Will Altman

Education

The Ohio State University, Columbus, Ohio *Class of 2023*
Major: Computer Science and Engineering
GPA: 3.80/4.00, Dean's List
Languages: Luau, C, C#, Java, JavaScript, x86-64 Assembly, Python, SQL

Work Experience

Prizm Games *2022 - Present*
Founder, Lead Software Engineer

- Founded a Roblox-based game development studio and released the commercial title *MODERN MEDICINE*, which has reached **over 1,100,000+ play sessions** and **490,000+ unique players**.
- Led and managed a remote, multidisciplinary team over a two year development process. Ran weekly meetings, created and maintained development schedules, and assisted with blockers.
- Bridged the gap between programming, art, and level design by being a team player and helping team members acquire unfamiliar skills, ensuring their work was compatible with the codebase.
- Contributed to the full game development process, including UI design, sound design, integration of art assets, designing gameplay mechanics, and ensuring cohesion across gameplay elements.
- Designed and optimized proprietary world generation algorithms, combining Perlin worm tunneling and hierarchical recursive procedural generation while optimizing for memory efficiency and increasing map variation without sacrificing performance.
- Engineered and optimized efficient and realistic AI systems supporting 70+ simultaneous agents, utilizing a mix of behavior trees and finite state machines, pathfinding, animation controls, and real-time player interactions, all optimized for performance in 3D space and within engine constraints.

Infoverity *2022, 2023*
Software Engineering Intern

- Developed an application to synchronize Jira instances across companies, leveraging Atlassian's Forge API for both creating and consuming data.
- Optimized API interactions, cutting request volume by 90%, reducing load, and improving efficiency.
- Researched, prototyped, and presented different APIs, architectural designs, security concerns, progress, blockers, and future goals in weekly scrum meetings with project stakeholders.

Leonardo DRS *2021*
Software Engineering Intern

- Developed a multithreaded Java Swing application utilizing XML, sorting algorithms, regex, and object oriented design principles to recursively parse file directories and files for classified information utilizing keywords and allowing the user to perform file operations on specified keyword groupings.

Projects

WebGL Graphics Engine (JavaScript)

- Built a browser-based 3D graphics engine (available to view on my portfolio website) that implements the complete rendering pipeline, supporting real-time 3D transformations (rotation, translation, and scaling), texture mapping, environment cube mapping, and dynamic lighting with Phong shading.
- The engine algorithmically generates primitives such as spheres, cylinders, and cubes, calculating vertex positions, colors, normals (for lighting), and texture coordinates mathematically.

Linux Kernel Development (C, RedHat)

- Designed and implemented a custom fair-share scheduling policy based on user identities.
- Built a custom Linux file system with an ext2-like on-disk layout, supporting a single directory with multiple files, hard links, noncontiguous file storage, direct inode references to data blocks, at least 1,000 files and 8 MB total storage, and preservation of ownership, permissions, and timestamps.