Madison Schooley

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EDUCATION

A.S., Science and Mathematics
Santa Barbara City College, Santa Barbara, CA, GPA: 3.5 **May 2023**

B.S., Aerospace Engineering — *Cum Laude*
San Jose State University, San Jose, CA, GPA: 3.69 **May 2025**

Relevant Coursework: Aerostructures, Propulsion, Spacecraft Design, Rocketry, Flight Mechanics, Aerothermodynamics, CFD

SKILLS

Technical: Basic MATLAB, 3D Printing, CAD, Basic GD&T skill, Excel, Jira, Microsoft Office, Autodesk, SOLIDWORKS
Interpersonal: Leadership, Communication, Teamwork, Problem Solving, Adaptability
Languages: English, Basic ASL

EXPERIENCE

Manufacturing Engineer, Specialized Coating Services **October 2025-Present**

- Monitor and optimize the manufacturing prototype to product process, adjusting the execution for increased efficiency
- Leverage ERP software, JobBOSS, to manage production schedules and ensure job deadlines are met
- Design and 3D printed custom parts using FreeCAD to safeguard PCBAs, improving component durability
- Utilize ISO and IPC standards to optimize an ISO 7 cleanroom floor plan designated to highly sensitive aerospace PCBAs
- Protect sensitive information through the use of ITAR standards

PROJECT EXPERIENCE

Spartan Space Systems, SJSU **September 2023-December 2024**

- Led the structures and mechanisms team developing a payload for a mission utilizing electrodynamic propulsion to land on Jupiter's moon, Io
- Managed a team of 10 aerospace engineers, organizing efficient meetings and task delegations through Jira
- Collaborated with systems, thermal, ADCS, propulsion, telecom, and testing teams to enhance project efficiency and mission optimization

Rocketry, SJSU **September 2024-December 2024**

- Designed and built a Tripoli L1 rocket capable of flight and recovery, earning an L1 certification
- Utilized OpenRocket simulations to refine the rocket's aerodynamics and ensure optimal flight dynamics
- Manufactured a final product through CAD, using Autodesk Inventor, and 3D printing for the body of rocket
- Assembled the rocket using precise machinery and soldering tools for the avionics
- Achieved a maximum apogee of 1012 m and a maximum acceleration of 388 m/s

Hall-Effect Thruster Project, SJSU **September 2024-May 2025**

- Developed a small Hall-effect thruster for future spacecraft applications, using Solidworks to model and improve designs under self funded budget constraints
- Enhanced thruster longevity and sustainability through R&D
- Collaborated with and utilized the electric propulsion test facilities at NASA JPL to test the fully constructed thruster
- Achieved 300 V and 500 W independently in a steady condition

ACTIVITIES

Lead, Spartan Space Systems - Research, Collaborating, Running meetings
Social Chair, San Jose Dragon Boat - Fundraising, Event Planning, Athletics
Member, RRP-300 - Structures, Testing