# Juan José Gómez Simón

gs.juanjose.1999@gmail.com | gomezjuanjose.github.io | github.com/GomezJuanJose

# **Experience**

## C++ Programmer, Catness Game Studios

Jan 2023 - Feb 2025

- Developed a multi-threaded custom plugin in C++ following an OO design to implement leaderboard services for any platform. Reduced the workload from 2 weeks to 3 days
- Developed a custom tool in Unreal Engine using C++ and Slate for advanced LOD editing in batches, achieving a more customizable and faster workflow when working with LODs
- Developed a custom tool for Unreal Engine using C++ and Slate to replace dialogue audios with new ones corresponding to their new subtitles, eliminating any manual work and **saving days of work**
- Ported Sea Horizon for **PlayStation** and **Xbox** in 4 months using Unreal Engine by dividing the complex tasks into smaller ones, which allowed the project to be finished **1 month before the deadline**
- Ported Hell of an Office for PlayStation and Switch in 6 months through teamwork and tackling new problems, which led to the creation of new custom plugins
- Ported Genie Reprise for PlayStation and Xbox in 2 months with **performance optimization** in mind by using Scrum and custom tools in C++, **achieving the target framerate with good graphical quality**

#### **Skills**

Programming languages: C, C++, C#, Python, Lua

**Technologies:** wxWidgets, Dear ImGui, Unreal Slate, EnTT, glm, GLFW, Valgrind, Cmake, premake, Vulkan, PlayStation SDK, Xbox SDK, Switch SDK

Software: Unreal Engine, Unreal Engine Profiling tools, Optick, Perforce Helix Core, TeamCity, RenderDoc

Languages: Spanish, English

## **Projects**

# Game Engine in C with Vulkan

github.com/GomezJuanJose/VulkanGameEngine

• Programmed a basic version of the first game engine, made from scratch in C with an efficient architecture by applying a **data-oriented** paradigm

## Game Engine in C++ with OpenGL

github.com/GomezJuanJose/ModelOne

• Developed a first game engine to learn the basic concepts, programmed a layered architecture and implemented subsystems such as physics, renderer, custom ECS and events in 1 year applying **OO design** 

## **Teselator**

github.com/GomezJuanJose/Teselator

An tool for generate "tiles" assets to implement them directly in DevKitPro applying a OOP paradigm

#### Games made with Unreal Engine

g-juanjo.itch.io

- Death's Door: A prototype to show all the features of an action-adventure framework developed in C++
- Inari The Forgotten World: Puzzle game that shows AI implementation and a quadrupedal movement system
- Operation Crimson Day: Top down shooter with a wave system, entity manager system and dynamic music system when the difficulty increases

## Education

Universidad Jaume I, BS in Game Desing and Development

2023

IES Leonardo Da Vinci, Advanced formation in multiplatform application development