

## Profile:

Game/software developer with over 10 years experience. Passionate about creativity, aesthetics, pragmatism, efficiency, and usability. Looking to take on challenging software projects with room for learning. Focused in games, but open to work in a variety of fields.

## Education:

**Rochester Institute of Technology**, Rochester, NY

**Graduated:** December 2023, *summa cum laude* (GPA 3.980)

**Major:** Bachelor of Science, Game Design & Development

## Skills:

- **Coding:** C#, JavaScript, HTML, CSS, GDScript, C++, Java
- **Software:** Unity3D, Visual Studio, VSCode, Godot, Firebase, OpenGL, MonoGame, PixiJS, GitHub, Adobe Creative Cloud, Aseprite
- **OS:** Mac OSX and Microsoft Windows, working knowledge of Unix terminal
- **Soft Skills:** Teamwork, leadership, flexibility, fast learner, agile/kanban, experience w/most stages/aspects of game/software development, high level mathematics (Linear Algebra, Vector Math, Calculus, Trigonometry, 3D graphics math, Newtonian physics)

## Personal Projects:

**Collateral, GMTK Game Jam** ..... Summer 2024, 96 hours

- Worked in a team of five to build a 3D movement/mech commanding game using Godot and GDScript.
- Repurposed systems from previous unfinished projects, such as a 3rd-person camera controller and movement state machine.
- Provided code for player and enemy movement and attacks and all core game systems, utilizing Godot's navigation, UI, physics, and animation systems.
- Optimized game systems for performance and fine-tuned game feel with state transitions, input buffers, camera shake, and so on.

**Worm Go Down, Ludum Dare Game Jam** ..... Spring 2021, 72 hours

- Solo project — Built a 2D twin stick shooter using Unity and C#.
- Handled all aspects of development. Coding required a large emphasis on steering behaviors for AI and inverse kinematics, which I wrote custom systems for. Also utilized Perlin noise to create realistic ocean waves.
- Used Aseprite to create pixel art backgrounds and text assets which were displayed using a custom sprite text script that involves reading pixels from a sprite sheet and writing them to a target texture to be displayed on screen.
- Learned how to use Unity's Sprite Shapes to create an easily modifiable level design.

**Grapple Gaiden, Academic Project** ..... Spring 2020, 5 months

- Created a 2D platformer/action game using C# and the MonoGame library in a team of five.
- Personally came up with the general design idea of traversing cyberpunk-themed levels with a grappling hook and fighting enemies. Led weekly team meetings and held team members accountable to their roles and deadlines.
- Developed the core systems of drawing/screen scrolling and physics, and created character art and music.

## Work Experience:

**Programmer/Composer/Concept Artist for Raw Metal** ..... Team Crucible, Rochester, NY (May 2022 - Present)

- Worked as part of a small team to build a 3D stealth/action indie game for PC/Mac using Unity and C#.
- Utilized a variety of systems such as NavMesh, steering behaviors, finite state machines, animation events, ScriptableObjects, JSON data storage, singletons, events, etc.
- Provided the code, music, and concept art for the game. Also handled UI and assisted with many other aspects such as design, shaders, VFX, SFX, and PR.
- Experienced the full production cycle of a game, including providing updates post-release.
- Attended PAX East (as part of the PAX Rising Showcase) and MAGFest (as part of the MAGFest Indie Videogame Showcase) with the team to promote the game in person, taking feedback and occasionally fixing bugs on-site.

**Teaching Assistant** ..... RIT, Rochester, NY (March 2020 - December 2021)

- Mentored two classes (30/59 students respectively) in introductory/intermediate C#/Unity game programming, with a focus on data structures, optimization, and modeling real-world behavior such as physics, collision detection, and steering behaviors.
- Graded students' exercises and exams online and assisted students with issues via Discord/Slack.
- Provided office hours for students who need help.
- Adapted to the needs of different students and the limitations of the new online format (due to COVID-19) in order to appropriately assist.

**Interactive Games and Media Lab Tutor** ..... RIT, Rochester, NY (January 2020 - April 2020)

- Assisted students with coding and computer troubleshooting when necessary in the Interactive Games and Media labs at RIT.
- Enforced lab rules, checked PCs for issues, and performed clean up duties without direct supervision each shift.
- After the switch to an online format, continued working to assist students with code through a Discord server and scheduled tutoring hours.
- Mainly assisted with C# programming as well as some MonoDevelop and Unity issues.