JOEL VINAROZ GIMÉNEZ

GRAPHIC & VIDEO GAME PROGRAMMER

CONTACT

+34 603 866 996

joelvigi10@gmail.com

Av. del Montgó 26, Dénia (Spain)

https://jovingi.github.io/

Joel Vinaroz Giménez

ABOUT ME

I am 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.

EDUCATION

SEPTEMBER 2024 - MAY 2025

SHEFFIELD HALLAM UNIVERSITY, SHEFFIELD

- **BSc Hon Computer Science for Games**
- Specialized in graphics programming with techniques like Global Illumination.
- Developed a custom game engine with PlayStation 5 support.
- Gained experience with real-time rendering and low-level graphics APIs.

OCTOBER 2021 - JULY 2024

ESAT, VALENCIA

- **BTEC Level 5 HND in Computing**
- Developed strong programming fundamentals across various disciplines.
- Discovered a passion for graphics and gameplay programming.

SKILLS

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

- Unreal Engine
- Unity

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

- Visual Studio
- Git
- Perforce
- RenderDoc
- Trello
- Jira

LANGUAGES

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

WORK EXPERIENCE

Tiny Terrors Studio, Valencia OCTOBER 2023 - JUNE 2024

Gameplay Programmer

- Worked on Shelley Manor development, a third person puzzle game developed in C++ using Unreal Engine 5.
- Team composed of 8 programmers, 7 artists and 3 designers all of us students in their last year at ESAT.

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 functionalities of the main character (Alex), some gameplay interactables (placeables and launchables) and the AI of the first boss (Dracula).
- Available on Steam.

Elysium Engine OCTOBER 2023 - MAY 2024

- A multi-thread custom 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, Screen Space Reflections 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.