Michael Szolowicz

Portfolio LinkedIn
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Skills

Technologies: C++, C#, Python, Unreal Engine, Unity, GitHub

Core Competencies: Tools Programming, Math (Linear Algebra, Discrete, Calculus), OOP, Physics, Network Programming

Projects

Tools Programming Intern   May – August 2024
Infinity Ward

- Developed new workflows that reduced iteration times for content creators and artists.
- Quickly adapted to an unfamiliar codebase making QOL improvements and bug fixes.
- Communicated requirements to engine and pipeline teams to achieve synchronous, responsive user interface.
- Participated in code reviews and iterated designs based on feedback from the UX designer and Tools Lead.

Network Programmer   May 2023 – Present
Pinball SHMUP, UE5 / C++

- Engineers, tests, and iterates gameplay replication features, mitigating impacts of lag on the player experience.
- Implementing a standalone solution for character physics fit for an unconventional pinball shooter game.
- Programming a simple, maintainable AI system to deliver varied combat given few inputs or dependencies.

Lead Developer   September 2023
9th Annual Chico Game Jam, Unity / C#

- Helped integrate the team's content into a cohesive build by explaining pipelines and solving technical problems.
- Promoted an open feedback loop so the programmers, designers, and artists could contribute key design ideas.
- Collaborated on debugging all scripts to ensure consistency; programmed player controls and enemy animations.

Shader Programmer   April 2023
Splatoon Clone, Unity / C# / HLSL

- Used HLSL, render textures, and shader graphs to write, store, and display paint on level geometry.
- Optimized asynchronous GPU readback tools which reduced a bottleneck and improved scalability.
- Developed a character controller that reads paint data and reacts with different movement states or animation.

Enemy AI Programmer   2019
Chain Chomp Recreation, UE4

- Created fluid player / enemy interactions using behavior trees, blackboards, nav mesh, and animation blueprints.
- Learned different disciplines by making my own 3D model, rig, animations, and particle systems.

Work

Big Data and Cybersecurity Researcher   May – August 2022
California State Polytechnic University Pomona

- Defined processes to validate a set of ambiguous data points against a set of ordered data points, which will service future researchers in improving a neural network model.
- Improved code architecture, documentation, and workflows, resulting in faster, more reliable data processing.

Education

BS; Computer Animation & Game Development
California State University Chico. December 2024.

AS; Computer Science
Bakersfield College. May 2022.