Aniesha Dyce

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EDUCATION

Massachusetts Institute of Technology, Cambridge, MA

May 2025

Candidate for Bachelor of Science in Mechanical Engineering, GPA: 4.8/5.0

Relevant Coursework: Mechanics and Material; Dynamics and Control; Physics; Calculus; Fundamentals of Engineering Design; Differential Equations

RELEVANT PROJECT WORK

Remote Control Quadcopter, MIT Course Fundamentals of Engineering Design

April 2022 – May 2022

- Fabricated the body of a quad copter using Solidworks and a 3D printer
- Programmed a remote-control system to make the quad copter operational via Arduino skeleton code
- Communicated with an NRF24L01 wireless module for remote control capabilities

Model Car, MIT Course Fundamentals of Engineering Design

March 2022 – April 2022

- Designed a functionable car using Solidworks, a 3D printer, a laser cutter, a stepper motor, and a DC motor
- Programmed the car's movements using Arduino skeleton code

EXPERIENCE

Undergraduate Research Opportunity, Cambridge, MA

September 2022 – Present

Research Assistant

- Fabricating hydrogels (Thermal Energy Storage Device)
- Maximizing thermal storage capability of hydrogels

CICATA IPN, Querétaro, QRO, Mexico

June 2022 – August 2022

Research Assistant

- Researched previous Liquid Metal Magnetohydrodynamic (LMMHD) generators and proposed modifications
- Prototyped and modeled a LMMHD generator with enhanced power conversion using Solidworks
- Assembled 3D printed model to create an operational generator to be placed in areas with high foot traffic

Bicycle Habitat, Brooklyn, NY

Salesperson & Assistant Mechanic

March 2021 - August 2021

- Assembled new bikes to be sold and repaired used bikes
- Collaborated with customers to personalize their riding experience

Macademy School of Science and Technology, Brooklyn, NY

July 2019 - August 2020

Summer School Math Teacher & Office Assistant

- Educated and reinforced the math skills of 3rd to 8th graders in arithmetic, pre-algebra, algebra, and trigonometry
- Resolved concerns of incoming and prior parents about academic rigor and billing

LEADERSHIP & ACTIVITIES

Undergraduate Practice Opportunities Program (2022-Present) – Honing teamwork, problem solving, and communication skills through professional development themed workshops, discussions, modules, and mentorship Solar Electric Vehicle Team Member (2021-2022) - Adapted and revitalized prior solar car designs in Solidworks Girls Who Code Participant (2017-2021) - Attained basic programming knowledge in C++ and HTML Math Peer Tutor (2014-2021) - Assisted colleagues by clarifying topics and demonstrating solution techniques Swim Team Captain (2019-2021) - Motivated 20 teammates and reinforced good practice habits

Cross Country Captain (2019-2021) - Provided a supportive environment for 20 teammates and recruited members

SKILLS & INTERESTS

Solidworks · Advanced Spanish · Adobe Illustrator · Microsoft Office · 3D Printing · Machining · Sustainable Energy

SOCIETIES

A Better Chance Scholar; National Society of High School Scholar; Nu Delta; Cum Laude Society