

Key Skills

Software Development

- Python + MATLAB
- Unix + Shell Scripting
- SQL + Databases
- HTML + CSS + JavaScript
- Git + Jira

Internet Technology (IT)

- Linux Administration
- Networking & Automation
- Virtual Machines
- Containerization

Design & Manufacturing

- Machining
- Design for Manufacturability
- 3D Design/CAD
- Satellite Assembly
- Hardware Testing

Systems Engineering

- Requirement Development
- Requirement Verification
- Functional Analysis
- UML + SysML

Advanced Technologies

- Artificial Intelligence (AI)
- Robotics
- 3D Printing
- Aerospace Technologies

Commercial Software

- Advanced Excel
- Microsoft + Google Suite
- Atlassian Products
- Autodesk Products

Career Skills

- Leadership
- Project Management
- Public Speaking
- DEI Training

Interests

- For-Hire Handyman
- Woodworking
- Robotics
- Finance/Investing
- Golf + Hiking

Professional Experience

Mission Ops Satellite Command Controller

LASP (Laboratory for Atmospheric and Space Physics)

Boulder, Colorado - March 2023 to Current

Mission Operations:

- Monitor and operate satellites for partners such as NASA, ESA, and BAE
 - MMS mission; IXPE mission, IMAP mission
 - GOLD and EVE instruments
- Maintain and develop missions operations codebase
- Troubleshoot real-time satellite anomalies
- Issue real-time satellite commands
- Organized org-wide effort to revamp project management processes
- Contributed to Atlassian backend administration

Cubesats Mission Operations:

- Operated 8 Cubesats over tenure
- Conducted ground tests on flight hardware
- Participated in satellite deployment operations
- Streamlined developer onboarding processes
- Operated and maintained UHF/S-Band satellite ground stations

Cubesats Systems Engineering:

- Leading Linux System Upgrade
- Leading Python3.6 -> Python3.11 migration for operational codebase
- Developing architecture for a reusable and containerized missions
- Developing Cubesats Operations project management processes
- Co-wrote business cases and proposals for expanded project funding:
 - Organization-wide Cubesat Ops multi-year strategic review
 - Containerized and Reusable Cubesat Mission Framework

Education

Bachelors in Aerospace Engineering

University of Colorado Boulder, Aug 2021- Expected May 2025

- 3.45 GPA
- Minor in Engineering Management

Masters in Engineering Management

University of Colorado Boulder, Aug 2024 - Current

- Entrepreneurship and Innovation Focus
- Part-Time

Additional Experiences

Ralphie Cubesat (2021-2023)

- Developed satellite concept of operations and commissioning plan
- Machined and assembled satellite components
- Presented to Air Force University Nanosatellite Program

FIRST Tech and FIRST Robotics (2017-2021)

- Led 40+ individuals across two FTC and one FRC teams
- Managed 30k+ in resources
- Grew team by 50%
- Built local FLL (First Lego League) teams