Ethan Ball (508) 446-2067 • ejb3432@rit.edu • Portfolio: https://starchy29.github.io/Portfolio/

EDUCATION

Rochester Institute of Technology   **Rochester, NY**
Bachelor of Science, Game Design and Development, Summa Cum Laude   May 2024
Master of Science, Game Design and Development   May 2024

SKILLS

Programming Languages: C++, C#, HLSL, Java, Javascript, Python
Software: DirectX 11, Github, Perforce, Visual Studio
Development: Gameplay Programming, Game Engine Programming, Agile Development, 3D Math
Game Engines: Unity, Monogame, Playstation 4 Development Kit, Unreal Engine 4

GAME DEVELOPMENT EXPERIENCE

Changeling VR   **Rochester, NY**
Game Developer   *Summer 2023*
- Worked with a team of 70 RIT students on a virtual reality narrative mystery game
- Utilized Unreal Engine 4 blueprints to implement a diegetic UI and enhance player interaction
- Resolved technical problems for the level designers as they were uncovered, streamlining the prototyping process for content creation

Rockstar Games   **Andover, MA**
AI Programmer Intern   *Summer 2022*
- Developed a novel input system for debugging tools and potential game mechanics
- Investigated Rockstar's proprietary game engine to ideate possible features
- Gained proficiency in industry-standard C++ practices via mentorship and codebase observation

PROJECTS

Elbran Engine (Personal Project)   **November 2024 - January 2025**
- Developed a custom game engine for prototyping 2D games in C++
- Implemented a toolbox of features to expedite gameplay scripting, including user input and audio
- Utilized DirectX 11 and HLSL to set up a rendering pipeline and add advanced graphical features including post-processing, particles, and lighting

Cauldron Craft (Personal Project)   **December 2023 - November 2024**
- Designed and developed a 2D turn-based tactics game in Unity using C#
- Implemented an artificial intelligence enemy system for automated computer opponents
- Wrote HLSL shaders for visuals effects such as outlines and particles

PS4 Space Game (Academic Project)   **December 2023**
- Developed a simple space shooter game on a Playstation 4 development kit using C++
- Leveraged graphics programming knowledge to set up a rendering pipeline for game objects

ADDITIONAL EXPERIENCE

Volante Farms   **Needham, MA**
Produce Handler   *December 2024 - Present*
- Collaborated with teammates to ensure a consistent quality and quantity of produce in stock

Rochester Institute of Technology   **Rochester, NY**
Teaching Assistant   *2022 - 2024*
- Assisted students with learning C# and evaluated programming assignments

Arbor Biotechnologies   **Cambridge, MA**
Operations Coordinator Intern   *Summer 2021*
- Assisted with inventory management and scientific research operations