

### **Summary of Interests**

I am currently an undergraduate student studying Mechanical Engineering at Colorado State University. From a very young age I have loved engineering and space, and I would love the opportunity to further the technology of the world.

### **Prior Work Experience**

#### **Undergraduate Research at CSU Short Pulse Laser Laboratory (January 2024 - Present)**

- Responsible for the design and development of an X-Ray spectrometer.
- Responsible synthesis of nanowire targets as well as analysis using Scanning Electron Microscope.
- Designing parts in SolidWorks for use in the laser line and vacuum environments.
- Using SolidWorks CAM to prepare and machine parts using CNC.
- Trained in using a HAAS VF1 CNC Mill to machine custom components.
- Using MatLab to analyze data to find optimal operating conditions.

#### **Fort Collins Parks Worker with Southwest Crew (June 2023 – August 2023)**

- Responsible for maintaining multiple public parks with a team, as well as individually.

#### **CNC Machining Apprenticeship with Woodward (July 2022 - April 2023)**

- Worked in secondary operations like part deburr and inspections.
- Used metrology to ensure parts were within tolerance.

#### **Fort Collins Junior Parks Crew with Facilities and Trails Crew (June 2021 - August 2021)**

- Responsible for maintaining multiple public parks and exteriors of facilities.

### **Education**

Colorado State University (Expected Graduation: May 2027)

Major: Mechanical Engineering

- Walter Scott Scholar

Rocky Mountain High School (Fort Collins, Colorado), Graduated May 2023 (4.1 GPA)

Honors:

- Principal's Cord (4.0 or higher GPA)
- National Honors Society
- National Technical Honors Society
- Mu Alpha Theta (Math Honor Society)

### **Awards**

- Outstanding Sophomore in Science (2021)
- CU Boulder Outstanding High School Student Award (2022)
- Taylor J. Bastian Excellence in Technology Education Scholarship (2023)
- Excellence in Computer Science Coding Club (2023)

### **Extracurricular and Volunteer Activities**

- Peer and Victim Representative for City of Fort Collins Restorative Justice and Mediation Program (2017-Present)
- Baja SAE team (2024-Present)
- Baja SAE Manufacturing Logistics Lead (2024-Present)
- H2Auto Officer and Founding Member (2024-Present)
- Hewlett Packer Enterprise CodeWars 2021, 2022 (Placed 3<sup>rd</sup>) & 2023 (Placed 3<sup>rd</sup>)
- CS@Mines Coding Competition 2022 & 2023
- Lockheed Martin CodeQuest 2021, 2022, & 2023