

Marcos Pardo Estelles *C++ Developer*

✉ pardoestellesmarcos@gmail.com

📍 Tokyo, Japan

🔗 <https://pardoestell.es>



About me

I'm a C++ programmer working across gameplay, engine and graphics. I love tackling technical challenges, optimizing performance, and pushing graphics tech forward. Based in Tokyo on a work visa, studying toward JLPT N3.

Professional Experience

Tools Programmer

2025/08 – Present | Tokyo, Japan

Meta Meow 🔗

- **Unannounced Unreal Engine 5 Game (Multi-platform)**

- Built material workflows across different teams.
- Modified the engine and implemented custom HLSL shaders.
- Verified rendering and performance across PC and console targets.
- Developed tools to improve team performance.

- **Magical Forest: Mobile Neural Rendering Tech Demo (UE5)** 🔗

- Built the gameplay and interaction systems for the demo.
- Integrated neural inference into the UE5 rendering pipeline.
- Contributed to the training tools for the neural depth of field.
- Optimized for mobile GPU power and thermal budgets.

- **Client Plugin Project (NDA)**

- Developed a C++ plugin for a 3D content-creation tool.
- Processed live data from external hardware and mapped it onto character skeletons.

Projects

Wanted: Yokai Uprising

 🔗

2023/09 – 2024/07

FPS Released on Steam · Unreal Engine 5.2, C++, Blueprint

- Part of a 16-member team, following **Agile (Scrum)**
- Focused on **gameplay programming** and **core mechanics**
- Developed **mission objectives** using **event-based programming**
- Contributed to **multiplayer functionality** using **Unreal RPCs**

CHEE22 & Tyro Engine

2024/09 – 2025/05

PS5 Game on a Custom C++20 Engine · PS5 API, PSSL

- **Deferred rendering pipeline** with **Blinn-Phong illumination**
- **Modular post-processing system** for enhanced visuals
- **Model and texture loading** with an efficient **resource manager**
- **UI framework** and **game-state manager** for CHEE22, in a team of five programmers and a designer

Mutant Engine

2023/09 – 2024/07

Custom Rendering Engine with Advanced Graphics Features

- Real-time **C++20** and **OpenGL 4.6** rendering engine
- 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

Skills

Programming Languages

C, C++ (20), C#
Go, Lua, Python
HLSL, GLSL

Game Engines

Unreal Engine 5 (C++ / Blueprint)
Unity

Platforms

PC, PlayStation 5, Nintendo Switch
Mobile (Snapdragon)

Graphics frameworks

OpenGL 4.6
PlayStation 5 API, PSSL

Software

NVIDIA Nsight Graphics and RenderDoc
Visual Studio and Rider
Git, Perforce and Jira
Autodesk 3ds Max

Rendering & ML

Neural inference in UE5, ray tracing
Deferred rendering, post-processing

Education

BSc in Computer Science for Games

Sheffield, England

Sheffield Hallam University

First Class Honours. Studied a top-up year at Sheffield Hallam University, deepening my knowledge of C++ and graphics programming.

HND in Computing

Valencia, Spain

Escuela Superior de Arte y Tecnología

Distinction (graduated with honours). 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.