

Bora Ayhan

Littleton, CO

Education

AHS High School

May 15, 2026

- GPA: 4.0 UW / 4.44W (Rank 1 of 405)
- SAT: 1580 (780 R&W, 800 M)

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

Jun. 2025 – Aug 2025

- Interned at the ARIA (Autonomy, Robotics, and Intelligent Algorithms) 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

AHS Rocketry Club: Founder, President

Sep. 2024 – present

- Led a team student engineers through the design, production, testing, and evaluation processes of various rocketry-related projects as a project manager.
- 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.

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

AHS Computer Science Club: Vice President

Nov. 2022 – present

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

AHS 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

AHS 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 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.

AHS 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

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| • 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 th place globally | 2018 |