**EDUCATION**

# Massachusetts Institute of Technology (MIT)

*Candidate for Bachelor of Science in Electrical Engineering and Computer Science*  *May 2026*

* Relevant Coursework: Linear Algebra, Differential Equations, Fundamentals of Programming, Artificial Intelligence, Intro to Algorithms, Circuits & Electronics, Robotics, Computation Structures.

**EXPERIENCE**

**DeepCurrents**

Intern *July 2024 — Present*

* Designed and developed new trading algorithms for bonds, stocks, and commodities.

**University of Tennessee Research Group**

Machine Learning Researcher *May 2023 — Present*

* Constructed a machine learning predictive model for superconductivity based on material properties
* Created an LLM to extract materials information, such as chemical formula, from research papers

**MIT Media Lab – Personal Robotics Group**

Machine Learning Software Engineer Intern *Summer 2022*

* Developed and trained machine learning models that determined robot behavior in response to human interactions
* Integrated vision pipelines and wrote robot code with Robot Operating System (ROS)

**SIEMENS**

Automation Intern *Summer 2023*

* Developed C# code to automate testing of PET/CT scanners and its user interface
* Ran the automated tests on PET/CT scanners, investigated issues, and documented findings and defects

# MIT Formula Society of Automotive Engineers (FSAE) Team

Software Engineer  *2021 — 2023*

* Programmed (C++) custom circuit board for autonomous vehicles battery testing and cycling

**PROJECTS**

* **Machine Learning Program for Google Dino Game:** Java

Created a neural network from scratch that could learn how to play a simple game.

* **Segway Robot:** C/C++

Built and programmed a working segway robot (Arduino).

* **Electric Field Stream Lines Program:** Java

Designed and developed an app that draws electric field stream lines of point charges input by users

* **Tournament Prediction Webapp:** HTML/CSS, JavaScript, Firebase

Built a webapp with Firebase that allows users to sign in and make predictions of a tournament. The webapp displays a leaderboard of the most accurate predictors once the matches occur.

* **Next Haunt Build Director:**

Designed a large haunted house, delegated build tasks to volunteers, and monitored the build process.

* **FIRST Robotics Competition (FRC) Robot:** Java, Python

Designed vision pipelines with Python OpenCV; developed autonomous routines and wrote robot code in Java

**SKILLS**

**Programming Languages:** Python, C++, C, C#, Java, Assembly, PHP, SQL, RISC-V, MATLAB, LabView.

**Programming Skills:** Pytorch, Tensorflow, scikit-learn, MongoDB, React, NodeJS, Firebase.

**Computer Skills:** Linux, Ubuntu, SDLC, UI/UX, Git, Docker, Wordpress, Microsoft Office.

**Robotics/Controls:** Motion control, PID control, Computer vision (OpenCV), CAN bus, Sensors, Arduino, Nucleo, Raspberry Pi, ROS, Motion Simulation, Localization, Path Planning & Following Algorithms, LiDAR.

**Prototyping:** Solidworks CAD, Lathe and Mill Machining, Laser Cutting, PCB Design (Eagle).

**AWARDS and LEADERSHIP**

**MIT League of Legends Esports Team Manager** *2023 — Present*

**American Math Competition (AMC) Honor Roll** *2018 — 2021*

**AMC Young Women in Mathematics Prize**