

Jonathan Siskind

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CAREER OBJECTIVE

Self-motivated, passionate, and detail-oriented engineering student with extensive project-based experience in both mechanical and software design seeking to apply hands-on skills and gain expertise in mechatronics and robotics

EDUCATION

Stanford University

*Bachelor of Science in Mechanical Engineering
Minor in Computer Science
GPA: 4.00*

Stanford, CA

Expected Graduation: June 2026

Purdue University

Non Degree Student (advanced coursework taken during high school)

West Lafayette, IN

August 2021–May 2022

WORK & EMPLOYMENT

Stanford Robotics Lab

Undergraduate Researcher

Stanford, CA

January 2023–Present

- Conducted both full and part-time robotics research under the mentorship of Dr. Oussama Khatib as the only undergrad in the lab
- Developed a series of hardware and software upgrades to the handheld camera used by the teleoperated underwater exploration robot Ocean One K. This included the implementation of a tethered live camera feed to stream Raspberry Pi video to the surface, buoyancy leveling to minimize underwater roll, the integration of an OLED screen inside the camera housing for easier troubleshooting for the user, and correction of underwater lens distortion for sharper and clearer video.
- My equipment was recently tested, utilized, and demoed in an advanced underwater research facility in Dubai

Curious Cardinals

K-12 Engineering Mentor

Stanford, CA

July 2023–Present

- I teach a wide set of fundamental, applied engineering skills including CAD, electronics/circuitry, programming, and more through personally tailored project-based mentorship to passionate and driven students

Bricklink

Independent Business

Online

June 2018–September 2022

- Operated an E-Commerce store for kits/toys: purchased hundreds of toys on clearance and packaged, shipped, and sold them at a markup after they were discontinued by the manufacturer; made approximately \$4000 in the final year of the store's operation

Café Literato

Expo/Line Cook/Kitchen Prep

West Lafayette, IN

March 2022–September 2022

- Worked lunch and dinner rush shifts at a high-end local espresso bar and brick oven Neapolitan pizza café
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PROJECT EXPERIENCE

Stanford Space Initiative

Polar Rover Team Lead

Stanford, CA

September 2022–Present

- Lead the Mars division of the highest funded and populated club at Stanford; manage the subteam's \$15,000 yearly budget
- Currently leading the development of an autonomous, solar-powered, GPS-navigated rover with internet and LiDAR path-planning that will drive across Antarctica to the South Pole
- Solved critical hardware issues with the RF transmitter and receiver so that communication could be established between the human-operated testing interface and the rover's onboard microcontroller; constructed the electronics enclosure and solar charging system for 2 early-stage prototype rovers to test navigational and autonomous capabilities

Maker Faire

Independent Engineering Projects

Various Locations: IN, WI, PA

March 2020–Present

- Personally designed and built a fully-functional remote-controlled submarine with differential steering, ballast depth control, and live underwater vision AND a robotic ornithopter with motorized flapping wings and a pan-tilt two-axis tail
 - Demonstrated these projects to hundreds of people at national inventor conventions in Indiana, Pennsylvania, and Wisconsin
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SKILLS & INTERESTS

- Proficiency in Autodesk Fusion 360, Autodesk Inventor, and Onshape CAD software
- Experienced in MATLAB, C++, Python, and machine learning libraries
- 6 years of working with Arduino/Raspberry Pi electronics and circuitry (self-taught)
- 6 years of workshop/power tool skills (saws, drills, sanders, soldering, 3D printing, etc.)