

# ALESSANDRO BASON

Game programmer

@ale55.bason@gmail.com

[alessandrobason.co.uk](https://alessandrobason.co.uk)



## ABOUT ME

Hi! My name is Alessandro Bason, I'm a games programmer. I have a passion for engine and graphics programming in particular, and I like to build stuff from scratch.

I have extensive knowledge of C++ and in my free time I like to tinker with C. In My free time I like to watch movies and play some music on my guitar. I also draw every once in a while!

## EXPERIENCE

### Graphics Programmer

#### Assemble Technology

01/2024 - 07/2024 Remote

At Assemble Technology, I focused on GPU and CPU optimisation for the PlayStation 5 using Unreal Engine 5.

I gained experience with various tracing tools, such as Unreal Insight and Razor GPU, to identify and resolve performance issues.

- Worked on GPU and CPU profiling and optimisation on shipped games.
- Optimised in-house tools written in C++.

### Junior programmer

#### Free radical design

10/2023 - 12/2023 Nottingham

At Free Radical Design, I collaborated with a team of ~90 people, regularly interfacing with the design and art teams to implement new gameplay features and fix bugs.

I worked with Unreal Engine 5 and had to take into consideration the multiplayer aspect of the game when implementing features

### Internship

#### Internship, people can fly

08/2022 - 09/2022 Remote

At People Can Fly, I worked with a small team of approximately 15 people on the foundations of a new prototype.

My responsibilities included creating new gameplay features according to the game designer's requests.

## EDUCATION

### Bsc. (hons) Computer Games Technology

#### Abertay university

2019 - 2023 Dundee

### Perito informatico (Computer Science)

#### Itsos Marie Curie

2016 - 2019 Cernusco sul Naviglio, Italy

## PROJECTS

### Beyond Triangles: Sculpting with SDF Raymarching

[alessandrobason.co.uk/projects/beyond-triangles](https://alessandrobason.co.uk/projects/beyond-triangles)

User-friendly application that enables non-technical users to create and modify complex 3D sculptures using signed distance fields.

- Real-time editing of 3D SDF textures
- Offline rendering with path tracing
- Saving and loading

### Hydraulics Erosion on the GPU

[alessandrobason.co.uk/projects/erosion](https://alessandrobason.co.uk/projects/erosion)

A showcase of hydraulic erosion on the GPU and a few other terrain generation techniques.

### Raymarched volumetric clouds

[alessandrobason.co.uk/projects/clouds](https://alessandrobason.co.uk/projects/clouds)

Volumetric clouds rendered inside a 3D SDF box with day and night cycle

- Cross platform, works on Windows and on Web
- Supports hot-reloading shaders
- Various optimisations (blue noise, LOD)

### Legend of the Puzzle

[alessandrobason.co.uk/projects/lotp](https://alessandrobason.co.uk/projects/lotp)

A 2D game inspired by Legend of Zelda and Enter the Gungeon

### Online Bomberman

[alessandrobason.co.uk/projects/bomberman](https://alessandrobason.co.uk/projects/bomberman)

A 4-player local and online multiplayer bomberman game