

Rebecca Blum

astro.aero.bec@gmail.com
4700 Kirkwood St., Boulder, CO

EDUCATION

University of Colorado, Boulder
Bachelor of Science (expected date of graduation: May 2024)
Emphasis: Aerospace Engineering
GPA: 3.57/4.00; Dean's List for 3 semesters

Aug 2020 - present

EXPERIENCE

Undergraduate flight controller at Laboratory of Atmospheric and Space Physics (LASP) May 2022 - present

- ~ Certified mission operator for NASA missions
- ~ Missions include: Magnetospheric Multiscale (MMS), Imaging X-ray Polarimetry Explorer (IXPE) and Emirates Mars Mission (EMM)
- ~ Perform real-time activities with NASA satellites alongside professionals
- ~ Observe instrument data to ensure the proper function of spacecraft subsystems
- ~ Write and improve scripts for data analysis and planning purposes

Built 8" Reflecting Telescope

Feb 2020 - May 2020

- ~ Applied equations to select required optics for procurement
- ~ Used table saw, routers and drill press for metal and woodwork
- ~ Implemented the telescope for astrophotography and observing the night sky: Comet NEOWISE, Mars, Saturn, Jupiter and its moons, nebulae, and star clusters

LEADERSHIP EXPERIENCE

Student subsystem lead for IXPE COMM and for MMS EDI (Electron Drift Instrument) at LASP

- ~ Lead biweekly student meetings and present at monthly meetings with professionals
- ~ Assign tasks to co-workers

Concertmaster of Shining Mountain Waldorf School Orchestra

2018-2020

- ~ Led rehearsals, mentored other members, provided bowing guidance to other violinists

HONORS AND AWARDS

BOLD Leadership Scholarship (4 years at CU Boulder)

Goethe-Institut German Language Olympiade (international competition)

- ~ 10th Grade - one of seven USA Finalists

Deutsches Sprachdiplom (International German Language Diploma)

- ~ 12th Grade - DSD II - speaking certified at C1 level (proficient user of language); reading and listening- certified at B2 level (independent user of language)

PROFESSIONAL AFFILIATIONS

Member of SWE (Society of Women Engineers) and WOAA (Women of Aeronautics and Astronautics)

SKILLS

MATLAB, Python, Bash, IDL, STK, ANSYS, C++, Arduino, machine shop, LATEX, CAD, error analysis, Microsoft Word, Excel, PowerPoint

Language: German (near-fluent)

Other: Artist of mediums including painting, clay modeling, and drawing. Alpine safety

HOBBIES

Violin, entomology, astronomy, alpine skiing, indoor gardening, art