

Ethan Ball

(508) 446-2067 | ejb3432@rit.edu | Needham, MA | Portfolio: <https://starchy29.github.io/Portfolio/>

Education

Rochester Institute of Technology (RIT), Rochester, NY, 2024

Bachelor of Science, Game Design and Development, Summa Cum Laude

Master of Science, Game Design and Development

Professional Experience

Game Developer: Changeling VR, Rochester, NY (remote) June 2023 - August 2023

- Worked on a team of 70 RIT students on a Virtual Reality narrative mystery game
- Applied game development and game engine knowledge to quickly learn Unreal Engine 4
- Utilized blueprints to refactor the player's companion notebook and implement a diegetic UI
- Solved code problems for the level designers as they prototyped mechanics
- Mentored less-experienced teammates and assisted with Perforce using prior knowledge

AI Programmer Intern: Rockstar Games, Andover, MA (remote) June 2022 - August 2022

- Developed a novel input system to add debugging tools and new game mechanics
- Investigated Rockstar's proprietary game engine to ideate new interactions
- Learned industry-standard C++ practices through tutorials and observation of existing code

Teaching Assistant: RIT, Rochester, NY January 2022 - May 2024

- Assisted students with learning C# and the Monogame engine
- Managed a classroom of students for a remote professor
- Evaluated programming assignments based on accuracy, readability, and efficiency

Operations Coordinator Intern: Arbor Biotechnologies, Cambridge, MA June 2021 - Aug 2021

- Earned certification in biosafety levels 1 and 2 standards and procedures
- Coordinated with Research and Development teams to meet necessary operational needs
- Assisted scientific operations department with inventory management

Projects

Cog & Key, Capstone Project at RIT, August 2023 - May 2024

- Collaborated with three teammates to design and develop a 2D puzzle platformer in Unity
- Implemented the player controller, core mechanics, and various platform types
- Researched 2D camera algorithms and techniques to implement an intelligent camera system

Death Chain, Personal Project, January 2022 - December 2023

- Designed and developed a 2D action roguelike with the ability to possess enemies in Unity
- Implemented an AI system with pathfinding, movement modes, and customizable behavior
- Generated random levels using procedural generation techniques like wave function collapse

Skills

Game Design: Level Design, Ideating Mechanics, Prototyping, Iteration

Development: Gameplay Programming, Engine Programming, Agile Development, 3D Math

Programming Languages: C#, C++, Java, HLSL, Javascript

Game Engines: Unity, Unreal Engine 4, Monogame, Playstation 4 Development Kit

Software: DirectX 11, Visual Studio, Github, Perforce