

Bemnet Asefa

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EDUCATION

Massachusetts Institute of Technology (MIT)

Cambridge, MA
2024 – 2028

GPA: 4.2/5.0 | *B.S. in Mechanical Engineering w/h a Minor in Computer Science*

Relevant coursework: Classical Mechanics, Electricity and Magnetism, Differential Equations, Intro to Design, Chemistry, Multivariable Calculus, Mechanics and Materials, Dynamics and Controls, Fundamentals of Programming, Numerical Computation for Mechanical Systems, Mechanical Engineering Tools

Uplift Infinity Preparatory

Irving TX

2020 – 2024

GPA: 4.38/4.0 | ACT: 33/36

EXPERIENCE & PROJECTS

University of Melbourne: Human Robotics Lab

Melbourne, Australia

Research Intern

Summer 2025

- Interned at the University of Melbourne’s Human Robotics Laboratory, focusing on improving energy efficiency in an existing prosthetic arm
- Researched and analyzed non-back drivable mechanisms (spring clutch, sprag clutch, roller clutch, etc.) in commercial and research prosthetics for potential integration with current model
- Designed and prototyped a 3D-printed mechanism using CAD, and recommended the optimal design to the project’s PhD lead based on testing results

Massachusetts Institute of Technology: Cohen Mechanics Group

Cambridge, Massachusetts

Research Intern

Dec 2024 - Feb 2025

- Developed a modular, 3D-printable add-on for a Volume Controlled Cavity Expansion (VCCE) system to enable multi-cavity soft tissue testing
- Designed for usability and reproducibility, ensuring the add-on was modifiable, detachable, and accessible for other researchers
- Improved system scalability and research flexibility, culminating in a collaborative hackathon where the full multi-cavity testing setup was assembled and validated

MIT Consulting Group (MCG)

Cambridge, Massachusetts

Case Team Member

2024 – 2025

- Collaborated on a team consulting for leading EUV lithography manufacturer ASML, developing a precision manufacturing tool through CAD modeling and the design of a targeted testing framework
- Researched supply chain and policy solutions to optimize the food economy in rural Western Massachusetts, delivering actionable insights to the client
- Served on the Client Sourcing Committee, reaching out to potential clients and pitching MCG’s value proposition to secure new project opportunities and client partnerships

LEADERSHIP AND ACTIVITIES

Uplift Infinity Preparatory Highschool Volleyball Team

Irving, TX

Captain

2022 – 2024

- Started my school’s first boys' volleyball team with 20 players, leading team to regional championships in consecutive years
- Organized and coordinated 2 weekly practices between coach and players on- and off-season

HONORS AND ACHIEVEMENTS

- **Awards:** Precalculus Student of the Year (awarded to one student every year) *2022*
- **Scholarships:** \$1,000 Charles Schwab Scholarship (First ever recipient) *2024*

SKILLS AND INTERESTS

- **Relevant Skills:** Fusion360, Python, MATLAB, Mathematica, Amharic
- **Non-academic Interests:** Basketball, Volleyball