

# William Garman

I am a senior programmer with seven years experience in the games industry, working on a mixture of AAA and smaller titles. My primary focus in that time has been Gameplay and AI programming in C++, however I have branched out and taken on more varied tasks whenever possible.

I wish to continue to develop a diverse set of skills by working on interesting projects with talented people of different disciplines.

## Professional Experience

### Wushu Studios - 2021 to 2025

- Three year's experience with Unreal Engine 5 on three different unannounced projects, ranging from AAA to indie.
- Helped deliver the Heart of Democracy update for Helldivers 2 working in Autodesk Stingray using C++.
- Worked in Unity on the Fall Guys Creative Mode update.
- Gained experience in co-development both as part of an inhouse team working on specific features and fully integrated into a client team.
- Worked closely with designers, VFX artists, sound engineers, and animators on a broad spectrum of features including:
  - Designed and built a modular enemy movement system, including formation movement.
  - Maintained and extended a system to support rewinding gameplay to an arbitrary point within a limit.
  - Extended Unreal's animation systems to allow for rewinding animation montages and state machines.This was done with no prior animation programming experience.
- Maintained documentation throughout development, including user guides for other disciplines.
- Have been responsible for maintaining builds, and adjusting the build pipeline to run automated tests.
- Profiled with Unreal Insights and Telemetry to identify problem areas and optimise them.
- Onboarded and mentored a junior programmer.
- Took on a management role on a small team, organising meetings, and discussing and deciding priorities.
- Identified and pursued fixes for organisational and communication issues between my team and the client.

### Cloud Imperium Games - 2018 to 2021

- Worked on quarterly patch releases for Star Citizen, a AAA space simulation MMO as well as its single player companion Squadron 42.
- Started on the Gameplay team and then transitioned to AI, focusing on ship AI.
- Developed AI behaviours, including capital ship behaviours for in game events.
- Maintained and reworked legacy systems.
- Developed new systems with the hard deadline of upcoming patches.
- Used a heavily modified version of Lumberyard, programming in C++.

## Technical Skills

- C++, C#, OOP, DOD
- Unreal Engine, Unity
- Perforce, Git
- Visual Studio, Rider

## Interests

- Video games (Pyre, BotW, Pathologic 2)
- Tabletop RPGs (Running D&D games)
- Boulderling, Hiking, Cycling
- Indie Game Development

## Education - Newcastle University

- MSc Computer Games Engineering - Distinction
- BSc Computer Science with Game Engineering - First Class honours.