# Marcos Pardo Estelles C++ Developer

marcos@estelles.es

Valencia, Spain

https://pardoestell.es

#### About me

I'm a C++ and graphics programmer passionate about game engine development and real-time rendering. I love tackling technical challenges, optimizing performance, and pushing graphics tech forward. Beyond coding, I enjoy sharing knowledge, mentoring others, and contributing to projects that inspire those around me.

#### **Education**

# **BSc in Computer Science for Games**

09/2024 - 05/2025 | Sheffield, England

Sheffield Hallam University

[Predicted Grade: First Class] Studied a top-up year at Sheffield Hallam University, deepening my knowledge of C++ and graphics programming.

#### **HND in Computing**

09/2021 – 06/2024 | Valencia, Spain

Escuela Superior de Arte y Tecnología

[Distinction - Graduated with Honors] Studied for three years at ESAT, specializing in C++ and graphics programming with OpenGL. Gained experience in low-level assembly, Linux environments, and embedded systems like Raspberry Pi.

#### **Projects**

# Wanted: Yokai Uprising 🛮

09/2023 - 07/2024

Steam Published First-Person Shooter Developed in Unreal Engine 5.2

- Part of a 16-member team, following Agile Methodology
- Focused on gameplay programming and core mechanics
- Developed mission objectives using event-based programming
- · Contributed to multiplayer functionality

**Mutant Engine** 09/2023 - 07/2024

Custom Rendering Engine with Advanced Graphics Features

- Real-time C++20 and OpenGL 4.6 rendering engine
- Focused on performance and modern techniques
- Features ECS, resource manager, and multithreaded job system
- Supports deferred rendering, MDI, bindless textures, SSBO, vertex pulling, and compute shaders
- Implements SSGI and SSAO for enhanced visuals

**PS5 Engine** 09/2024 - 05/2025

Custom PS5 Engine with Advanced Rendering Capabilities in C++

- Deferred rendering pipeline with Blinn-Phong illumination
- Modular post-processing system for enhanced visuals
- Model and texture loading with an efficient resource manager

**PS5 Chess Game** 01/2025 - 05/2025

PS5 Game Developed with Custom Engine and C++

- Developed in a team of six using a custom engine
- Focused on graphics programming, post-processing effects, engine programming, and core gameplay mechanics

### **Skills**

# **Programming Languages**

C, C++ (20), C#

Go, Lua, Python

### **Game Engines**

**Unreal Engine 5** 

Unity

# **Graphics frameworks**

OpenGL 4.6

PlayStation 5 API, PSSL

#### Software

Nvidia Nsight Graphics and Render Doc Visual Studio and Rider

Git and Perforce