

Juan S. Avilés Yáñez

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📍 Valencia, Spain

Education

Computer Science for Games

Sheffield Hallam University

Predicted Grade: First class.

09/2024 – 05/2025

Sheffield, England

HND in Computing

ESAT - Escuela Superior de Arte y Tecnología

Graduated with Distinction

10/2021 – 06/2024

Valencia, Spain

Projects

PS5 Engine

Data driven, C++ 3D engine for PS5 using Sony API.

- PBR lighting system with material support.
- Scene serialization using json.
- Fully deferred pipeline.

09/2024 – 05/2025

Shelley Manor

Steam published third person immersive puzzle game.

- Developed custom level streaming system.
- Developed save game functionality.
- Worked on boss AI.
- Aided with steamworks and publishing.

09/2023 – 07/2024

Obsession engine

C++ 3D engine with focus on AZDO programming.

- Multidraw indirect with bindless textures.
- OpenGL dsa APIs.
- Fully integrated job system with support for futures.
- Fully custom ECS system with focus on performance.
- SSGI (Screen space global illumination).
- SSAO (Screen space ambient occlusion).
- Fully deferred rendering pipeline
- Usage of compute shader pipeline.

09/2023 – 05/2024

PS5 Local chess game

- Built a standalone level editor in C++ using ImGui.
- Setup gameplay framework
- Focused on graphics related task such as SSAO.

01/2025 – present

Skills

Programming languages

- C, C++20, Python, Lua, C#, Jai, Rust

Game engines

- Unreal Engine 4 and 5
- Unity
- Godot
- Gamemaker

Graphics frameworks

- OpenGL (GLSL).
- PS5 Api (PSSL).
- DX12 (HLSL).

Software and tooling

- RenderDoc
- NVIDIA Nsight graphics
- Git and Perforce