

PARKER McLAUGHLIN

Portola Valley, CA

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(650) 850-2614

EDUCATION

Cornell University, College of Engineering, Ithaca, NY *Expected May 2026*

Bachelor of Science, Mechanical Engineering, GPA: 4.09

Menlo School, Atherton, CA *Jun. 2022*

GPA: 4.22; Rotary Scholastic Achievement Award, Spring 2022; AP Scholar with Distinction, May 2022

TECHNICAL EXPERIENCE

Cornell FSAE Racing Project Team, Ithaca, NY: *Part Designer* *Oct. 2022-Present*

- Collaborates with 60 person team to design and build an electric Formula One style race car; presents design concepts at weekly subteam meetings
- Designed compound planetary gearbox for 4WD architecture, increasing drivetrain efficiency by 2%; developed comprehensive spreadsheet to streamline gear stress calculations; established and documented protocols for gearbox lubrication, break-in, and dynamometer testing; presented to judges at Design Finals
- Designed custom aluminum high voltage enclosure to withstand 40g, reduced weight by 33%; executed extensive sealing and fitment testing

Mainspring Energy, Palo Alto, CA: *Electromechanical Intern* *May 2025-Aug. 2025*

- Worked with cross-functional teams on a grid-scale generator; simulated thermal behavior of electronics enclosures using ANSYS Mechanical; created and calibrated custom flow meter rake for use in ducts
- Devised battery cell testing rig; characterized thermal behavior of cells under 1C charge cycling; authored UL 9540 thermal runaway test plans;

Pivotal (formerly Opener), Palo Alto, CA: *Marketing & Engineering Intern* *May 2023-Aug. 2023*

- Compiled & analyzed information on 25+ competitors; executed market research & presented to senior management; collaborated with colleagues to construct brand foundation; assisted in flight testing tasks

LEADERSHIP EXPERIENCE

Cornell Outdoor Education, Ithaca, NY: *Rock and Tree Climbing Instructor* *Apr. 2023-Present*

- Instructs rock and tree climbing classes of 20 students; plans and organizes lessons with co-instructors to teach or practice specific skills; ensures student and instructor safety, manages class timing

Cornell Outdoor Education, Ithaca, NY: *Outdoor Odyssey Guide* *Oct. 2022-Present*

- Guides pre-orientation rock climbing and backpacking trips; partners with co-guides to mentor a small group of incoming students; instructs students in outdoor skills

Private Pilot's License, Palo Alto, CA: *Certificate Holder* *Nov. 2022-Present*

- 235 flight hours; high performance endorsement; member of Cirrus formation flying club, flies in formation with up to 50 aircraft; working toward Instrument Flight Rating

Cornell Wild Roses Ultimate Frisbee, Ithaca, NY: *Spirit Captain* *Aug. 2023-Present*

- Proactively communicates with teammates and opposing team to resolve conflicts; acts as a knowledge resource for rules issues and disputes; promotes team morale

SPECIALIZED SKILLS

Modeling and Drawing in CAD Software: Autodesk Inventor, Fusion360

Fabrication: Experience with manual mill and lathe, hand tools, laser cutting, soldering, 3D printing, multimeters, oscilloscopes

Software: ANSYS Mechanical, ANSYS Fluent, Microsoft Office, Google Workspace, MATLAB, Java, Python, C++, Arduino