# SOFTWARE ENGINEER

## **SKILLS**

= I have some experience

#### **LANGUAGES**

|| Lua | HLSL | Assembly Python | GLSL

#### FRAMEWORKS/ LIBRARIES /APIs

STL ] [OpenGL 4.6] DirectX11

Vulkan 1.3 | PS5 SDK | GameCube SDK XBOX One SDK | [ImGui] (SFML) (SDL 2 Raylib | SoLoud .NET

#### **ENGINES**

UE5 [Unity] { Godot | Poyo]

#### **SOFTWARE**

Rider (Visual Studio)(GitHub)(Perforce) Blender | Aseprite | (Jira) (Trello) (Office) [Maya | RenderDoc | NVIDIA Nsight

## **EDUCATION**

#### **Sheffield Hallam** University

**United Kingdom** 2024 - 2025

BSc Hon Computer Science for Games Average Grade: First Class [87.6]

#### **ESAT**

2020 - 2023 València, Spain

HND in Computing, BTEC Level 5 **Average Grade: Distinction** 

#### **AWARDS**

Sheffield

<u>University</u>

Hallam

#### **BEST INDIVIDUAL PROJECT** Cubed Cube<sup>3</sup>

**GAME OVER 2025** Winner Winner



#### **BEST STUDENT GAME** 🗞 Invicta: The Next Queen

**GAMESCOM LATAM 2024 Finalist** 

## ADDITIONAL INFO

#### Private Tutor: C++ & OpenGL

Tutored students for two years, focusing on C++, graphics programming, and engine architecture. Found it personally rewarding.

#### Hobbies and Interests

I enjoy modding consoles and creating software for legacy systems like the GameCube and DS, with a focus on porting and low-level programming. I also swim regularly.

# tebasdev@gmail.com Portfolio GitHub in LinkedIn







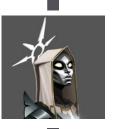
**EXPERIENCE** VIEW MY PORTFOLIO: <u>WWW.TEBAS.DEV</u>



## Junior C++ Programmer | Steel Minions April 2025 - July 2025

• Developed a **2D educational vectorial** game in **C++** with **Python** scripting for first-year computing students.

• Firebase integration for student login, leaderboard tracking, and remote task management by lecturers.



## Gameplay Programmer | Dark Moth

València, Spain Sep. 2022 - July 2023

- Developed INVICTA: The Next Queen (top-down Soulslike) in Unreal Engine, published on Steam.
- Implemented animation systems, combat mechanics, and gameplay features (e.g. parrying, lock-on, status effects).

## RELEVANT PROJECTS





- Built a custom engine from scratch using ECS architecture.
- Implemented Deferred Rendering, PBR materials, GPU skinning mesh animations, Shadow Mapping...
- Added editor tools (Undo/Redo, Object Selection, Gizmos, Logger) and optimised rendering with **Direct State Access** and **Multi Draw Indirect**.
- Ported the engine to DirectX 11 for Xbox One support.

Sep. 2022 - Jun. 2023 Links: DevLog



## INVICTA: The Next Queen 👑





- Development of a **top-down Soulslike**, **published** on **Steam**.
- Led all animation programming: state machines, blend spaces, layered systems, and anim-notifies for gameplay events.
- Integrated all rigs and animations from artists.
- Implemented combat features including parrying, enemy lock-on, status effects, custom projectiles, and fast-travel portals.

Links: Sep. 2022 - Jul. 2023





- Built a voxel engine for GameCube (2001, 24MB RAM).
- Implemented procedural terrain, skeletal animation, batching, frustum and occlusion culling and memory optimisations.
- Project awarded as Best Individual Project at Game Over 25 showcase, judged by professionals from the games industry.

Sep. 2024 - Jan. 2025 Links: 🙀 <u>DevLog</u> 🕞





- Built a custom game engine for PS5 from scratch in Semester 1, including a real-time skeletal animation system with GPU skinning.
- In Semester 2, collaborated extend the engine in a 6-person team for a coop Pikmin-style game. Implemented animation blending and a compute**shader**-based **interactive grass** responsive to **wind** and **player footsteps**.
- Currently **porting** the project to the **Nintendo Switch**.

Jan. 2025 - May. 2025 Links: DevLog Switch Port