

# Bora Ayhan

(720) 879-6925

[boraayhan3737@gmail.com](mailto:boraayhan3737@gmail.com)

Littleton, CO 80121

## Education

### Arapahoe High School

May 15, 2026

- GPA: 4.0 UW / 4.44W (Rank 1 of 405)
- PSAT/NMSQT Fall 2024: 1520 (760R&W, 760M)

### Relevant Coursework

- Introduction to Aerospace Engineering (AE1110x) @ TU Delft (Netherlands) through EdX
- Linear Algebra (18.06) @ MIT, through OpenCourseWare
- *Introduction to Flight* by Anderson and *Rocket Propulsion Elements* by Sutton & Biblarz

## Work Experience

### ARIA Lab at School of Mines: Intern, Project Lead

Jun. 2025 – Aug 2025

- Interned at the ARIA Lab at Mines under PI Prof. Kaveh Fathian.
- Implemented computer vision algorithms and SLAM systems using the Robot Operating System (ROS2) on Docker, published open-source drivers and packages alongside internal documentation related to the Boston Dynamics Spot, the Clearpath Robotics Husky, and our Sensor Backpack.
- Served as experiment lead during the successful live demonstration of the group's work at the Edgar Experimental Mine

### FIRST Robotics Competition, Team 4293: Programmer, Drive Team

Jan. 2024 – present

- Notably focused on computer vision algorithms for odometry and target alignment
- Coordinated programming strategy and internal management during competitions and 'build' stages

### Arapahoe Rocketry Club: Founder, Project Manager

Sep. 2024 – present

- Led a team student engineers through the design, production, testing, and evaluation processes of various rocketry-related projects.
- Coordinated subteams of chemistry/propulsion, CAD/manufactory, software, and publicity. Oversaw the implementation of, and helped develop, flight computer software using state machines. Oversaw production of solid-propellant rockets in a safe environment.

### Arapahoe Computer Science Club: Vice President

Nov. 2022 – present

- Created and compiled practice problems and lessons, organized attendance for coding competitions, and hosted meetings

### Arapahoe Mathematics Club: President

Sep. 2022 – present

- Hosted participation in local competitions (CSU Math Day, Colorado Math League, etc.), created practice p-sets and lessons, and recruited new members

Warriors Water Polo **Aug. 2021 – present**

- Participated in various regional tournaments as a designated captain, hole set: 2022 ABQ regional runner-up, 2024 Colorado High School League runner-up

Wind Crest Senior Living: Server **Mar. 2024 – Feb. 2025**

- Provided quality customer service in a fast-paced kitchen, maintaining a safe and clean environment.

## Volunteering Experience

Denver Museum of Nature and Science: Docent **Mar. 2024 – present**

- Assisted museum visitors in navigating the museum, answering related questions and facilitating emergency contingency plans.

Turkish American Cultural Society of Colorado: Mentor **Jan. 2022 - present**

- Volunteered as a mentor at the “Turks without Borders” program, which aims to provide an opportunity for underprivileged K–12 students in Türkiye to engage in weekly conversations with Turkish-American mentors.
- Designed posters and fliers to support the global relief efforts during the events of the 2023 Türkiye-Syria earthquakes, distributed through TACSCO.

Arapahoe High School National Honor Society: Math Tutor **Aug. 2024 - present**

- Tutored math students in topics ranging from algebra to fundamental differential calculus.

## Skills

### Certifications:

- CPR/AED/Lifeguard Certification, issued by the American Red Cross
- 525F Digital Multimeter Certification, issued by Snap-on

### Engineering Skills:

- Programming languages: Python3, Java, C++ for Arduino and ESP32, C#
- LaTeX, HTML/CSS
- Git version control

### Personal Skills:

- Languages: Turkish (native), English (native), Spanish (B2)

## Awards

- AP Scholar with Distinction **2025**
- National Honor Society Inductee and Member **2024**
- Spanish Honor Society Inductee and Board Member **2024, 2025**
- 2nd place, Advanced Programming Division, School of Mines HSPC **2024.**
- 3rd place, Novice Programming Division, Lockheed Martin CodeQuest **2023**
- CSU Math Day, top 25% of competitors **2023, 2024**
- ECIS International MathQuest Competition, 4<sup>th</sup> place globally **2018**