

# Raymond Tsai

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Availability: May-Dec 2024

## EDUCATION

**Northeastern University, Khoury College of Computer Sciences - Boston, MA**  
*Candidate for Bachelor of Science in Computer Science and Game Development*

Sep 2022 - May 2026 (expected)  
GPA: 3.93/4.00

**Awards:** Honors College, Honors Scholarship, Dean's List x3

**Relevant Coursework:** Game Programming, Level Design & Game Architecture, Rapid Idea Prototyping, Computer Systems, Algorithms & Data Structures, Object Oriented Design, Programming in C++

**Activities:** Game Studio Club, Electric Racing Club, Music Production Club, Green Line Records, NU Chorus

## TECHNICAL SKILLS

### Languages:

- Proficient: Java, C#, C++, Racket
- Familiar: Python, JavaScript, TypeScript, HTML/CSS

**Applications:** Git, Unity, Docker, VS Code, CLion, Microsoft Office Suite, Confluence, Blender, Logic Pro

**Frameworks & Libraries:** React, OpenCV, Prisma, Jenkins, SonarQube, Swing, Limelight, WPILib

## EXPERIENCE

**Programmer, Sound Designer, Composer** | Game Studio Club - Boston, MA

Sep 2022 - present

- Actively participate in weekend-long game jams and multi-semester game projects encompassing diverse teams of programmers, writers, and artists from Northeastern, Emerson, and Berklee.
- Demonstrated versatility by seamlessly transitioning between roles in music, sound, and programming,
- Contributed music and/or programming to 7 game jams and 2 long-term projects over the course of 1.5 years.

**Software Lead** | First Robotics Competition Team 1197 - Torrance, CA

Jan 2022 - Jun 2022

- Led the software team in programming turret, SparkMAX motors, and Limelight vision tracking of field objects.
- Placed Quarterfinals in San Diego Regionals, Semifinals in Los Angeles Regionals, received Autonomous Award 2022.

**Software Intern** | Boeing Satellite Systems - El Segundo, CA

Jun 2021 - Aug 2021

- Spearheaded development of CI/CD Pipeline for automated testing and building, utilizing industry standard tools like Docker, Jenkins, and SonarQube.
- Collaborated with Boeing employees and interns to ensure precise execution and troubleshooting of the pipeline.
- Delivered a comprehensive presentation on project achievements to an audience exceeding 100 attendees.

## GAMES

**Stand Up! (3D Comedy)** | Programming, Sound Design

Jan 2024

- Contributed programming and sound design for a game created for the Boston Global Game Jam 2024.
- Engineered an intuitive system to manage the presentation and sequencing of on-screen jokes, enabling team members to seamlessly integrate and personalize their own jokes.
- Coordinated with a team of 10+ to ensure code usability and reliability with the rest of the team.

**Ronan (2D Platformer)** | Design, Programming, Music, Art

Nov-Dec 2023

- Conceptualized, designed, and independently developed a full 2D platformer game from start to finish.
- Engineered smooth and responsive movement, jumping, and launch pad mechanics, utilizing physics concepts and Unity events to ensure precise handling of forces.

**Soul Solace (Psychological Horror)** | Design, Programming, Sound Design

Aug 2023

- Collaborated with another game designer for a weeklong project for the Brackeys Game Jam 2023.
- Conceptualized and implemented a state machine in Unity for handling in-game events and transitions.
- Engineered a non-Euclidian repetitive space, enabling players seamlessly transition from one space to another.

**The Roots of Yggdrasil (Visual Novel)** | Writing, Programming, Music

Jan 2023

- Wrote a 2500+ word branching dialogue and contributed 5 original compositions for a RenPy visual novel created for Boston GGJ 2023.
- Integrated branching dialogue into RenPy engine, working closely with a 5-person team of writers and artists.

## INTERESTS

Music Production, Game Scoring, Game Jams, Piano, Audio Engineering, Robotics, 3D Art, Geography, Wikipedia