

About:

Game developer with a love for crafting unique, fun, and memorable experiences. Three years of experience under the belt, working solo and with teams as a programmer.

Skills:

Programming: C#, C++, Python, JavaScript

Game Engines & Libraries: Unreal Engine 5, Unity, Godot, PyGame

Tools: Visual Studio, JetBrains Rider, Git, SourceTree, Perforce, DevOps, Hansoft, Jira, Trello

Miscellaneous: MVC & MVVM architecture, Front-end web development, Agile/Scrum, Graphic design, VR game development experience, Documentation writing

Education:

University of Greenwich – London, UK
BSC in Games Design & Development
First Class Honours

September 2019 – July 2022

Key modules included OOP, Procedural generation, Networking, Game design, and 3D Modelling, animation & cinematics. Various game projects were developed independently and in teams.

Hobbies & Interests:

In my free time I like to write stories & characters in worlds that I hope to bring to life someday! I'm always getting inspired by the films, shows & comics I enjoy, and love learning about the process behind making them.

On occasion I also like to organise Game Nights, whether it be board games, party games or online-multiplayer games.

Some of my favourite games include *Portal*, the *Prince of Persia: Sands of Time* trilogy, *Final Fantasy X*, *CIV 5*, *Transistor*, *Little Big Planet 2*, and *Telltale's The Wolf Among Us*.

Experience:

UI Engineer

Maverick Games, England – August 2024 – Current

- Developing an unannounced project's UI architecture in Unreal Engine 5 with scalable systems that allow for quick iteration and reliable UX flows.
- Building new UMG Widgets in C++ and exposing key functionality in Blueprints to allow Artists & Designers to build UI in-engine.
- Collaborating with Gameplay Engineering to facilitate data bindings to the UI in the form of View Models.
- Writing documentation on pipelines and workflows.

Junior Software Engineer (UI)

SEGA HARDlight, England – July 2022 – Current

- Collaborated with artists & designers on the development of several major UI/player-facing features on live service titles *Sonic Dash* & *Sonic Forces: Speed Battle* as the primary programmer.
- Improved key areas within the *Sonic Dash* codebase to allow for greater scalability of new & existing UI systems, as well as greatly improving performance on low-end devices.
- Developed tools to optimise the Character Creation pipeline on *Sonic Dash*, allowing for parallelisation in the pipeline and increasing the rate at which new characters can be implemented annually.
- Developed Editor-GUI extensions for Unity that allows other teams within the studio to produce tools that share a consistent design language & layout.
- I wrote studio-wide documentation on UI implementation & best practices within Unity that is shared with other engineers & artists. This has been used to help onboard those in the same role that have joined after myself.
- Occasionally carried out duties as the engineer assigned to a release. This meant communicating with different disciplines to ensure the release is on schedule, and serving as the point of contact for any issues that may arise during QA testing or while monitoring metrics post-release.

Side Projects:

[Manabu | Deduction Game – Winner of the GDG Jam 3.0](#)

Unity | Team of 4 | October 2024 | 1 Week Jam

- Owned the “interrogation” side of the gameplay loop which involved building:
 - Branching dialogue system with conditional branches and “memory”
 - Trust/emotion system that influenced conversations with suspects
 - Scalable interrogation system that supported an infinite number of suspects for questioning, with tracking of possible motives found & confessions
 - Visual-novel styled dialogue flow
- Also handled implementing the UI across the game, such as in the main menu or the seamless wipe transition that doubles as a loading screen.
- To help iterate the game’s mechanics faster I developed a game framework with features such as a global event system, subsystem injection, data bindings, conditional interface and an audio manager. These base systems allowed us to make the game within a week.

[Project Goldfish | Wave-based Survival FPS prototype](#)

Unreal Engine 5.3 | Solo dev | April 2024 – May 2024

- Developed in-game HUD & frontend UI with an event-driven approach using Blueprint visual scripting & C++.
- Implemented simple shooter mechanics & scoring system.
- Implemented Wave-system with increasing difficulty.

[A Long Commute | Arcade hopper game - GDG Jam 1.0](#)

Unity | Programmer | Team of 3 | April 2024 | 48h Jam

- Implemented the procedural track system with progressive difficulty, multiple biome support, and RNG item spawning.
- Implemented full game loop, character controller & player stats.
- Supported Tech Artist to bring Happiness-Colour system to life. It serves as a survival mechanic tied to the difficulty.

[Sunseekers | Multiplayer social deduction game](#)

Unity | Programmer | Team of 4 | October 2021 – March 2022

- *Rapidly prototyped gameplay ideas and iterated the core gameplay loop based on playtest feedback.*
- *Implemented Unity Netcode to facilitate peer-to-peer lobbies.*
- *Designed & implemented the game’s UI.*
- *Implemented a player avatar customisation system that can be seen by other players in the multiplayer session.*
- *Led bi-weekly sprints and managed teammates’ tasks on Trello.*