

Ambitious high school student with an inquiring mind in engineering, materials science, and aerospace.

Education

Carlmont High School – Class of 2024, San Carlos, CA

Unweighted GPA: 3.857

AP COURSES IN PROGRESS: AP European History

Online Courses: Conceptual Physics

Mentoring Experience

Academic Coach

(2019 - present)

- Tutor elementary and middle school students by assisting with homework and test preparations.
- On average, help students improve their grades by at least one full letter grade.
- Primarily concentrating on mathematics and science.
- Empower and increase confidence in students by helping reduce stress and anxiety relating to school work.

Volunteer Work

Volunteer Guide at Hiller Aviation Museum

(2021 - present) (3 hours/ week; 26 weeks/ year)

- Assist guests by providing information about the Museum, gallery, and answering aerospace related questions.
- Assist in the Invention Lab by supporting children and families through hands-on activities related to flight.
- Maintain drone simulator software and supporting children through flying physical drones. Teach children both the importance of flight innovation and the techniques through safe and proper drone flight.
- Operate flight simulator systems while teaching people of all ages proper plane techniques of flight and safety.

Extracurricular Activities

Robotics Club

(2020 - present)

- Member of a vigorous and demanding highschool aged robotics program (FRC)
- Designer working on critical mechanisms vital for robot function. Using CAD software to design and model the robot virtually.
- Provide instructions and directions to other sub-teams in order to build the robot.
- Create and experiment with different ideas to see the best solution for complex problems.
- Mentor new robotics and design students in teaching CAD and design techniques.

Investment Club

(2020 - present)

- Complete research by reading and analyzing published works. In addition, practice in the stock market through participation in stock market simulators and paper trading. Compare and contrast with team members to predict future market trends.

Woodshop and Engineering

(2020 - present)

- Design, model, and build equipment and furniture for school use. Using geometry and physics applications to provide strong build ideas. Provide leading solutions through presentations of CAD drawings.

Materials Science and Engineering Blog (Let's Talk Materials)

(2020 - present)

- <https://www.letstalkmaterials.com/>
- Owner and operator of a Blog site dedicated to research and analysis of topics relating to materials science. Originally launched in 2020, this site is maintained to provide research based findings related to material science and engineering in everyday topics, helping those looking to gain knowledge by providing one stop source for fact based documentation.

Leadership Skills

- Continuously learning and improving my leadership skills by steering team members towards solutions. Direct meetings through listening to the ideas and perspectives of team members and further communicating with other sub-teams to find the best conclusions to analytical problems.
- Recognize members who are struggling with their work or finding solutions to their design related problems. By guiding and mentoring, help members in need by breaking down the problem to the root cause, allowing them to steer towards resolution. Setup meetings to collaborate with other sub-teams and collectively work towards addressing the problem.

Independent Reading

Independent reading are books I read that fall under the topic of Material science. It gives me a chance to learn more about different aspects of MS&E while also viewing the perspectives of different authors.

- *Stuff Matters*, Mark Miodownik
- ASM International

Hobbies

- Reading
- Ice hockey
- Dirt biking
- Traveling