## Education

## Massachusetts Institute of Technology (MIT)

Cambridge, MA

• Candidate for S.B. in Electrical Engineering. GPA: 4.8 / 5.0.

Sept. 2021 – present • Programming: Python — NumPy and SciPy. MATLAB. Julia. Graduation: June 2025

Signals, Systems, and Inference \* Signal Processing \* Biomedical Signal and Image Processing \* Music Processing \* Computational Imaging: Physics and Algorithms \* Feedback System Design \* Electromagnetics, Waves, and Applications \* Acoustics and Sensing \* Multivariable Calculus \* Differential Equations \* Linear Algebra \* Probability and Random Variables \* Intermediate Probability Problem-Solving \* Physics I: Classical Mechanics \* Physics II: Electricity and Magnetism \* Circuits and Electronics \* Computer Architecture \* Programming in Python \* Low-Level Programming in C and Assembly \* Toy Product Design \* Strobe Photography Lab

# **Teaching**

### Teaching Assistant for Signal Processing

Jan. 2024 – present

- Develop course materials, including problem sets, labs, and quizzes.
- Assist with lectures and recitations. Staff office hours. Lead quiz reviews.
- Maintain course website. Supervise lab assistants. Grade guizzes.

## Teaching Assistant for Multivariable Calculus

Sept. 2022 – present

• Hold recitations, office hours, and exam reviews. Webmaster. Head grader. Tutor.

### Laboratory Assistant for Signal Processing

Sept. 2023 - Dec. 2023

• Helped students with problem sets and labs during office hours. Led quiz reviews.

## Research and Work Experience

### Research Assistant, MIT Computational Biophotonics Lab

Cambridge, MA

• Research and develop next-generation optical imaging and computational methods.

Jan. 2024 – present

• Enable non-invasive, deep, fast, and high-contrast visualization of biological systems.

#### REU Student-Scholar, South Dakota State University

Brookings, SD

• Researched electric power systems and electricity markets.

May 2023 - Aug. 2023

- Engaged in high-performance computing bootcamps.
- Presented research at the South Dakota EPSCoR symposium in July 2023.

#### Research Assistant, MIT TedLab

Cambridge, MA

• Modeled how prior expectations influence sentence comprehension in noise.

Feb. 2023 - May 2023

### Climate Action Intern, Bennett College

Greensboro, NC

• Initiated food waste composting program and water quality audit.

May 2022 - Aug. 2022

Interviewed seven sustainability-focused faculty in North Carolina and Virginia.

• Planned environmental justice and sustainability conference for November 2022.

## Extracurriculars at MIT

Associate Academic Advisor	Experimental Study Group	Aug. $2022 - present$
Associate Academic Advisor	Electrical Engineering and Computer Science	Jan. $2024 - present$
Resident Peer Mentor	Baker House (Dormitory)	Aug. $2023 - present$
Member	Undergraduate Student Advisory Group in EECS	Feb. $2024 - present$
Program Coordinator	Priscilla King Gray Center for Public Service	Jan. $2024 - present$
Program Counselor	Priscilla King Gray Center for Public Service	May 2023 - Aug. 2023
Track Meet Director	MIT Running Club	Jan. 2023 - Apr. 2023
DEI and Outreach Chair	Undergraduate Mathematics Association	May 2022 - Jan. 2023