

# Emmanuel Ogie

## Game Programmer



I'm a graduate game programmer, specialising in C++ and C#, both standalone, and within *Unreal Engine* and *Unity*. I'm a great problem solver, and have a passion not only for games but learning in general. I work well in a team, but I am also self-sufficient and can take the initiative when working independently.

## Skills

**Languages:** C++, C, C#

**Game Engines:** Unreal Engine 4/5, Unity 2021+

**Frameworks & Tools:** Git, Bash, CMake, Catch2

## Projects

**Keywords** - [/keywords](#) [itch.io/keywords](#)

*A cross-platform, terminal-based typing game*

**Technologies:** C++ 20, FTXUI, miniaudio, Catch2, CMake, Emscripten

- Created using a modern TUI library (FTXUI), with a component-based development approach
- Built with a rigorous test-driven approach – high code coverage unit tests written with Catch2
- Created different difficulty levels that scale based on player input, and a local leaderboard that stores the highest scores in a given difficulty
- Integrated reactive in-game audio, with an application wide toggle switch, using miniaudio
- Ported to WebAssembly using Emscripten

**Blob** - [/blob](#) [itch.io/blob](#)

*A top-down online multiplayer arena shooter*

**Technologies:** C#, Unity 2022.1.15, Photon Unity Networking (PUN), Photon Chat, PlayFab

- Developed a room-based, peer-to-peer networking system with PUN, that seamlessly synced in-game events, variables, and animations
- Created a real-time online chat system using Photon Chat
- Stored best player scores and uploaded them to a global online leaderboard using PlayFab
- Created custom assets, and mechanics - movement, shooting, health system - and a single-player game mode with enemy AI agents

**Derelict** - [/derelict](#) [itch.io/derelict](#)

*A walking simulator about a stranded astronaut*

**Technologies:** Blueprints, Unreal Engine 4.27.2, UMG

- Crafted an in-game cinematic using Unreal Sequencer
- Created a custom dialogue system, that was integrated with Unreal's UMG tool
- Developed a custom player controller, and camera system

**Asteroid Field Delivery** - [/asteroid-field-delivery](#) [itch.io/asteroid-field-delivery](#)

*A game about delivering rocks across an asteroid field*

**Technologies:** C#, Unity 2021.2.12

- Implemented the object pooling design pattern to optimise the spawning of in-game obstacles, and simulated a planetary asteroid belt
- Created a custom movement and interaction system, and a custom line renderer

## Education

### BSc (Hons) Computer Games Development

University of Westminster | 2020 – 2023

- Proficient in games programming, applied maths and algorithms for games
- Experienced in industry standard 2D/3D games development software