

QUALIFICATIONS

Modeling:

- SolidWorks 2019
- KeyShot 10
- AutoCAD
- OnShape
- Visio

Manufacturing:

- Mill
- Lathe
- Drill Press
- Dremel
- Bandsaw
- Belt Sander
- Bench Grinder

Programming:

- ANSYS
- SolidWorks Flow Simulation
- Arduino
- MATLAB
- Python
- EES
- R-Studio

Certifications:

- Dassault Systems Associate
- OSHA 10
- Stratasys Additive Manufacturing

WORK EXPERIENCE

SharkNinja – Quality Engineer Coop

December 2024 – Present

- Focused on the Luxe Café, Ninja’s newest coffee maker, conducting in-depth teardowns to analyze failures and customer-reported issues.
- Identified, replicated, and thoroughly diagnosed root causes of product failures, developing potential solutions to improve reliability.
- Organized and tracked all returned units, maintaining a detailed teardown log shared cross-functionally to support data-driven decision-making.

SharkNinja – Product Design Engineer Coop

January 2024 – December 2024

- Concept to prototype testing with a focus on user experience and performance, specifically for blenders, frozen dessert makers, and food preservation systems, incorporating human-centered design principles.
- Utilized various machine shop tools to quickly prototype concepts, accelerating timelines.
- Conducted extensive testing of consumer products to evaluate performance in terms of temperature changes, power draw, and RPM.
- Built large and small-scale prototypes, saving time by repurposing existing materials and utilizing both 3D-printed and machined components.
- Led large-scale brainstorming sessions for motorized projects, fostering a fast-paced, cross-functional team environment.
- Created impactful weekly presentations and demos for leadership and executives, showcasing project advancements.
- Regularly designed and rendered product concepts using SolidWorks and KeyShot for fast, iterative prototype visualization.

Schneider Electric – Hardware Design Coop

September 2022 - December 2022

- Designed Electrical Installation and Process Diagrams for building automation projects.
- Created detailed diagrams using AutoCAD and Visio for floor layouts and electrical panels.
- Verified compliance with instrument specifications and approvals.

Schneider Electric – Systems Application Engineer Coop

January 2022 - May 2022

- Collaborated with field teams to implement building automation control systems.
- Developed user-friendly graphics for consumer interaction.

PROJECTS

Ninja SLUSHI™

- Quickly learned system components and functionality to understand its inner workings.
- Conducted extensive testing to assess performance, identify issues, and improve efficiency.
- Rapidly Prototyped design features to optimize user experience and product performance.

Ninja Blenders

- Conducted extensive testing on our blenders and competitor models, focusing on motor performance and user interactions.
- Evaluated alternative motor options to identify solutions that maintain performance standards while enhancing overall efficiency.

Vertical Axis Wind Turbine:

- Designed and tested four blade designs in a wind tunnel for a VAWT. Selected the highest drag force design for 3-6 blade configurations. Presented findings at AIAA student conference.

Turbofan Engine Analysis:

- Analyzed V2531-E5 turbofan engine using Ansys, Python, and EES, producing results closely aligned with actual performance data despite aerodynamic challenges.

Emergency Zipline Launching System:

- Designed and analyzed a grappling hook launching system using SolidWorks FEA and flow simulations.
 - Prototyped using cutting, milling, lathing, and 3D printing for testing.
-

PUBLICATIONS

- Massimiliano Orfanini, Eleonora Orfanini, Eduardo Meza Ubeda, Emily Sievers,” Studying the Efficiency of Various Wind Turbine Designs Through CFD Simulation and Numerical Testing”, AIAA New England, Region I, university of Buffalo, New York, 2023

EDUCATION

Wentworth Institute of Technology | GPA: 3.37

B.S. in Mechanical Engineering | September 2019 - August 2023

Minors: Aerospace Engineering, Applied Mathematics

- Awards: Wentworth Academic Scholarship (2019-2022), Dean’s List (2020, 2023)

Boston College | GPA: 3.8

Part-Time Student | January 2022 - May 2022