

Education

University of Pennsylvania, Philadelphia, PA

Aug 2019 - May 2023 (Expected)

B.S.E. in Mechanical Engineering and Applied Mechanics. Cumulative **GPA: 3.8 / 4.0**.

Minors in Eng. Entrepreneurship and Computer Science

Experience

Vehicle Development Intern — Body Systems

May 2022 - Aug 2022

[Zoox](#)

- Conceptualized, designed, and improved stampings, brackets, and SMC parts for a mixed material BiB using CATIA V6.
- Led RCA efforts on 20+ vehicle issues, implemented safety critical design changes, and achieved FMVSS/IIHS compliance.
- Defined test plans, designed fixtures, and analyzed vibe/shock test data for multiple body and closures components.

Vehicle Design and Development Intern — Vehicle Prototyping

May 2021 - Aug 2021

[Toyota Racing Development](#)

- Developed a modular accumulator enclosure for a prototype electric vehicle, packaging its battery, HV and cooling.
- Performed validation testing of a prototype EV via K&C and CoG testing, blue light and laser scanning.
- Prototyped and implemented chassis mounts, body enclosures, and drivetrain adapters for an electric powertrain.

Lead Engineer — Body, Aerodynamics, and Composites

Sep 2019 - June 2022

[Penn Electric Racing](#) — Formula SAE

- Managed the design and fabrication of a carbon fiber body and aero package for a formula racecar, developed using STAR-CCM+ simulations, achieving a coefficient of downforce of 3.51, a 40% increase compared to previous designs.

Lab Teaching Assistant — Mechanical Design and Manufacturing

Aug 2020 - Present

[Penn Engineering](#) — University of Pennsylvania

- Introduced students to rapid prototyping (3D printing, laser cutting) and machine shop equipment (CNC Mill, Lathe).
- Trained students on CAD software (SolidWorks) and engineering validation methods (FEA, UTM) in a project-based lab.

Mechanical Design and Analysis Intern — CAE

Jul 2020 - Aug 2020

[Santobono Innovation](#)

- Remodeled and optimized an ABS 3D-printed orthopedic cast using FEA, achieving a 31% reduction of the overall stress experienced by the cast under nominal use, while increasing the weight only by 6%.

Assembly Team Member

Jan 2017 - Feb 2019

[Italian Space Agency](#) — Multitrop Project

- Assembled a space farming experiment unit sent on the ISS, compiling the assembly procedures with a cross-functional team from the Italian Space Agency, ESA, and Kayser Italia.
- Presented the project's findings in seminars organized by the Italian Space Agency, attended by over 500 students.

Honors and Awards

[Penn World Scholar](#) — University of Pennsylvania

Chosen from over 700 international students to represent Penn's intercultural leadership and talent, by participating and presenting in a series of career development seminars, leadership workshops, and guest conferences.

[Youth on the ISS Competition Winner](#) — Italian Space Agency

ISS competition set up by the Italian Space Agency in 2017 to recognize student teams with innovative space experiments. The Multitrop Project experiment was chosen from over 15 university student teams because of its cost-efficient design.

Skills and Interests

Software: Catia V6, SolidWorks, Ansys, Geomagic Design X, Adams Car, Star CCM+, HTML, C Java, MATLAB, Python.

Hardware: Rapid Prototyping (3D printing, CNC, laser cutting), Carbon Fiber Layups, Machine Shop Equipment (CNC Mill, Lathe, Bandsaw, Powertools), Handheld Laser Scanning, Blue Light Scanning, MTS Universal Tester.

Interests: Wood Working, Modern Art, Contemporary Architecture, Urban Design, Traveling, Cooking, Hiking.