

Drake Elliott

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Education

Massachusetts Institute of Technology (MIT)

Cambridge, MA

Candidate for B.S. in Mechanical Engineering, GPA: 4.8/5.0

Class of 2026

Relevant Coursework

- | | | | |
|--------------------------------------|-------------------------------|-----------------------------------|------------------------------|
| • Dynamics and Control II | • Design and Manufacturing II | • Measurement and Instrumentation | • Mechanics and Materials II |
| • Electronics for Mechanical Systems | • Thermal-Fluids II | • Mechanical Design | • Product Engineering |

Experience

GentleCare

Somerville, MA

Mechanical Engineering Intern

July - September 2025

- Engineered and rapidly prototyped critical components for a soft robotics product specializing in patient transfer and repositioning to reduce required human labor and strain
- Led design discussions and made critical technical decisions for the company's flagship product based on core mechanical engineering principles and internal research and development
- Verified flagship product performance and showcased demonstrations for potential new investors and company partners

d'Arbeloff Robotics Lab

Cambridge, MA

Undergraduate Researcher

February 2024 - May 2025

- Contributed to the design, fabrication, and analysis of an exercise assistive robot to help the elderly and disabled with balancing and fall prevention as they perform daily physical exercises or rehabilitation movements
- Performed static and workspace analysis of the robotic linkage assembly and integrated high-precision encoders and load cells for accurate measurement of position and applied forces
- Developed signal processing algorithm to filter noise and produce clear visual representations of collected data

The Red Laboratory

Cambridge, MA

Undergraduate Researcher

January - December 2023

- Developed a working prototype of a cryogenic pump intended for space application and research by employing 3D design software and fabrication techniques
- Designed and fabricated a testing loop to accurately measure various parameters of the pump to optimize performance
- Addressed design challenges such as cavitation prevention and vapor phase minimization by leveraging existing literature

Leadership

Divison I Varsity Rowing

Massachusetts Institute of Technology

Athlete & Team Captain

Fall 2022 - Present

- Led a team of over 30 student-athletes by serving as primary communication between coaches and teammates, including discussions about goals and behavior expectations
- Mentored athletes and acclimated members to team culture by modeling standards for performance and professionalism
- Competed as a rower in a nationals and international-qualifying boat, and engaged in rigorous training for 18 hours/week year-round

Gordon-MIT Engineering Leadership Program

Massachusetts Institute of Technology

Gordon Engineering Leader

Fall 2024 - Present

- Participating in leadership development program focused on being an effective leader of industry engineering teams
- Actively practicing leadership, teamwork, and communication skills in an engineering context; complementing MIT's technical coursework

Publications

Spring Loaded Double Pantograph: A Robotic Mechanism for Safe Balance Training

August 2025

Ravi Tejwani, John Bell, Drake Elliott, Cameron Wright, Peter Wayne, Paolo Bonato, Harry Asada

Accepted and Presented at IEEE RO-MAN 2025, Eindhoven, Netherlands, Kazuo Taniguchi Award Finalist

Technical Skills

Software: CAD (SolidWorks, Fusion 360), MATLAB, C++, Processing, Photoshop

Machine Shop: Mill, Lathe, CNC, CAM, Band Saw, Drill Press, Miter Saw, Table Saw, Soldering, 3D Printing, Sewing