Charles "Henry" Marsom

530-564-2207 charleshenrymarsom@gmail.com linkedin.com/in/henry-marsom

Education

University of California at Berkeley **Aug. 2025 – May 2029**
Bachelor of Engineering in Mechanical Engineering *2025 - 2029*
GPA *3.92*

Technical Skills

Technical Skills: CAD, 3D Printing, Solar PV, CNC Machining, Machine Learning, Scientific Research Writing
Interpersonal skills: Communication Skills, Project Management, Team Collaboration, Team Leadership
Programming Languages: Python, MATLAB, HTML

Experience

Computational Axial Lithography (CAL) Lab **Sept. 2025 – Present**
Open CAL Project Hardware Design Engineer *Berkeley, CA*

- Create an open source version of CAL, simplify on other variations
- Design the vial system of the assembly, improve the rotation system and eliminate any vial wobble
- Prototype various attachment and mounting systems as one of the main manufacturers for the vial system

Space Technologies at CAL **Sept. 2025 – Present**
Quantum CubeSAT Mechanical Design Engineer *Berkeley, CA*

- Reassemble and remodel the Quantum CubeSAT to prepare for launch
- Create engineering drawings to model payload and other assemblies
- Help with battery testing and other on the ground simulations

Formula Electric Racing at Berkeley (FSAE) **Oct. 2025 – Present**
General Member - Aerodynamics Focus *Berkeley, CA*

- Conduct finite element analysis in SolidWorks for recruitment project
- Design back wing mount in SolidWorks for recruitment project
- Use Ansys Fluent to observe the aerodynamics of wings for recruitment project

CITRIS and the Banatao Institute **March 2024 – March 2025**
Hardware Design Engineer Intern *Davis, CA*

- Created a simplified solar cell sun tracking structure using Arduino Uno
- Desgined, 3D modeled (with CAD), and assembled photo-resistors and rotating solar cells on a Plexiglass frame
- Contributed to the rotation code in C++ and helped to document progress

1678 Citrus Circuits FRC Robotics Team **Aug. 2022 – June 2025**
Hardware Design Engineer *Davis, CA*

- Designed, 3D modeled (with CAD), and assembled robots to compete in FRC competitions
- Manufactured robot parts on CNC router and 3D printed with Bambu and Prusa
- Mechanism subsystem lead for 2+ years and prototyping group lead for 2+ years

BlastAI Summer Program **June 2023 – Aug. 2023**
Summer Intern *Davis, CA*

- Participated in AI boot camp, Learning about the different types of machine learning and implementation methods
- Learned Python, Pandas, NumPy, and scientific research writing; Participated in a Spaceship Titanic Kaggle
- Presented at summer symposium; Worked in group on AI research

Publications

Publication by IEEE Xplore | Publication **Feb. 2024**

- Created a benchmark to evaluate Large Language Models in the world of Data Science.
- Used toy datasets and questions to see whether or not a simple LLM would be able to complete data science tasks.
- Information and results could be applied to later models. Accepted to ICAIC-2024 conference. Published to IEEE Xplore.