

Education

Carnegie Mellon University • Dec 2019 • Pittsburgh, PA

Major: B.S in Mechanical Engineering (May 2019). M.S. planned Dec 2019.

GPA: 3.72 (Dean's List: F15, F16, S17, F18, S18, S19)

Leadership

Vice President of Structures for Carnegie Mellon Racing

June 2018 – June 2019

- Lead project managers and system leads to produce a competitive car, ensuring designs met team goals, and managed schedule & resources to ensure timely completion of this year's vehicle (19e)
- Team was a design finalist at FSAE North & FSAE Electric; won 1st place overall at FSAE North

Team Leader at Needham Track Club

June 2012 – Aug. 2017

- Coached children ages 4-14 through track and field related activities, led peer group of counselors

Projects

Desktop Waterjet Capstone January 2019 – May 2019.

- Lead development and machining of components to produce cutting stream powered from OTS pressure washer
- Team won best overall project at design exposition

Carnegie Mellon Racing (CMR) (Formula SAE) 18e June 2017 – June 2018.

- Accumulator Mechanical System Lead: packaged 720 lithium ion cells and other electrical components, designed container for water impermeability, ease of assembly, and withstanding rules-mandated requirements
- Mechanical Recruitment and Training Lead: integrated new members into club through projects and mentoring

CMR 17e Pedal Assembly Aug. 2016 – June 2017.

- System lead for pedal assembly, worked with other members to ensure compatibility and rule compliance
- In charge of designing, analyzing, and manufacturing the pedal assembly for the electric racecar

Experience

Aurora Flight Sciences, Cambridge, MA

Mechanical Engineering Intern, May – Aug. 2018

- Developed, fabricated, and tested subscale models of proposed eVTOL aircraft configurations with a small team of interns and full-time engineers to acquire funding and guide design for larger scale development
- Responsible for detailed design and fabrication of internal structure of vehicles

iRobot, Bedford, MA

Mechanical Engineering Intern, June – Aug. 2017

- Worked on Robot Development Team utilizing prototyping, design tools, and test equipment to verify and improve the robot as a system and its subsystems
- Determined viability of a pre-filter in cleaning system, prototyped overmolded parts, improved wheel spring force
- Developed test fixtures, made mechanical changes to automate an existing fixture working with software engineers

Skills

SolidWorks • MATLAB • ANSYS • Creo/Windchill • Python • CNC Milling • Manual Mill/Lathe

Relevant Coursework

Thermal-Fluids Exp.
Heat Transfer

Dynamic Sys. & Ctrl.
Dynamics

Applied FEA
Mechanical Sys. Exp.

Numerical Methods
Design II (capstone)