Sebastián Valdés

SOFTWARE ENGINEER

Sheffield, UK <-> Barcelona, Spain 📍
Catalan & Spanish (Native), English (C1) 💬

✉ tebasdev@gmail.com 🌐 Portfolio ⚙ GitHub 🔗 LinkedIn

SKILLS

⬚ = I have some experience

LANGUAGES

C++ | C# | C | Lua | YAML | SQL | Python | GLSL | HLSL | Assembly

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

UE4 | UE5 | Unity | Godot | Poyo

SOFTWARE

Rider | Visual Studio | GitHub | Perforce | Blender | Aseprite | Jira | Trello | Office | Maya

EDUCATION

Sheffield Hallam University
2024 - 2025 — United Kingdom
BSc Hon Computer Science for Games
Average Grade: First Class

ESAT
2020 - 2023 — València, Spain
HND in Computing, BTEC Level 5
Average Grade: Distinction

AWARDS

BEST STUDENT GAME
Invicta: The Next Queen
GAMESCOM LATAM 2024
🏅 Finalist

BEST INDIVIDUAL PROJECT
Cubed Cube³
GAME OVER 2025
🏆 Winner

ADDITIONAL INFO

Private Tutor: C++ & OpenGL

Provided one-on-one **tutoring sessions** over **two years** to students from both **ESAT** and **Sheffield Hallam** University. Focused on **graphics programming** and **engine architecture fundamentals**. Supporting their progress and confidence has been **personally rewarding**.

EXPERIENCE

VIEW MY PORTFOLIO: **WWW.TEBAS.DEV**

Junior C++ Programmer | Steel Minions
Sheffield, UK
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

🍗 Poyo Engine 🍗 — OpenGL | DirectX11
- Designed and developed a **custom engine entirely solo** using **ECS** architecture.
- Implemented core systems: **Deferred Shading**, **PBR** materials, GPU **skinning mesh animations**, Frustum Culling, **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 ▶ Trailer

INVICTA: The Next Queen 👑 — UNREAL ENGINE
- Collaborated on the development of a **top-down Soulslike**, **published** on **Steam**.
- **Led all animation programming**: **state machines**, **blend spaces**, layered systems, and **anim-notifies** for frame-accurate gameplay events.
- Integrated all **rigs** and **animations** from **artists** and **riggers**.
- Implemented **combat features** including **parrying**, **enemy lock-on**, status effects, **custom projectiles**, and fast-travel **portals**.

Sep. 2022 - July 2023 — **Links:** 🌐 DevLog ▶ Trailer ⬢ Steam Page
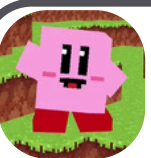
Cubed Cube³ 🧊 — NINTENDO GAMECUBE
- Built a **voxel engine** for the GameCube (2001, **24MB RAM**, **fixed-pipeline**).
- Implemented **procedural terrain**, real-time sprite and **skeletal animation**, **batching**, **frustum** and **occlusion culling**, **vertex packing**, and custom **memory optimisations**.
- Project selected as a **finalist** and **awarded Best Individual Project** at **Game Over 25**, Sheffield Hallam University's end-of-year **showcase**, **judged by professionals** from the games industry.

Sep. 2024 - Jan. 2025 — **Links:** 🌐 DevLog ▶ Trailer

SkyGlyphs 🌿🐞 — PS5
- 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, extended the engine as **part of a team** of 6 people to develop a cooperative **Pikmin-style game**. Developed features such as animation blending and an **interactive grass system** affected by **wind** and **player footsteps**, using **compute shaders**.

Jan. 2025 - May. 2025 — **Links:** 🌐 DevLog