Giovane Bernardo

Junior Engine Porgrammer

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PROJECTS

Plaza Engine 🔗   05/2023 – present

3D Game engine made with C++ and Vulkan, for general use, that gives the user complete control over the engine.

- Designed and implemented a modular render graph system, enabling real-time debugging through a node-based interface.
- Used deferred rendering for better performance with Tiled deferred lightings, Screen Space Reflections and Decals.
- Shipped two playable games, demonstrating engine reliability.
- Integrated Vulkan Memory Allocator (VMA) for efficient resource management, minimizing GPU memory fragmentation.
- Technologies: Vulkan, GLSL, C++ and C# Scripting, PhysX 5, OpenAL, GLM, ImGui for editor GUI.

The Summoners Path 🔗

Shipped *The Summoners Path*, a 3-day Ludum Dare 55 game demonstrating Plaza Engine's real-time rendering capabilities.

SKILLS

- Rendering APIs: Vulkan, OpenGL

- Languages: C++, C#, GLSL

- Tools & Build Systems: Cmake, Git, Visual Studio

- Libraries & Frameworks: PhysX5, OpenAL, Vulkan Memory Allocator (VMA), GLFW, GLM, Cereal, ImGui

- Specialized Knowledge: Real-time rendering, Shader Development (GLSL)

LANGUAGES

Portuguese - Native   English - Intermediary