

Berkeley Adair

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Aerospace Engineer seeking an internship working on mission operations, system testing, controls and guidance/navigation.

Education:

Barrett Honors College, Arizona State University - Tempe, Arizona
Major: Aerospace Engineering (Astronautics) GPA: 3.73

Start: Aug 2021
Anticipated graduation: May 2026

Work Experience:

May 2023 -
current

Student Data Analyst for Mastcam-Z on the MARS 2020 Rover

Uses linux command line to calibrate images; Navigates various NASA databases; Collaborates with Rest of Mastcam-Z team; Organizes data from mission into directories.

Aug. 2022 -
current

ASCEND - NASA Space Grant High-Altitude Balloon Mission Project Lead

Collaborates with Arizona Near Space Research organization (ANSR) to plan launches; Determines flight path for high altitude weather balloon; Designs PCB boards using Kicad; Soldered connectors to the PCB; Crimped and connected wires to the sensors; Leads meetings 2x per week; recruits team members. Successful Fall and Spring Launch.

May 2017 -
2021

Girlstart Inc – Austin, TX Summer Camp Assistant (2021) / Summer Camp Volunteer (2017-2019)

Prepped materials for science experiments on-site and for satellite locations with photographs, STEM kits, and documentation; designed website content; led students in STEM experiments including: Structural Engineering, Atmospheric Pressure, Plate tectonics, Water Cycle, etc.

Aug. 2020 -
Aug. 2021

YMCA – Austin, TX Head Lifeguard / Swim Team Coach

Managed lifeguards; Directed water safety and first aid; Organized & led swim team practices/lessons

Jan. 2020 -
March 2020

Astrophysics Internship: The University of Texas at Austin Lab of Dr. Anna Tenerani, Professor of Astrophysics at UT Austin

Learned Python to graph data; Accessed and organized data from the NASA Astrophysics Data system

Academic Experiences/Awards/Leadership:

Electrical Subsystem Member, Coconut Cubesat (Arizona State University Interplanetary Initiative Lab)

NASA CSLI selected cubesat mission; Leadership role in planning overall mission operations; Integrates Sensors into PCB; Tests sensors and runs code for components; Collaborates with software team weekly

Students for the Exploration and Development of Space (SEDS) (ASU Chapter)

Served as President (2022-2023) responsible for participation in Mars Gateway program, fall excursion to JPL, school-wide Yuri's Night Celebration, and industry networking events.

Space Ambassador At ASU - Fall 2023, Spring 2024

Arizona State University Dean's List: Fall 2021, Spring 2022, Fall 2022

New American University - Provost's Award, Arizona State University, \$12,000/year (2021-2025)

Sun Devil State Award, Arizona State University, \$2000/year (2021-2025)

Academic Publications/Presentations:

Adair, B., & Cooper, G. (2023). *Analysis of Atmospheric Data and Collection Methods through Simultaneous Experimentation*. 2023 Arizona NASA Space Grant Statewide Symposium. Retrieved from <https://spacegrant.arizona.edu/students/symposium>

Related Coursework:

Differential Equations (Spring '23)
Circuits 1 (Spring '23)

Matlab (Fall '22)
Computer Aided Design (Fall '22)

Mechanics of Particles and Rigid Bodies I:
Statics (Spring '23)

Skills: Solidworks (proficient); Matlab (intermediate); Python (emergent); Spanish (working oral proficiency); Squarespace and similar website platforms (proficient); Linux Command Line (proficient); Microsoft OS and Office products (Proficient)

Extracurricular Activities: Active member of Sun Devil Satellite Laboratory; Actor/Writer in *Farce Side Sketch Comedy Troupe* (ASU); Swimming and weight training