

Gonçalo Pires

Gameplay Programmer

UI Programmer

Leiria, Portugal

Portfolio Github Linkedin Itch.io

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About Me:

Game Development Graduate | C++ & Unreal Engine 5 Programmer
Focused on Gameplay and UI Programming. Experienced in building decoupled MVVM interface architectures, core gameplay mechanics, and networked multiplayer systems in UE5. Open to entry-level roles and relocation across Europe.

Key Projects:

Multiplayer C++ Framework

In Progress - Unreal Engine 5, C++ (Solo Dev)

- **Host-Client Architecture:** Engineered a Listen Server lobby system using the OnlineSubsystem, where the lobby creator acts as the Host to initialize the session.
- **Data Persistence & Replication:** Implemented a system where player customization (Color Selection) in the lobby persists across level transitions and correctly replicates to all connected clients.

Past Echoes

2025 - Unreal Engine 5, Blueprints (First-Person Puzzle)

- **Tactile Interaction System:** Engineered a physics-driven mechanic where players manually drag doors and drawers open by calculating Mouse Delta, rather than using standard button inputs.
- **Dynamic Visual Effects:** Scripted an immersive "Headache" system using Post-Process Volumes, manipulating screen blur and distortion variables in real-time to simulate player health states.
- **UI & Puzzle Logic:** Developed a fully functional in-game computer terminal using UMG (Unreal Motion Graphics) to drive narrative puzzles and gameplay progression.

Witch's Forest

2024 - Unity 2D, C#

- **AI Architecture:** Engineered an intelligent enemy system using A Pathfinding* for navigation, combined with Raycasting and Finite State Machines (FSM) for complex line-of-sight behaviors.
- **Physics & Interaction:** Implemented a telekinesis mechanic using Screen-to-World conversion; utilized dynamic collision layers so levitating objects visually "float" while allowing AI vision to pass underneath.
- **Systems:** Coded a modular Ability Manager with cooldowns and an event-driven progression system that unlocks spells via UI updates.

Kill Die Kill Kill Die

2025 - Unreal Engine 5, Blueprints (48h Game Jam)

- **Movement & "Game Feel":** Engineered a high-speed character controller featuring Dynamic FOV and Camera Tilt, where the camera interpolates based on velocity to visually simulate acceleration.
- **AI & Spawning Logic:** Programmed a Dynamic Spawning System to manage enemy waves and implemented aggressive AI pathfinding that relentlessly tracks the player.

Education:

- Universidade do Algarve - Undergraduate of Engenharia Informática (2021-2022)
- Escola Superior de Tecnologia e Gestão - IPL - Undergraduate of Engenharia Informática (2022-2023)
- Escola Superior de Tecnologia e Gestão - IPL - Undergraduate of Games and Multimedia (2023-2026)

Previous Experience:

Game Programmer :

2023 - Present

- Worked in multiple small games with a small team.

Skillset:

Programming Languages :

- C , C++ , C# (Intermediate)
- Python (Basic Knowledge)
- Assembly (Basic Knowledge)
- Lua (Basic Knowledge)
- Java (Basic Knowledge)

Engines :

- Unreal Engine 5
- Unity

Tools :

- GitHub
- Visual Studio
- Jira

Languages :

- Portuguese (Native)
- English (C2)
- Spanish (A1)