RYAN TORRES

SOFTWARE ENGINEER

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TECHNICAL SKILLS

- C++, C#, HLSL
- DirectX11, Graphics Programming
- 3D Math
- Agile Work Environment, Sprint Planning
- Version Control

APPLICATIONS

- Microsoft Visual Studio
- Git
- Subversion
- Unity
- CMake

PROJECT EXPERIENCE

L3Harris | Software Engineer

November 2021 - Present

- Jumped into the aviation industry in order to create and maintain high-fidelity simulations of numerous aircraft systems
- Assisted in research with VR networking to facilitate a VR multiplayer training simulation
- Quickly learned and adapted to complex codebases for many different types of aircraft
- Constantly referenced aircraft system documentation and schematics to ensure all simulated systems are built to the correct specifications
- Used Jira to accurately track time spent and work finished on any particular task
- Created an Excel spreadsheet for the team to track and calculate metrics related to estimated time versus actual work time on tasks
- Used Subversion to pull projects, checkout files, and commit changes

Graffiti Tower Defense | Game Developer | Custom C++ Engine February 2021 – June 2021

- Programmed the game's Input Manager, allowing per-key input from the player, tracking all mouse position information, and support for per-frame input and input over multiple frames
- Implemented a full raycast system that takes the mouse coordinate on the screen and allows interaction in the 3D world using Matrix and Vector math
- Using various 3D math concepts, added steering behaviors to the AI of the enemies, making them curve around the set nodes, rather than robotically moving from node to node
- Utilized the DirectX Audio API to program an audio system that plays, pauses, loops, and can edit sounds and music tracks
- Created an FBX Exporter to take in FBX files and output a binary file that allows for importing of models, animations, and textures
- Preserved the project's version through GitHub, using TortoiseGit

EDUCATION

Full Sail University, Bachelor of Science in Game Development Winter Park, FL – **Valedictorian, 3.96 GPA**

June 2021