

Raymond Xu

+1 (781) 502-6377 | xu.raym@northeastern.edu | linkedin.com/in/raymondyxu | github.com/Bruvato | ray-xu.com

EDUCATION

Northeastern University <i>Bachelor of Science in Computer Engineering & Computer Science, Minor in Mathematics</i>	Boston, MA Sep. 2024 – May 2028
• GPA: 4.0/4.0 , Dean's List, Rev Cohort 4, Tau Beta Pi, Eta Kappa Nu • Relevant Coursework: Algorithms & Data, Computer Systems, Object-Oriented Design, Embedded Design	

EXPERIENCE

Software Engineer Intern <i>Mosaic (YC W25)</i>	Jul. 2025 – Aug. 2025 San Francisco, CA
• Optimized agentic video editing pipeline by 40% by redesigning a React Flow-based node editor with pausing, selective restarts, and internal versioning for real-time debugging. • Built a Remotion-based video editor in TypeScript/Next.js with synchronized timeline and inspector, boosting render performance by 80% and enabling multimodal video agent iteration. • Built FastAPI endpoints to manage Supabase data and orchestrate Gemini API calls for agent reasoning.	
AI/ML Fellow <i>Break Through Tech</i>	Apr. 2025 – Present Cambridge, MA
• Selected from 3000+ applicants for 12-month program at MIT including ML coursework with Cornell faculty. • Partnered with MathWorks on Human Motion Recognition project using IMU data; applied sliding window segmentation on HARTH dataset and trained Random Forest model with 94% accuracy in activity classification. • Developed Next.js/FastAPI app for real-time activity classification using IMU sensor data from MATLAB app.	
Section Leader <i>Stanford University: Code In Place</i>	Apr. 2025 – May 2025 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, contributing to an overall program completion rate of 90%+ in my section.	

PROJECTS

Real Time ASL Translator <i>Next.js, FastAPI, OpenCV, MediaPipe, ElevenLabs</i>	Oct. 2025 – Nov. 2025
• Developed a real-time ASL recognition and translation app with hand and face tracking for HackHarvard 2025. • Built a MediaPipe Hands model with 94% classification accuracy across 25+ gestures using a FastAPI backend. • Integrated ElevenLabs text to speech API for natural, context aware multilingual speech.	
Classroom Copilot <i>Next.js, FastAPI, LangChain, Supabase, Gemini</i>	Jul. 2025 – Sep. 2025
• Built an AI agentic learning platform for class-wide analytics for and personalized feedback for HackMIT 2025. • Developed LangChain agents in FastAPI with Supabase vector store and RAG pipelines for analyzing submissions. • Integrated PDF ingestion with LangChain’s PDF loader and vector search for context-aware, structured feedback.	
SpendShield <i>TypeScript, Next.js, Supabase, Shadcn</i>	Feb. 2025 – Mar. 2025
• Built a viral social finance app that gamified saving and peer accountability, reaching top 5 at HackIllinois 2025 by increasing projected user retention by 60% through competitive spending challenges and progress sharing. • Built database schema and interactive dashboards using Next.js, visualizing 500+ savings and spendings updates.	
SVS Lunar Client <i>C#, Python, Unity, PyTorch</i>	Oct. 2024 – Nov. 2024
• 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” track at BostonHacks 2024. • Boosted model performance by 2.3 times through deep reinforcement learning with Python, PyTorch, and Unity, simulating realistic physics for autonomous navigation tasks.	

TECHNICAL SKILLS

Languages: Java, Python, C#, C/C++, JavaScript, TypeScript, HTML/CSS, SQL, Matlab, Lua
Frameworks/Libraries: React, Next.js, Node.js, FastAPI, Flask, Tailwind, NumPy, Pandas, Sklearn, PyTorch, JUnit
Technologies: Git, Docker, Bash, Linux, AWS, PostgreSQL, Supabase, Cursor, Figma, SolidWorks, Unity, Blender
Technical Skills: DSA, AI & ML, UI/UX Design, CI/CD, Data Visualization, CAD, Game Development, VR/AR
Other Skills: 3D-Modeling, Graphic Design, Editing, Project Management, Social Media Marketing, Teaching