Lundeen Cahilly

+1 (203) 780-1564 | lcahilly@stanford.edu | linkedin.com/in/lundeencahilly | github.com/lundeen06

Education

Stanford University
Stanford, CA

Engineering Physics & Computer Science
Sep. 2024 – Jun. 2028

- GPA: 3.9/4.0
- Relevant Coursework: Quantum and Thermal Physics, Mechanics and Special Relativity, Programming Methodologies, Linear Algebra and Multivariable Calculus, Into the Metaverse: Designing the Future of Virtual Worlds, An Intro to Making & EE

Phillips Academy
Andover, MA

Aug. 2020 – Jun. 2024

- GPA: 5.97/6.0   *(top decile: 5.8/6.0)*
- Relevant Coursework: Modern Physics, Astronomy Research, AP Physics C Mechanics and E&M, The Art of Persuasion

Experience

Virtual Human Interaction Lab (VHIL)
Stanford, CA

Undergraduate Researcher
Jan. 2025 – Present

- Working with Prof. Jeremy Bailenson's XR research lab to quantify behavioral effects of XR via objective body measurements
- Developing computer vision-based motion tracking systems to enable precise measurement of human movement responses for studies on multimodal XR interfaces (e.g., haptics, spatial audio)

Stanford Space Initiative
Stanford, CA

Satellite GNC Engineer
Sep. 2024 – Present

- Architecting flight computer GNC subsystem, implementing high-fidelity attitude determination algorithms including B-dot detumbling, 6th-order IGRF magnetic field modeling, and Kalman Filter for state estimation
- Built 6-DOF attitude propagator incorporating gravity gradient, drag, SRP, magnetic field modeling, etc., with closed-loop LQR and B-dot control law validation with our GNC team
- Created optimization software for PCB-integrated magnetorquer design, incorporating magnetic dipole modeling and KiCAD automation to maximize torque while meeting power constraints

Dragon Group LLC
Greenwich, CT

Analyst
Jun. 2017 – Aug. 2024

- Financial modeling and strategic analysis on core team for Revitate's successful acquisition of Portland's WNBA franchise
- Conducted on-site strategic consulting in São Paulo for media-tech startups, helping video streaming and data-driven content companies develop international market expansion strategies
- Identified investment opportunity in Epic Games through analysis of Unreal Engine's market potential during 2017 Fortnite growth phase, directly contributing to successful investment decision

The Ligado Society
Greenwich, CT

Cofounder, Board of Directors
May 2017 – Present

- 501(c)(3) inclusive tech startup helping marginalized Portuguese-speaking kids esp. in Mozambique & Brazil
- Created & distributed high-value digital COVID-19 info reaching $\geq 50k$ Mozambicans on a regular basis

Other Projects

heimdall
May 2024 – Present

- Architecting ML pipeline and backend infrastructure enabling real-time, privacy-preserving dining analytics for athlete nutrition optimization app, developed in collaboration with NCAA athletes including co-founder Max Huang (UChicago XC/TF '28)
- Building anomaly detection and forecasting system synthesizing historical ingredient data, nutritional requirements, and real-time student feedback to reduce food waste across dining facilities (targeting 15% reduction in initial phase)
- Working on securing dining provider partnerships at Stanford and UChicago for Spring 2025 launch

Corsair Investment Theses & Acquisition
May 2017 – Dec. 2019

- Led comprehensive market analysis of gaming peripheral ecosystem trends, developing investment thesis that identified Corsair Gaming's undervalued manufacturing capabilities and brand equity, directly leading to Dragon Group's successful investment
- Leveraged intimate understanding of the gaming ecosystem to identify opportunities post-acquisition, leading to Corsair's subsequent acquisitions of Elgato (content creation), Origin (custom PCs), and SCUF (controllers)

Skills

Technical: Python, Julia, C, KiCAD, Javascript (React, Typescript), Unity, Unreal Engine 5, Solidity, Microcontrollers