

Sean Lin

CONTACT INFORMATION	216 Rosse Ave Stanford, CA 94305	(909) 538-7519 seanlin@stanford.edu https://seanlin.dev/
RESEARCH INTERESTS	Spacecraft Guidance, Navigation, and Control; Vehicle Autonomy; Optimal Control; Design for Controllability	
EDUCATION	Stanford University, Stanford, CA M.S. Aeronautics and Astronautics, Expected December 2026 - GPA: 3.86/4.00 University of California Berkeley, Berkeley, CA B.S. Mechanical Engineering, May 2023 B.S. Business Administration (Haas), May 2023 Minor Electrical Engineering, May 2023 - High Honors - GPA: 3.93/4.00	
RESEARCH EXPERIENCE	iFR @ University of Stuttgart P.I. Cunis Torbjørn Jun 2026 - Present - Aerodynamic Attitude Control of VLEO satellites - Design for controllability under nonlinear, optimal control frameworks. Space Rendez-Vous Lab @ Stanford P.I. Simone D'Amico Jan 2026 - Present - Fast Autonomous satellite Guidance and Navigation - Angles-only-Navigation FLOW Lab @ Berkeley P.I. Simo Makiharju Sept 2021 - May 2022 - Design of Magnetohydrodynamic Pump. The Kulik Group @ MIT P.I. Heather Kulik June 2018 - Sept 2018 - Visiting student computational chemistry researcher.	
TEACHING EXPERIENCE	ME 106: Fluid Mechanics Course Staff Aug 2022 - Dec 2022 - Design and grade PSET and exam rubrics - Lead weekly online discussion and section EECS 16B: Designing Information Devices and Systems II Course Staff Aug 2021 - May 2022 - Design and grade PSET and exam rubrics	
INDUSTRY EXPERIENCE	HyLight Propulsion and Dynamics Intern Sep 2024 - Mar 2025 <i>Le Plessis-Pate, FR</i>	

- Designed a propulsion system testing apparatus with live thrust, torque, RPM, vibration, and power readouts. Inserted data acquisition pipeline into flight control loop.
- Performed CFD aerodynamic analysis, characterizing lift, drag, and moment of an airship envelope for online lookup tables.
- Designed a PID controlled buoyancy-regulator and saved 10,000 euros in retro-engineered seals and valves.

De-Ice

Thermal Engineering Intern

Jun 2024 - Sep 2024

Boston, MA

- Designed a testing apparatus to mimic in-flight thermal conditions for avionic inverters. Applied fluid heat transfer theory for analytical validation. Gained lab experience in high power AC, EMI, and infrared imaging.
- Perform shock and vibration analysis on avionics and propose solutions to low order resonant coupling.

NASA Ames Research Center

Mechanical Design Intern

Sep 2024 - Mar 2025

Mountain View, CA

- Design and integrate legacy shock tube parts for Electric Arc Shock Tube.
- Perform high-pressure structural analysis on critical parts to avoid catastrophic thread stripping, flange bending, burst.

SpaceX

Associate Avionics Engineer

Jun 2023 - Sep 2023

Hawthorne, CA

- Design a Destructive Physical Analysis lab routine on avionics EEE parts. Findings lead to a faulty part containment of \$45,000.
- Perform electrical Failure Analysis on flight pressure transducers and capacitors.
- Validated Raptor engine MEMS and piezoelectric oscillators under helium-rich environments.

Launch Engineering Intern

May 2022 - Aug 2022

Cape Canaveral, FL

- Owns 4 assemblies for Ground-Station-Equipment and launch pad hardware.
- Closed open supply chain issues for all sleeve bearings used on the launch pad.

FormFactor Inc.

Engineering Intern

May 2021 - Aug 2021

Livermore, CA

- Silicon wafer metrology and error analysis.

Hermes Robotics

Engineering Intern

May 2020 - Aug 2020

Berkeley, CA

- Mechanical design of an actuator system that autonomously shift's a gearstick.

GRANTS &
AWARDS

University of California, Berkeley
Regents and Chancellors Scholarship

Aug 2019 - May 2023

PUBLICATIONS

F. Last, *Title*, Publisher, City, ST, 2015.

PRESENTATIONS

Title, Department of Mathematics, University College. (December 2015)

LANGUAGES

English (Native), Mandarin Chinese (C1), French (B2), German (A2)

PROGRAMMING
LANGUAGES

Python, C++, Matlab, Julia, Java, ROS2, bash, L^AT_EX,

REFERENCES

Prof. Name, Title, Bates College, (555)555-5555, `user@domain.edu`