Summary of Skills

- Proficient in creative Computer Aided Design and GD&T with demonstrated experience: Solidworks, Autodesk Inventor & Fusion 360, Onshape, nTop
- CFD simulation: Ansys Fluent
- Additive Manufacturing (FDM) Software: Ultimaker Cura, Autodesk Meshmixer
- Programming: Java, Python, MATLAB (Beginner)

Education

University of Washington - Seattle, WA

Expected graduation June 2026

Pursuing Bachelor of Science in Mechanical Engineering, GPA 3.98

Relevant coursework (through Winter 2024): Visualization & CAD, Beginning Scientific Computing, Engineering Statics, Fundamentals of Materials Science

Experience

Incoming Mechanical Engineering Intern - Boeing

Starting June 2024

Electric Powertrain Engineer - UW Formula Motorsports, Seattle, WA

October 2023 - Present

- Analyzed and optimized geometry within inverter cold plate for improved heat transfer and flow rate
- Compiled and presented designs to industry professionals and integrated feedback into work
- Pinned out and waterproofed inverter connectors
- Collaborate with 90+ students to build a Formula 1 style race car for the Formula Student Competition

Intern - FineTech Toolings, Bangalore, India

August 2023

- Modeled a novel HSK-CNC chuck adapter fixture using a lever to increase holding force
- Assembled mechanical product visualizations demonstrating gear ratios of boring tools
- Learned process planning in a commercial setting
- Observed end-to-end design and fabrication of precision machined, injection molded, and stamped parts 3D Printing Lead *Newport High School Rocketry Club, Bellevue, WA* 2019 2023
 - Co-captained 2022 national American Rocketry Challenge champion team of 10, competing at the International Rocketry Challenge in London, England against three countries' representative teams
 - Developed and simulated rocket designs using *OpenRocket*
 - Designed and 3D printed end-use rocketry components such as nose cones, fins, transitions, and altimeter sleds using *Onshape, Autodesk Fusion 360*, and *Cura*
 - Constructed, assembled, and launched numerous model rocket bodies

CAD (Computer Aided Design) VP - Newport Robotics Group 948, Bellevue, WA

2019 - 2023

- Competed in 2023 FIRST Robotics Competition World Championship
- Developed, wrote, and implemented design training curriculum for subgroup of 15-20 in team of 100
- Managed the design and prototyping process of 125 lb robot
- Designed 3D printed accessories such as earrings and aglet covers

Design Projects

Rocket nose cone mounted airbrake for precise payload deployment, 5" - 11" diameter size-adaptable flywheel shooter for robot prototyping, Non-cyclic 10ft scale wind tunnel for aerodynamics testing, Climber capable of traversing a 125 lb robot across multiple spaced rungs, Mechanisms for dual-pendulum hotend based 3D printer 3D Printed Cosplay Props: Broadsword - Inspired by Christian Iconography, The Consuming Dark - Path of Exile, Tombfinger - Warframe, Tracer's Pulse Pistol - Overwatch

Awards and Achievements

Keynote Speaker, "How to Win the American Rocketry Challenge" vNARCON	January 2024
Team Sustainability Award, FIRST Robotics Competition World Championship	April 2023
1st place, The American Rocketry Challenge National Finals	May 2022
2nd place, International Rocketry Challenge	July 2022
Yale Young Global Scholar	July 2022
Semifinalist, FIRST Robotics Competition Dean's List	April 2022
1st place, The American Rocketry Challenge National Presentation Competition	<i>May 2020</i>