

Curriculum Vitae

Jack Thomas Bulson
Games Programmer

Location: Newcastle-upon-Tyne

Email: jackbulson@gmail.com

GitHub: github.com/BulsonJ

Website: jackbulson.dev

Personal Profile

Video games and the industry surrounding them are something that I have always knew I wanted to be a part of. I am a reliable, friendly, and hard-working individual, and enthusiastic to learn new skills and solve problems in order to create great experiences for people to play and enjoy.

Education

2018-2022 *MComp Computer Science (Game Engineering), Newcastle University*
Graduating in 2022
Degree: 1st in Year 1, 2 & 3 of Study, on course for a 1st in Year 4

As part of the 4th year of my degree, have gained a large amount of experience in C++, creating a password encrypter/decrypter and programming the physics and gameplay behind a game inspired by *Screwball Scramble*. Have also utilised OpenGL and shaders to create a tropical island graphics scene. When finished, will also have worked as part of a team to create a game, and will have created another dissertation.

Modules completed:

- Advanced Programming for Games(100%)
- Advanced Graphics for Games(90%)
- Advanced Game Technologies(Mark awaiting)

2015-2018 *Macmillan Academy Sixth Form*
A Levels: Maths(A), Computing(B) and ICT(B)

2010-2015 *Macmillan Academy*
GCSE: 10 A-C Grades

Projects

2020-2021 *3rd Year University Dissertation*
Title: Near Infinite, Procedurally Generated Terrain
Language: C# (Unity)
Created a tool that procedurally generates terrain to compare using two different noise implementations (Perlin vs OpenSimplex). A custom shader is used to texture the terrain using height and steepness values from the terrain.
Link: jackbulson.dev/university/2021/08/30/procedural-terrain.html

2021 *3rd Year Game Development Module*
Title: Gladiator
Language: GDScript (Godot)
Created a top-down action game set in a gladiator arena. Programming/art solely created by me, music and sound effects sourced externally.
Link: jackbulson.dev/university/2021/09/04/gladiator.html

For the past year, I have also been actively creating small, solo game projects which are also displayed on my website. More details about my university projects can found there too.

Past Employment

Jun 2016-Aug 2018 *Stand Attendant at Showcase Cinemas*

Key responsibilities included serving customers, ensuring the stand was a clean and sanitary environment, working as part of a team and dealing with problems and complaints. As I became a more experienced member of staff, the I was trusted with more responsibility, such as managing stock replenishment on the stand. This helped me to develop my organisational and leadership skills.

Skills and Achievements

Languages:

C++ / C# / GDScript & Java

Software Experience:

Godot / Unity / Visual Studio / Nvidia NSight

Gameplay Programming:

Implementation of 3D physics system

Implementation of AI using state machines and behaviour trees

Graphics Programming:

OpenGL Graphics Scene – Deferred Rendering / Real-time Shadows / Water

Refraction & Reflection

Miscellaneous skills, experience, and achievements:

Version control, more specifically GitHub

Creating Gantt charts, UML diagrams for various university modules

2015-2017 Silver Duke of Edinburgh Award