James Shipp

jshipp1@depaul.edu | 812.679.1075 | Chicago, IL | linkedin.com/in/jmscshipp

Languages

C/C++, Java, C#, Python, Scala, HLSL

Software

Visual Studio, Perforce, Git, Unity, Unreal Engine, Adobe Suite

Projects

Dockyard Game Engine | C++

- Programming fully featured 3D game engine from scratch
- Implemented collisions using command pattern (bounding spheres, OBB, AABB)
- Developed systems for asset management, input handling, displaying 2D sprites and text, debug collision visualization, timers, and a math library

DirectX 11 Graphics API | C++

- API for 3D rendering organized around GraphicObjects for each shader used
- Developed support for abitrary number of point and spot light sources, fog, mirrors, and terrain models automatically generated from a texture

Centipede | C++

- Developed a version of the classic arcade game Centipede in weekly sprints over a 3 month period in a barebones C++ engine
- Utilized design patterns like finite state machines, factories with object pools, singletons, observer and strategy patterns

SCIATE | C#

- Created a unique 2D platformer using Unity with one button control scheme, tile-based environment design, and custom animation system

alternative keyboard mixtape | C#

- Developed an alternative input game in Unity with mechanics featuring character controller that uses whole keyboard to track player's finger

Education

Depaul University | BS in Computer Science *Fall 2019 - Current*

Focus in Game Systems | Minor in Community Service | GPA 3.789

Activites: Junior Development Experience, Volunteering with the Steans Center, Urban Gardeners, Radio DePaul

Relevant Coursework

Game Engine Programming, Graphics/Rendering Programming, Object-Oriented Game Development, Optimized C++, Applied 3D Geometry