# Ryan Cooley

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# Education

## Tufts University, Medford, MA

Expected Graduation June 2027

BS in Chemical Physics

GPA: 3.88/4.00, Dean's List (All Semesters)

Relevant Coursework: Calculus I-III, Physics 11-13, General Chemistry, Organic Chemistry I, Introduction to Computer Science

# Research Experience

# Ding Lab at Tufts University, Medford, MA

May 2024 - Present

Undergraduate Research Assistant

- Attend weekly Ding Lab meetings on molecular simulation models
- Apply molecular simulation software for water box modeling
- Develop bundled water structures to facilitate coarse-graining in molecular simulations

# Center for Astrophysics, Cambridge, MA

June 2022 - August 2023

Astrophysics Intern

- Created astronomical images from Chandra data using CIAO and DS9 under the mentorship of Dr. Felipe Andrade-Santos
- Learned to use LaTeX for scientific paper creation and publication

#### Dexter Southfield, Brookline, MA

September 2022 - December 2022

Presenter on Information Retrieval

 Researched retrieval principles and presented findings to math and science faculty at Dexter Southfield

# Professional Experience

# Chestnut Hill Realty, West Roxbury, MA

May 2024 - August 2024

Administrative Assistant

- Managed office tasks, organized property tours, and handled calls with prospective and current tenants
- Coordinated maintenance requests enhancing tenant satisfaction

CVS, Wellesley, MA

December 2020 - March 2023

Retail Store Associate

• Stocked inventory, trained new hires, and helped customers have a positive experience

# Skills

**Programming Languages:** Python (PCEP Certified), C++

Molecular Simulations: OpenMM, VMD Astronomical Data Tools: CIAO, DS9 Document Preparation: LaTeX

Web Technologies: HTML

# Extracurriculars

#### SEDS

Radio Telescope Software Developer November 2023 - Present CubeSat Flight Software Team Member September 2024 - Present

- Calculate minimum angles for telescope alignment
- Develop flight software for CubeSat missions
- Coordinate with teams for software testing and integration

American Chemical Society - Member

Society of Physics Students - Member

Club Squash - Member

September 2023 - Present
September 2023 - Present
September 2023 - Present
September 2023 - Present
January 2023 - Present