Aven Li

yl4262@cornell.edu | 408-881-3810 https://www.linkedin.com/in/aven-li-b6363428b/

EDUCATION

Cornell University, College of Engineering, Ithaca, NY

Expected May 2029

Bachelor of Science, Mechanical Engineering

Currently Enrolled: Statics and Mechanics of Solids, Differential Equations for Engineers *Relevant Courses:* Multivariable Calculus for Engineers, Mechanics and Heat, Electromagnetism

The Harker School, San Jose, CA, GPA: 4.0, SAT: 1590

May 2025

Relevant Courses: AP Physics C E+M & Mechanics, AP Physics 2, AP Calculus BC, AP Chemistry, Electronics

TECHNICAL SKILLS

Onshape CAD, Java, Visual Studio Code, Bambu Lab, Google Suite, Microsoft Office, Adobe Creative Cloud, Mechanical Assembly, Aluminum and Polycarbonate Machining, Omron TM Flow, Universal Robotics

TECHNICAL EXPERIENCE

College Kickstart, Palo Alto, CA, Data Science Intern

June-Aug 2025

- Implemented interactive data visualization chart with HTML/JS/CSS for standardized test scores and other admissions data for high school counselors across the country with a 58% open rate on newsletters.
- Verified and analyzed 20K+ data points across 750 colleges, improving dataset reliability for 4K+ readers.
- Investigated and authored a blog about the top 30+ schools cultivating diversity, amassing 17K+ views on blog.

Analog Devices Inc., Beaverton, OR, High School Mechatronics Intern

June-Aug 2024

- Designed and 3D-printed end effector with Onshape and Bambu Lab to automate semiconductor pod transport.
- Engineered Universal Robotics arm 7th axis frame, increasing arm reach from 6' to 9' and enhancing its mobility.
- Programmed end effector on an Omron TM Cobot, achieving consistent pod-to-machine cycle time of ~1.3 min.
- Validated end effector design performance through iterative strength testing with PLA-CF material and optimized geometry to withstand over 80,000 pick-place cycles, ensuring durability and minimal friction.
- Supported on-site team in machining and assembling 6 tool-tending robotic systems for semiconductor FAB.

Harker FIRST Robotics 1072, San Jose, CA, Machining and Mechanical Lead

Aug 2021-May 2025

- Led fabrication and assembly of 3+ new mechanical subsystems and integrated electrical and software systems.
- Collaborated with the design/CAD subteam for yearly challenge and iteratively optimized design.
- Directed a team of 10+ members to accomplish build goals, coordinating daily agendas and seasonal timeline.
- Trained 15+ members on aluminum and polycarbonate machining with manual and CNC equipment.
- Awarded FIRST Robotics Regional Finalist twice: in 2025 (out of 42 teams) and in 2024 (out of 38 teams).

LEADERSHIP EXPERIENCE

Talon Yearbook, The Harker School, Co-Editor-In-Chief

Aug 2021-May 2025

- Spearheaded end-to-end development of a 250+ page publication from initial conceptualization to final design.
- Led, trained, and motivated a team of 20+ members through facilitating meetings 2-3 times a week and maintaining internal calendars and spreadsheets to ensure on-time completion of project milestones.
- Coordinated photography and interview coverage of 100+ school-wide events to document the academic year.

Art Club, The Harker School, *Co-President*

May 2022-May 2025

- Directed and created agendas for monthly leadership meetings, dividing tasks among 10 leadership members.
- Planned biweekly events for 115+ students and supervised the schedule of annual Artist-in-Residency.
- Organized fundraisers selling custom-designed stickers and raised \$850+ for international relief efforts.

VOLUNTEER EXPERIENCE

Phoenix Volleyball, San Jose, CA, Coach

Jan 2024-Aug 2025

FIRST Lego League, The Harker School, Volunteer Student Mentor

Aug 2021-Dec 2024

Chinese Wisdom Culture and Education Organization, Volunteer Teacher's Assistant

June 2022, June 2024