# Liam J. Walsh

## Education

Carnegie Mellon University • Graduating May 2019 • Pittsburgh, PA

Major: B.S in Mechanical Engineering

**GPA**: 3.67/4.0 (Dean's List: F15, F16, S17, F18)

Needham High School • Graduated June 2015 • Needham, MA

GPA: 4.74/5.0; High Honor Roll

# **Projects**

#### **Carnegie Mellon Racing (CMR) (Formula SAE) 18e** June 2017 – Pres.

- Accumulator Mechanical System Lead: packaging 720 lithium ion cells and other electrical components, designing container for cooling cells, ease of assembly, and withstanding rules-mandated crash loads
- Mechanical Recruitment and Training Lead: integrating 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 last year's 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

### Skills

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

# Experience

## 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, optimized wheel spring force
- Developed test fixtures, made mechanical changes to automate an existing fixture working with software engineers

#### Object Management Group, Needham, MA

Summer Intern, May – Aug. 2016

- Designed and deployed an application to automate data entry projects
- Trained employees to use application that is still in use to this day

## Relevant Coursework

Thermal-Fluids Exp.\* Dynamic Sys. & Ctrl.\* Design I Numerical Methods Heat Transfer Dynamics Fluid Mechanics Stress Analysis

# Leadership

#### Assistant to TA for Physics I

Sept. – Dec. 2016

• Explained concepts to students in small groups, answered questions from students

# **President of Needham High Environmental Club**

Sept. 2014 – June 2015

· Organized and led meetings and projects, communicated with school administration

#### **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