

AVENIDA DEL MONTGÓ, 26
03700 DÉNIA (ALICANTE)
(34) 603 866 996
JOELVIGI10@GMAIL.COM
<https://jovingi.github.io/Portfolio/>

JOEL VINAROS GIMÉNEZ

ABOUT

I'm Joel, a curious person by nature, always looking to understand how things are made. This curiosity was sparked when I started playing video games, leading me to discover my passion for programming.

I am fascinated by graphics and gameplay development, and my goal is to create interactive experiences that excite and immerse players. I am constantly learning and honing my skills to contribute meaningfully to every project I am involved in.

SKILLS

PROGRAMMING LANGUAGES

- C/C++
- C#
- Assembly Language (ARM)
- Python
- LUA

TOOLS

- Visual Studio
- GitHub
- Perforce
- RenderDoc
- Trello

ENGINES

- Unreal Engine
- Unity

LANGUAGES

- Spanish (Native Proficiency)
- English (IELTS 7.5 - 2024)
- Catalan (Native Proficiency)

GRAPHIC APIS

- OpenGL
- DirectX 11
- DirectX 12
- AGC (PS5)

EXPERIENCE

Tiny Terrors Studio, Valencia — *Gameplay Programmer*

OCTOBER 2023 - JUNE 2024

- Worked on [Shelley Manor](#) development.
- Team composed of 8 programmers, 7 artists and 3 designers all of us students in their last year at ESAT.

EDUCATION

ESAT, Valencia – *BTEC Level 5 HND in Computing*

OCTOBER 2021 – JULY 2024

During my time at ESAT I built the foundations of my knowledge and it allowed me to get to know great branches of programming and to awaken my interest and curiosity for graphic and gameplay programming.

Sheffield Hallam University, Sheffield – *BSc Hon Computer Science for Games*

SEPTEMBER 2024 – MAY 2025

During my time at Sheffield Hallam University, I solidified my knowledge in graphics programming by implementing more complex rendering techniques such as Global Illumination. I also worked on developing a custom game engine with support for PlayStation 5, further deepening my understanding of real-time rendering and low-level graphics APIs.

HIGHLIGHTED PROJECTS

Shelley Manor (October 2023 – June 2024)

- Third person puzzle game, with fixed cameras in the style of the old resident evil games developed in Unreal Engine 5.2.
- Worked on the main character (Alex), some interactables (placeables and launchables) and the AI of the first boss (Dracula).
- Available on [Steam](#).

Elysium Engine (October 2023 – May 2024)

- A multi-thread proprietary engine written in C++ that uses OpenGL and DirectX, and integrates physics, sound and physically-based rendering.
- Worked on the ECS, a resource manager, the OpenGL integration (buffers, programs, textures, lights, shadows, etc.), PBR and a procedural terrain generator.

SSGI in DirectX 11 (September 2024 – December 2024)

- Implemented a real-time Screen Space Global Illumination (SSGI) technique in DirectX 11 to enhance indirect lighting in scenes.
- Developed a GBuffer pipeline to store necessary scene data and designed an efficient sampling strategy to approximate light bounces.
- Optimized the implementation to balance visual quality and performance, addressing challenges such as noise reduction and temporal stability.
- Conducted research on the impact of Global Illumination on visual realism and performance in games as part of my dissertation.

The Son of Chronos (March 2023 – May 2023)

- A VR game based on motion sensors inspired by the unique gameplay mechanics of Super Hot to craft an immersive experience, where time only moves forward when the player moves.
- Developed in Unity.