# Will Altman

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## 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#, x86-64 Assembly, MIPS, Python, SQL, Java, JavaScript

## Work Experience

**Prizm Games**                                                                          *2022 - Present*
Founder
- Founded a Roblox based game development studio and released the commercial title *MODERN MEDICINE*, which has reached **over 1,000,000+ play sessions** and **400,000+ unique players**.
- Led and managed a multidisciplinary team over a two year development process. Ran weekly meetings, created and maintained development schedules, assisted with blockers.
- Bridged the gap between programming, art, and level design by helping team members acquire unfamiliar skills and ensuring their work was compatible with the codebase.
- Designed and optimized proprietary world generation algorithms, combining Perlin Worm Tunneling and hierarchical recursive procedural generation while optimizing memory efficiency and increasing map variation without sacrificing performance.
- Developed 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.
- Designed all core proprietary systems, including multiplayer infrastructure, player systems, gameplay logic, level design tools, and backend systems for player data, analytics, and in-game purchases, ensuring smooth, scalable, and engaging multiplayer experience.
- Led playtests to refine the game's direction during development and leveraged analytics alongside player feedback to continuously improve gameplay, balance features, and optimize performance post-launch.

**Infoverity**                                                                           *2022, 2023*
Software Engineering Intern
- Independently managed a project to connect and sync issues between separate Jira instances.
- 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 allowed the user to perform file operations on specified keyword groupings.

## Projects

**WebGL Graphics Engine**
- Built a browser-based 3D graphics engine that implements the complete rendering pipeline, supporting real-time 3D transformations (rotation, translation, and scaling), texture mapping, environment cube mapping, and dynamic lighting
- The engine algorithmically generates primitives such as spheres, cylinders, and cubes, calculating vertex positions, colors, normals (for lighting), and texture coordinates
- Implements reflective surfaces using environment cube mapping and utilizes Phong shading for realistic lighting effects.