

Micah Zhang

Cell: (970) 689-8121 | Email: micah.zhang@colorado.edu
257 Andrews Hall 2510 Kittredge Loop Drive, Boulder CO 80310

EDUCATION

Aerospace Engineering Sciences BS | University of Colorado | Boulder, CO Anticipated Graduation: May 2020
Computer Science Minor, Applied Mathematics Minor 3.654 GPA

RELEVANT COURSEWORK

- Gateway to Space | Fall 2016
- Computer Systems | Spring 2018
- Data Structures | Summer 2017
- Intro Human Spaceflight | Spring 2017
- Matrix Methods and Appl. | Spring 2018
- Thermo and Aerodynamics | Fall 2017
- Stat, Struct, and Matls | Fall 2017
- Dynamics and Systems | Spring 2018
- Veh. Design & Perform. | Spring 2018
- Adv. Engineering Calculus | Fall 2017

TECHNICAL SKILLS

OS | Software Linux, UNIX, GitHub, Windows
Programming Python3, MATLAB, C, C++, Mathematica, Git, BASH
Other Spaceflight Mission Operations, Multithreading, Software Architecture and Design, Software Management, Version Control, 3D Printing, Soldering

RELEVANT WORK EXPERIENCE

HASP Software Development Lead Engineer | Colorado Space Grant Consortium | Boulder, CO
Jan 2017 – Dec 2017

- Led a team of 3 software engineers
- Planned, designed, executed, and tested the entirety of flight software for the 2017-2018 HASP (High Altitude Student Platform) Mission, including set of 20 Uplink Commands, together with teammates
- Worked 15 hours/week during the school year, and 60+ hours/week during the summer
- Monitored and responded to payload data downlink during testing and flight
- 50+ hours of environmental testing experience
- 1 of 3 members chosen to assist with preparing payload for launch operations
- Coauthor of HASP Final Science Report

Research Assistant – Embedded Systems Laboratory | Colorado State University | Fort Collins, CO
May 2015 - August 2015

- Designed, built, and tested Infrared Motion Sensor Detection System for Raspberry Pi
- Documented development process on internet blog that has accrued approximately 5000 views
- Worked 40+ hours during the summer

RELEVANT PROJECTS

Miura I Flight Software | Colorado Space Grant Consortium | Boulder, CO Jan 2017 – Dec 2017

- Integrated multiple USB cameras and step motors with advanced uplink and downlink functionality to test feasibility of origami space habitat
- Automated entire 20-hour mission with 5 threads and 2000+ lines of code
- Designed and implemented extensive error monitoring and response systems to ensure smooth spacecraft operation and ease of use

Balloon Satellite | Gateway to Space | University of Colorado | Boulder, CO Aug 2016 – Dec 2016

- Planned, designed, executed and tested entirety of flight software for near space algae detection system

LEADERSHIP & VOLUNTEERING EXPERIENCE

Eagle Scout | Boy Scouts Troop 188 | Longs Peak Council | Fort Collins, CO Jan 2011 – Present

- Former Senior Patrol Leader, Chief Quartermaster, and Master of Ceremonies for one of the largest troop in the Longs Peak Council, with over 50 scouts
- Planned, organized, delegated, and ran weekly meetings, monthly campouts, and summer camp
- 1500+ hours of service and involvement over 6 years

Work Authorization: U.S. Citizen