfaces for existing system telemetry programs
- Development in both Python and C

Enhanced Skills: C, Python, SQL, unit testing, individual and team programming

Undergraduate Research Assistant @ University of Colorado

Analysis & Composition of Diffuse Intergalactic Clouds

May 2014 - May 2017 // Boulder, CO

- Retrieval and analysis of spectral data from the Hubble Space Telescope
- Data retrieval using SQL and processed taking molecular composition of diffuse gas clouds found at specific distances

Enhanced Skills: SQL, technical writing, grant/proposal writing, data analysis

Science Educator @ Astrocamp, Guided Discoveries

Jan 2018 - May 2019 // Idyllwild, CA

- Science educator/instructor with a focus on physics & astronomy. Development of curriculum, teaching of technical material, and handling experiments
- Outdoor education, ropes-course technician (safety and management), & youth management. Guiding a group of students (grades ranging from 3-12th) for 3-14 days year-round

Enhanced Skills: Technical communication, teaching, curriculum development

Planetarium/Science Presenter @ Fiske Planetarium

Aug 2013-May 2015, Feb 2017-May 2017 // Boulder, CO

- Presented and put together astronomy, physics, geology, as well as biology planetarium shows for audiences of all ages and communities around the Boulder area, ranging from college students, primary education, families, and adults
- Helped develop educational astronomy labs for use within the planetarium as well as for outreach around Boulder

Enhanced Skills: Curriculum development, Python, technical communication, outreach

Laboratory and Learning Assistant @ University of Colorado

Jan 2017 - May 2017 // Boulder, CO

- Helped facilitate The Physics of Light and Color course for 6 lecture/lab hours and 4 office hours a week. Held weekly office hours, test review sessions, in the classroom daily and helped develop a weekly review session for students struggling with material
- Worked with faculty to ensure students in the classrooms were continuously problem-solving and having thoughtful discussions

Enhanced Skills: Curriculum development, LaTeX, technical writing, problem solving

Skills

Programming & Development

C, Python, R, JavaScript, CSS, HTML, Bootstrap, Flask, GitHub, Unit Testing

Database & Data

MySQL, SQL Server, large data manipulation

Operating Systems & Hardware

Linux, MacOS, Windows, Bash, Raspberry Pi, Arduino, circuit design

Research

Grant and proposal writing, collection of biological samples, field work

Education

University of Colorado

2012-2017 // Boulder, CO // GPA 3.9

- Bachelor of Arts, Astrophysical and Planetary Sciences
- Space Minor, through Aerospace Engineering

Projects

Traffic Violations, Data Analysis

Analysis of moving violations in Montgomery County, MD

Personal Website (V1)

Built with bootstrap, hosted on Github

Home Control, IoT

Raspberry Pi project to make a smarter home; includes LED control and expanding to a personal climbing wall and weather/light data

Interests

Climbing, trail running, backpacking, traveling, reading, D&D