# John R. Donahue III

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#### Education

## Northeastern University, Boston MA

Candidate for Bachelor of Science in Mechanical Engineering and Physics

Candidate for Master of Science in Mechanical Engineering with Concentration in Mechatronics

Honors: Dean's Scholarship Recipient, Dean's List Scholar

Coursework: Thermodynamics, Mech. Eng. Computation and Design (FEA), Statics, Mechanics of Materials, Electronics,

Electricity and Magnetism, Advanced Physics Lab, Modern Physics, Materials Science, Graduate Math Methods

Activities: Paradigm Hyperloop, Northeastern Club Ultimate Frisbee, American Society of Mechanical Engineers (ASME)

Simsbury High School, Simsbury CT

May 2018, GPA 4.39

August 2022, GPA: 3.68

Honors: High Honor Roll, 2018 Matianuck District Eagle Scout of the Year, National Merit Scholar

Activities: Varsity Rowing Team (Captain), National Honor Society (Vice President), Boy Scouts of America (Eagle Scout)

## **Technical Skills**

Computer: SolidWorks (Parts, Weldments, Simulations), ANSYS, AutoCAD, Autodesk, Creo, MATLAB, Arduino, C++

Manufacturing: Lathe, 3D Printing, Band Saw, Miter Saw, Jigsaw, Drill Press, Sanders, Standard Power Tools

Certifications: Certified SolidWorks Associate (CSWA), Shimano T.E.C. Certified, American Red Cross Adult and Pediatric First

Aid/CPR/AED

# **Experience**

# Paradigm Hyperloop - Boston, MA

September 2018 – Present

Mechanical Designer

- Design in SolidWorks and build a fully functional hyperloop pod to compete in the annual SpaceX competition as part of an
  international collaborative team (Placed 8<sup>th</sup> in the World in 2019)
- Co-led the design and Finite Element Analysis (FEA) of an aluminum pod chassis to withstand acceleration to 300mph and a deceleration of 7g's with an ultimate factor of safety of 3 or higher for the 2019 competition
- Co-leading the research and design of a titanium and carbon fiber reinforced polymer (CFRP) chassis to provide structural support for accompanying subsystems while withstanding acceleration, braking, and vibrational forces for the 2020 competition.
- Create clear and accurate documentation of work throughout the process for communication to manufacturers, SpaceX officials, and team members across 5 time zones

#### Urban AdvenTours - Boston, MA

March 2019 - Present

Service and Retail Associate, Tour Guide

- Diagnose problems and perform repairs ranging from flat tire fixes to drivetrain replacements utilizing Shimano T.E.C. methods, and provided quality service and recommendations on mechanical components for customers
- Prepare rental bikes and guided guests on a historical Boston bike tour while ensuring a safe cultural experience

## Paradies-Lagardere - Windsor Locks, CT

June 2018 - April 2019

Stock Associate

Communicated with vendors, generated inventory reports, and processed merchandise alongside a team of 15 in a retail
warehouse at Bradley International Airport, servicing thousands of travelers daily

# **Community Involvement**

# Beta Gamma Epsilon - Boston, MA

December 2018 - Present

Philanthropy Chairman, Interfraternity Council Chairman

- Organize, plan, and supervise 300+ man-hours of biweekly volunteer opportunities and fundraisers per semester such as cooking
  for the homeless at Pilgrim Church, route support for the Boston Marathon, and build projects for Habitat for Humanity
- Collaborate with fellow student organizations and Northeastern University on operations decisions and campus involvement

## Boy Scouts of America - Simsbury, CT

April 2013 - Present

Eagle Scout, Assistant Scoutmaster

- Planned, budgeted, and led a \$1000, 150 man-hour project to remove rotting debris and rebuild an 80 year old pavilion at a local community center to reclaim the space for outdoor events and fundraisers
- Led and mentored a troop of 70 boys through weekly meetings and monthly camping trips, while promoting leadership development and growth opportunities

# **Background and Interests**

- Outdoor sports, camping, and adventures such as backpacking in New Mexico and summiting Mt Washington in the winter
- Currently training to bike across the country to support the fight against cancer in young adults