Emma Bethel

she/her

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Education

Tufts University School of Engineering, Medford, MA

Bachelor of Science in Computer Science, 2024 GPA 3.97, Tau Beta Pi Honors Society 2022-Present

Lowell High School, San Francisco, CA

Class of 2020, Shield and Scroll Honors Society 2019-2020

Work Experience

Tufts University Computer Science Department, Medford, MA

Algorithms TA, Spring 2023 - Present // Discrete Math TA, Spring 2022 - Fall 2022

- Hold office hours to answer student questions and go over new content.
- Grade and give feedback on proofs, algorithm designs, and other math work.

Pax et Lox Kosher Deli, Medford, MA

Student Manager, Fall 2023 - Present // Student Worker, Fall 2020 - Spring 2022

Prepare and hand off sandwich orders to customers, as well as train new employees and manage break schedules.

Sensata Technologies, Attleboro, MA

Software Engineering Intern, Summer 2023

• Designed and implemented a signal processing algorithm, as well as associated GUI, for detecting faulty sensors.

Ciena Corporation, Hanover, MD (Remote)

Cloud Engineering Intern, Summer 2021 - Summer 2022

- Designed and programmed a REST API and attached database using the Django REST Framework, with features based on discussions with future users.
- Set up infrastructure for running a web server remotely in Docker containers using AWS ECS and Fargate.

Tufts Center for Engineering Education and Outreach, Medford, MA

Research Intern, Winter 2020

• Expanded, documented, and created examples for software library for JavaScript control of LEGO SPIKE Prime robots.

Activities

Tufts Assistive Agent Behavior and Learning Lab, Medford, MA

Undergraduate Research Assistant, Fall 2022 - Present

- Provide data visualizations and other assistance to Ph.D. researchers.
- Regularly discuss recent advancements and possible future work in the Human-Robot Interaction field.

Tufts Robotics Club, Medford, MA

President, Fall 2023 - Present // Secretary, Spring 2022 - Spring 2023 // General Member, Fall 2020 - Spring 2022

- Plan and lead workshops in areas such as computer vision, motor control, and ROS.
- Organize internal robotics competitions, including a self-designed computer vision competition.
- Design and program robots for local robotics competitions, such as the Harvard Pacbot Competition.

Skills

- Python, C/C++, Java, C#
- HTML, CSS
- Agile Framework

- OpenCV, PyPlotlib
- SkLearn, Pytorch, Tensorflow
- Django, Flask, SQLAlchemy
- ROS
- SQL
- Microsoft Office