Elias Bilal

774 331 1665 | eliasbyo23@gmail.com | LinkedIn

EDUCATION

Tufts University 2022 – 2026 Bachelor of Science Mechanical Engineering (BSME)

Major GPA (Mechanical Engineering): 3.00 / 4.00

Relevant courses: General Physics I, General Physics II, Applications in Engineering: Simple Robotics, Computation in Engineering, Calculus I, Calculus II, Differential Equations, Mechanics I, Materials and Manufacturing I, Elementary Modern Standard Arabic

The American University in Cairo 2024-2024 Non Degree Seeking Study Abroad Student

Relevant courses: Mechanics II Dynamics, Materials and Manufacturing II, Calculus III

EXPERIENCE

Consigli Construction, Cambridge, MA— Project Management Intern

May 2023 - August 2023

- · Earned OSHA 10 Certification
- · Worked closely with Project Engineers, MEP Managers, Architects, Owners, and Subcontractors to restore the Harvard Newell and Weld Boat Houses while obtaining knowledge and experience of construction operations and procedures
- · Responsible for project documentation, communication with subcontractors, and participation in project meetings Tufts Sports Medicine, Medford, MA— Work Study

October 2022 - Present

· Accurately uploading student athlete paperwork onto the patient database

Dicks Sporting Goods, North Attleborough, MA— Cashier

March 2023 - May 2023

· Quick and precise handling of monetary transactions and frequent use of upselling so

PROJECTS

Electric Scooter Project

- · Modeled and manufactured functional electric scooter design with metal materials to meet desired load specifications via SOLIDWORKS
- · Assembled scooter using a 350W Permanent Magnet DC motor, motor controller, braking mechanism and steering mechanism under a budget to create a functional product

Crossbow Project

- · Used Lego Spike Prime, Legos, and wood to create a functional website controlled crossbow that could aim and pop balloons
- · Was developed to entertain middle school age clients who tested the crossbow from their school location via zoom Sign Language App
- · Coded an app that takes letter inputs from the user and outputs images of the correct ASL signs in order using JavaScript
- · Designed app layout to be user friendly and easily functionable

Lung Cancer Prediction Website

- · Coded a Python program which utilizes machine learning, medical patient data of lung cancer probabilities and user inputs to predict lung cancer risk.
- Graphs correlations between different patient characteristics and cancer probability as characteristic level increases

EXTRA CURRICULARS / LEADERSHIP

National Society of Black Engineers (NSBE)

- · Underclassmen Representative of the Tufts NSBE chapter; role to help expand Tufts' chapter member network **Tufts Football Team**
- · Athlete and teammate

SKILLS

Languages & Programs: Python, SOLIDWORKS, JavaScript, HTML, MATLAB, CSS, Comsol Mechanical Engineering: 3D printing, Laser Cutting, PCB, Prototyping, Design, Injection Molding

Graphics, Documentation, & Editing: Microsoft PowerPoint, Microsoft Excel