# Rayna Yu

Boston, MA | +1 774-315-6408 | rayna-yu.vercel.app | linkedin.com/in/rayna-yu | github.com/Rayna-Yu Available to work: January 2026 - August 2026

### **EDUCATION**

Northeastern University

Boston, MA

Candidate for Bachelor of Science

September 2024 - May 2028

Computer Science and Mathematics

GPA: 4.0/4.0 | Honors: Dean's List, Dean's Scholarship

Relevant Coursework: Object-oriented design, Algorithms (Graduate-level), Artificial Intelligence, Theory of computation,
Matrix Methods in Data Analysis and Machine Learning, Linear Algebra, Probability and Statistics

#### **SKILLS**

Languages: Java, Python, MATLAB, JavaScript, TypeScript, SQL, HTML/CSS

Frameworks: React, Node js, FastAPI, PgAdmin 4, NumPy, Scikit-learn, Pandas, Matplotlib, Turf.js

Tools & Technologies: Git/Github, Visual Studio Code, Intellij, Eclipse IDE, Linux

### **EXPERIENCE**

**Code 4 Community** 

January 2025 - Present

Boston, MA

Software Developer

- Build full-stack web applications for non-profits across Boston (GI Boston, Securing Safe Food, NEFAC, ect.)
- Streamline backend operations alongside a team of 7 developers for a recruitment portal using React, PostgreSQL, PgAdmin 4, and Node.js to ensure efficient data storage, retrieval, and processing

Northeastern University Khoury College of Computer Science

September 2025 - Present

Teaching assistant, CS 2800: Logic and Computation

Boston, MA

- Support 100+ students in propositional logic, first-order logic, computability, and formal proofs using Python and OCaml
- Lead review sessions through weekly office hours, focusing on formal reasoning and theory application

Teuscher Lab Undergraduate Researcher May 2025 - August 2025

Undergraduate Researcher

Remote

Engineered a React Native mobile navigation app integrating multi-source GeoJSON datasets, OpenRouteService API, and

- FastAPI backend to optimize routes by detecting pedestrian-specific hazards in real time
- Trained and evaluated random forest models in Scikit-learn, Pandas, and NumPy using collision data with a 94% accuracy
- Published and presented the project paper as the leading author at the Final Symposium (paper available upon request)

## Northeastern University Khoury College of Computer Science

May 2025 - July 2025

Teaching assistant, CS 1800: Discrete Structures

Boston, MA

- Assessed 100+ assignments and exams using standardized rubrics and digital tools
- Facilitated weekly recitations and office hours for 30+ students, enhancing understanding of logic, set theory, and discrete math concepts

**RISD Museum** 

September 2022 - June 2024

Museum Curator

Providence, RI

- Collaborated with a team of 12 peers to curate Listen!, the first fully teen-led exhibit, featuring a blend of 30 historical and contemporary works on societal issues, drawing over 5,000 visitors in its first week.
- Exhibit link: <a href="https://risdmuseum.org/exhibitions-events/exhibitions/listen">https://risdmuseum.org/exhibitions-events/exhibitions/listen</a>

## **OTHER PROJECTS**

### Robot Path Planner - Matlab

- Engineered a 2D robot path planner combining Dijkstra and reinforcement learning for real-time, collision free navigation Calendar Application Java, GUI, Swing
- Designed a calendar using OOD principles and MVC architecture

### Nim Sum Player - Python

Shelter Support

• Programmed an AI to optimally play Nim using XOR and binary strategies

### **VOLUNTEER EXPERIENCE**

### Animal Rescue League of Boston

August 2023 – Present

Boston, MA

 Assist with animal care for 50+ cats and contributed to team efforts to improve animal welfare by evaluating animal behavior.