

EDUCATION

Tufts University, Medford, MA

Graduation: May 2021

Bachelor of Science in Mechanical Engineering

Dean's List: Fall 2017 – Spring 2020

Minors in Engineering Management and Human Factors Engineering

GPA: 3.65

Relevant Courses: Robotics, Machine Design, Technical Communication, Fluid Mechanics, Engineering Management, Mechanical Design and Fabrication, Statics and Dynamics, Applied Electronics

Awards: 2020 Vincent Manno Leadership Award

WORK EXPERIENCE

Zephyr Lock

June – August 2020

Mechanical Engineering Intern

- Devised and executed alpha testing for a cloud-based electronic RFID lock system. Evaluated the performance of locks through scenario-based tests and provided comprehensive feedback reports.
- Automated the compression measurements of a customer's clamp product by developing a testing machine to be used on the factory floor. Designed to fit safety, size, and power specifications for use by employees on the factory floor. Applied skills in 3D modeling, user-centered design, mechanics, and electronics.

Tufts University School of Engineering

January 2019 – May 2020

Undergraduate Researcher

- Improved the circuit and code-based controller for Professor Paul Lehrman's Self-Playing Violin. Solved problems with the electronics and physical mechanism and presented the violin at the NAMM conference for the musical instrument industry.
- Designed the Lego EV3 Wall-E Robot for Professor Chris Rogers. Built a robot that resembles Pixar's Wall-E and a chest-mounted controller that uses gyroscope data to control Wall-E's movements.

Tufts Center for Engineering Education and Outreach

Mechanical Engineering Intern

June - August 2019

- Conducted a scientific study for Conn-Selmer to eliminate a chemical defect that occurs during large-scale manufacturing of trombones and trumpets. Developed testing methods for brass samples using rapid-prototyping, research, programming and web-based data collection

LEADERSHIP & ACTIVITIES

Tufts American Society of Mechanical Engineers

September 2018 - Present

President

- Managed the affairs of the Tufts chapter of the ASME. Organized tours and lectures with engineering companies in the Boston area to expose Tufts students to careers in the Mechanical Engineering field.
- Fostered relationships with local engineering companies through professional communication and outreach.
- Awarded the 2020 Vincent Manno Leadership Award for demonstrating vision, communication skills, and an ability to motivate and lead a team to achieve specific objectives under various resource constraints.

Introduction to Engineering: Designing Smart Toys

Teachers Assistant

September - December 2019

- Mentored and taught incoming freshman at Tufts University about designing prototypes, coding for electronics, and using common fabrication tools. Helped students use 3D printers, the laser cutter, and hand tools to build smart toys powered by LabView or C++ code.

Nolop Makerspace

September 2019- June 2020

Fabrication Supervisor

- Educated and trained Tufts University students that are interested in using prototyping equipment such as 3D printers, laser cutters, or power tools to build creative and useful projects. Encouraged safe, creative, and inclusive use of the makerspace.

SKILLS

Technical: SolidWorks, C++, Python, MATLAB, LabView, MS Excel, 3D Printing and Laser Cutting

Professional: Product Development, Communication, Analytical Problem-Solving, Time and Resource Management