# Lawton Skaling

### **EDUCATION**

### Stanford University

Graduating with a Bachelor of Science in Mechanical Engineering in 2025 Concurrently pursuing Master of Science in Mechanical Engineering

### A.J. Dimond High School, Anchorage, Alaska Valedictorian

### **EXPERIENCE**

### Mechanical Engineering Intern, Astranis

Developed ground infrastructure for testing critical satellite systems, including a thrust stand to measure electric thrusters with milligram precision, and hardware to recreate a satellite deployment failure.

### Mechanical Engineering Intern, Joby Aviation

Redesigned battery terminals for Joby's electric aircraft, reducing weight and improving terminal retention. Developed tests to simulate high-temperature gas erosion during thermal runaway and end-of-life battery expansion.

### Hardware Engineering Intern, Argo AI

Designed and implemented an automated LIDAR calibration system using feedback from encoders and laser measurements to move a target across a 100m track with millimeter precision.

### **LEADERSHIP**

#### Co-founder and Mechanical Team Lead, Stanford Autonomous Underwater Vehicle Feb 2024 - Present

Developing underwater submarines to compete in the RoboSub competition and survey marine ecosystems in the Northern California bay. Leading a team of ten mechanical engineers.

### Co-founder and Project Director, Stanford Moonshot Club

Co-founded the Stanford Moonshot Club after observing a lack of community among students passionate about tinkering with personal projects. Grew to over 50 people in one year, and distributed \$20,000 to date to help students fund their projects.

### President, Stanford Flight Club

Helped the club recover after inactivity during COVID, including bringing back the Design, Build, Fly competition team, improving club recruitment, and introducing grants for funding personal drone projects.

### RESEARCH

### Stanford Biomechatronics Lab

Worked to improve the reliability of the Stanford Biomechatronics Lab's exoskeleton suit by redesigning a cable interface. This involved cyclic stress analysis and developing a test fixture that would simulate accelerated wear of the cable interface.

### Lepech Research Group

Developed a low-speed centrifuge, which could mix concrete under the influence of varying amounts of gravity, and a 3D printer that could extrude the concrete material, validating its use for 3D-printed structures. This research will determine the viability of 3D-printed structures on the Moon and Mars.

### **AWARDS**

Matthew Isakowitz Fellow, 2024 **TreeHacks Hardware Winner**, 2024

June 2024 - Sep 2024

Sep 2021 - Present

Aug 2017 - May 2021

June 2023 - Sep 2023

June 2022 - Aug 2022

## Sep 2022 - Present

June 2022 - June 2023

### Mar 2023 - June 2023

*April 2024 - June 2024*