

Raymond Xu

+1 (781) 502-6377 | xu.raym@northeastern.edu | [linkedin.com/in/raymondxyu](https://www.linkedin.com/in/raymondxyu) | github.com/Bruvato | ray-xu.com

EDUCATION

Northeastern University

Boston, MA

Bachelor of Science in Computer Engineering & Computer Science, Minor in Mathematics

Sep. 2024 – May 2028

- GPA: 4.0/4.0, Dean's List, Eta Kappa Nu
- Relevant Coursework: Algorithms & Data, Discrete Structures, Fundamentals of Computer Science I & II

EXPERIENCE

Section Leader

April 2025 – May 2025

Stanford University: Code In Place

Remote

- Led a 1-hour weekly live section over a 6-week program to cohorts of 10–15 international students.
- Guided students through Stanford's CS106A-based modules covering Python fundamentals: variables, control flow, functions, lists, and dictionaries.

Full Stack Developer

March 2025

HackIllinois 2025

Champaign, IL

- Led the development of a viral social media finance app, using Next.js, TypeScript, that gamifies saving money and helps users build better spending habits alongside their peers, achieving a top 5 finalists out of 105 teams.
- Engineered a scalable architecture with Supabase for secure authentication and Recharts for data visualization.

Front End Developer

Feb. 2025

Civic Tech Hackathon 2025

Boston, MA

- Developed a mobile app using Python, FastAPI, Flet, and Firebase to gamify real-world wildlife tracking, integrating AI-powered animal recognition (YOLOv8, PyTorch, OpenCV) with AR-based tracking, winning Best Design from 40 teams.
- Engineered a real-time species detection system achieving 85% accuracy, leveraging Moondream and Segment Anything Model 2 for image segmentation and enhancement.
- Designed and implemented a crowdsourced global biodiversity heatmap, projected to generate 100M+ species observations annually, aiding conservation research.

Unity Developer

Oct. 2024 – Nov. 2024

BostonHacks 2024

Boston, MA

- Developed simulations using Unity's Machine Learning Agents Toolkit to train AI for space vehicle tasks in diverse environments, reducing live-testing risks and winning the "Interstellar Intelligence" award selected from 49 teams.
- Developed deep reinforcement learning models using Python, PyTorch, and Unity for physics simulations.

PROJECTS

Voice Controlled Robotic Hand Brace | C++, Arduino, SolidWorks, Bluetooth

Jan. 2025 – April 2025

- Designed and 3D-printed a robotic hand brace to assist users with stroke, arthritis, and grip impairments.
- Integrated Arduino Mega, Bluetooth, and mobile app to control 5 independently actuated fingers with real-time positioning, voice control, and customizable grip presets.

Spotify Data Visualizer | TypeScript, Next.js, NextAuth.js, D3.js, Spotify Web API

Dec. 2024 – Jan. 2025

- Developed a full-stack web app that allows users to explore and visualize their Spotify listening data, including top artists, tracks, genres, recently played tracks, etc.
- Integrated Spotify OAuth with NextAuth.js to authenticate users and access personalized listening data.

3D Online Multiplayer Game | C#, Unity, Netcode for Game Objects, Blender

April 2024 – May 2024

- Developed a 3D Overcooked-inspired multiplayer educational game teaching AP Chemistry lab procedures.
- Built multiplayer features with Unity's Netcode and Gaming Services, and applied networking design patterns.

TECHNICAL SKILLS

Languages: Java, Python, C#, C/C++, JavaScript, TypeScript, HTML/CSS, SQL, Matlab, Racket, Lua

Frameworks/Libraries: React, Next.js, Three.js, Node.js, Flask, FastAPI, Tailwind, NumPy, Pandas, PyTorch, JUnit

Technologies: Git, Docker, Bash, Linux, Supabase, Firebase, LaTeX, Unity, Godot, Blender

Technical Skills: DSA, AI & ML, Data Visualization, CI/CD, UI/UX Design, Game Development, VR/AR

Other Skills: 3D-Modeling, Graphic Design, Editing, Project Management, Social Media Marketing, Teaching