Nathan Wildofsky

(937) 925-2140 | nsw7227@rit.edu
linkedin.com/in/nwildofsky | www.people.rit.edu/nsw7227

EDUCATION

Rochester Institute of Technology (RIT), Rochester, NY   Expected Dec 2023
Bachelor of Science, Game Design and Development   **GPA: 3.8**

SKILLS

Programming Languages: C#, C++, JavaScript, HTML, CSS
Game Engines: Unity, Unreal Engine 5
Tools: Visual Studio, Visual Studio Code, Git, Perforce, Maya, Surface Painter, Photoshop CC

PROJECTS

Racecar Evolution | 1 month
- Implemented a 2D simulation environment in Unity where racecar AI agents follow a genetic algorithm to learn to master driving on a looped racetrack using combos of simple driving inputs.
- Generated a user-friendly track creator GUI utilizing modular track tiles for the user to create varied simulation environments.

Mystic Forest | 1 month
- Developed a custom 2D movement and platforming system, which features jumping, dashing, wall sliding, and wall jumping, to serve as the basis for a level design project.
- Designed a platformer level in Unity, focusing on lighting and darkness mechanics and challenging the player, as a part of a compilation of levels created by a team of students.

Basic Rendering Engine | 3 months
- Architected a rendering engine in C++ and DirectX 11 with support for a 3D viewport with camera controls, transform objects with meshes and materials, 3 types of lights with shadow maps, and runtime manipulation utilizing Dear ImGui.
- Engineered a method of dynamic shadow mapping which allows lights to be repositioned at runtime and shadows to be updated on a per request rather than per frame basis.

WORK EXPERIENCE

Discovery Machine   Jan 2023 – April 2023
Software Engineer Intern   Williamsport, PA
- Leveraged new software to upgrade 3D characters with better designs and graphic fidelity.
- Created domain specific Unity Editor tools to automate the character import, cleanup, and preparation processes to support a new Reallusion to Unity ready-to-use pipeline.
- Constructed a large Unity world with multiple points of interest, inspired by multiple real-world locations for use in a variety of military training simulations.

Rockstar Games   June 2022 – August 2022
AI Programmer Intern   Andover, MA (Remote)
- Expanded the versatility and functionality of novel player input mechanisms currently in development while also ensuring those mechanisms are easier to use and comprehend.
- Added debugging and testing tools for immediate use by the global AI/Gameplay team.