# Mateusz Baesler

3 Dean Street, Coventry, CV2 4FD | **Address**

07462 896889 | **Phone**

matibaesler@gmail.com | **Email**

**Portfolio** | https://mateuszbaesler.github.io/Portfolio/

**LinkedIn** | /in/mateusz-baesler-761051177/

**Twitter** | **https://twitter.com/BaeslerMateusz**

## Profile

Games Technology Student working towards 1st Class Honours in Games Technology BSc at Coventry University. 3 years of University Experience programming and producing 3D assets and prototypes. Dedicated team worker experienced in group projects using industry practices including version control and code documentation. Possesses a wide range of knowledge and relevant technical experience. Currently searching for a full-time position in games development.

## Skills

**Technical**
- Capable of programming in Python, C#, C++.
- Built games using the Unity Game Engine in 2D, 3D and VR.
- 3D asset creation and animation in Blender, Substance Designer & Substance Painter.
- Experienced in video and image editing software including Adobe Photoshop, Premiere and After Effects.
- Data and information retrieval experience, using SQL, NoSQL and conceptual modelling

**Personal**
- Fluent in English & Polish.
- Learning Japanese & French.
- Excellent literacy skills.
- Efficient debugging skills: ability to identify anomalies and apply corrective actions.
- Report writing and presenting skills applying informative and demonstrative speeches.
- A team player and works to own initiative.
- Committed, passionate and enthusiastic.

## Education

**Coventry University** — **September 2018 - 2021**
- Games Technology BSc
    - Advanced Games Programming
    - Games & AI
    - Content Design Tools and Techniques
    - Mathematics for Computer Graphics
    - Advanced 3D Graphics Programming
    - Programming, Algorithms & Data Structures
    - Physics for Computer Graphics
    - Concept Development for Games Design

**Archbishop Ilsley Catholic School and Sixth Form Centre** — **September 2016 – June 2018**
- OCR Level 3 Cambridge Technical Introductory Diploma in IT
    - Fundamentals of IT (Distinction)
    - Global Information (Distinction)
- Applied Science - Medical Science (Distinction*)
- Core Mathematics (D)
- History (D)

**Archbishop Ilsley Catholic School and Sixth Form Centre** — **September 2011 – June 2016**
- 11 GCSES (Grade A*-C) including Computing (A), English (B) and Mathematics (B).

# Projects

## Portfolio -

### Project AI
A first-person shooter against 'dumb' assault drones commanded by a 'smart' commander drone. Work smart to wipe out the commander first or try to brute force through an army of drones.
- Created in the Unity game engine.
- Language: C#.
- Demonstrates use of artificial intelligence techniques, including finite state machines and fuzzy logic.
- Created a game prototype without use of external assets.

### C++ Ray caster
A ray casting program capable of rendering complex models and simple shapes with Phong shading for ambient, specular and diffuse intensities as well as hard shadows and light sources.
- Coded in Visual Studio.
- Language: C++.
- OpenGL for graphics rendering.

### Procedural Terrain Generator
A procedural terrain generation program, using Perlin noise and the Diamond-Step (Square-step) algorithm with runtime generation, dynamic texture blending based on height, animated water, and transparency.
- Coded in Visual Studio.
- Language: C++.
- OpenGL and SDL for rendering.

### *The Asylum*
A 3D horror puzzle experience in virtual reality. The player wakes up in a derelict asylum with no memories, attempting to uncover the series of events that led them there.
- Created in the Unity game engine.
- Language: C#.
- Made heavy use of Blender for creating 3D assets and textures for my level.

### *Scrabble Project*
I was tasked with recreating the 'scrabble' board game entirely in C++ as a windows application.
- Object-orientated programming.
- Data structures.
- File parsing.
- Algorithm efficiency.
- Computer-controlled opponents.

This project challenged me in many ways, making me consider how different functions will interact with each other, what sorts of sorting and searching algorithms to use in order to get the highest efficiency, and how computer-controlled opponents should behave in order to be fun to play against.

### *Hamora's Legacy*
A 2D top-down stealth game set in feudal Japan. The player is tasked with scaling a tower in order to retrieve a stolen heirloom, a sword called "Hamora".
- Created in the Unity game engine.
- Language: C#.
- I was responsible for the first level of the game, and the basis for what the rest of the levels will be like.
- Made use of Adobe Photoshop for the level graphics.
- Uses accelerometer in the mobile device.

Combined with my group members, the result was a fun, short mobile game, taking advantage of the mobile platform to aid in its gameplay. I learnt and made us of many valuable skills such as group planning, version control, and error testing to ensure the game functions properly as a whole despite working on individual elements. Furthermore, it helped me get familiar with Unity and the C# programming language.