Liam J. Walsh

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Education

Carnegie Mellon University • Graduating May 2019 • Pittsburgh, PA
Major: B.S in Mechanical Engineering. Planned M.S. in extra semester post-graduation.
GPA: 3.70 (Dean's List: F15, F16, S17, F18, S18)

Leadership

Vice President of Structures for Carnegie Mellon Racing
June 2018 - Present
- Leading project managers and system leads to produce a competitive car, ensuring designs meet team goals, and managing schedule to ensure timely completion of this year's vehicle (19e)

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

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 crash loads
- 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

Influences on Public Opinion Towards Climate Change Jan. – Mar. 2016
- Researched how the media as well as fossil fuel companies, have shifted public opinion towards climate change
- Presented my research at CMU's Meeting of the Minds Symposium

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.	Dynamic Sys. & Ctrl.	Applied FEA	Numerical Methods
Heat Transfer	Dynamics	Mechanical Sys. Exp.	Design I