



Olivier Pachoud

Junior Graphics and Games Programmer

CONTACT

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🌐 **Portfolio:**

<https://chocolive24.github.io/>

EDUCATION

Bachelor of Science

in Games Programming

SAE-Institute Geneva

Graduated: July 2025

Swiss Federal Baccalaureate

Economics and Law +

Computer Science option

Yverdon High School

Graduated: July 2022

SOFT SKILLS

- Empathetic
- Rigorous
- Optimistic
- Collaborative
- Clear communicator

HOBBIES

- Playing video games
- Going to the cinema
- Travelling
- Swimming
- Hosting birthday parties for children at the local game library in my village.

LANGUAGES

- French: Native
- English: Fluent-B2

OBJECTIVE

Passionate about graphics programming, I seek to contribute to video game and interactive media projects while continuously improving my real-time rendering skills.

I aim to put my technical expertise to work within a team to create striking and immersive interactive visuals.

TECHNICAL SKILLS

- ◆ **Programming Languages:** C++, C, C#, Python, GLSL, HLSL
- ◆ **GPU Programming:** DirectX 11 & 12, DXR, CUDA, OpenGL
- ◆ **Game Engines:** Unreal Engine 4 & 5, Unity
- ◆ **Tools:** Git, Perforce, Cmake, Vcpkg, Docker, Emscripten
- ◆ **Network programming:** Photon Realtime, SFML Sockets

EXPERIENCE

SAE-INSTITUTE:

- ◆ **Ruby and The Lost Crystals: UE5 Team Game Project**
Project Co-leader, Lead Game Programmer, Graphics Programmer & Tech Artist.
Developed a custom cel-shading post-process material.
Engineered special visual effects: planar reflections, outline shaders, particle systems, and dynamic visual feedbacks
Decided on and built the code architecture for the project.
- ◆ **Bachelor's Project: DXR Fluid Simulation Rendering**
Developed a real-time fluid renderer in DXR, using both raymarching and marching cubes pipelines. Integrated the system with an SPH particle simulation.
- ◆ **OpenGL 3D Scene in Deferred Shading and PBR**
Programmed a 3D engine from scratch in C++/OpenGL
Implemented deferred shading pipeline with PBR materials and dynamic lighting

PERSONAL WORK:

- ◆ **Pathtracer in CUDA**
Programmed a brute-force path tracer in CUDA supporting multiple materials, optimized with BVH.
- ◆ **Mini Minecraft clone in DirectX 11**
Generated a mini minecraft world procedurally with perlin noise and added a player controller with collisions

Portfolio Highlights



[Full portfolio available online here](#)

Ruby and The Lost Crystals

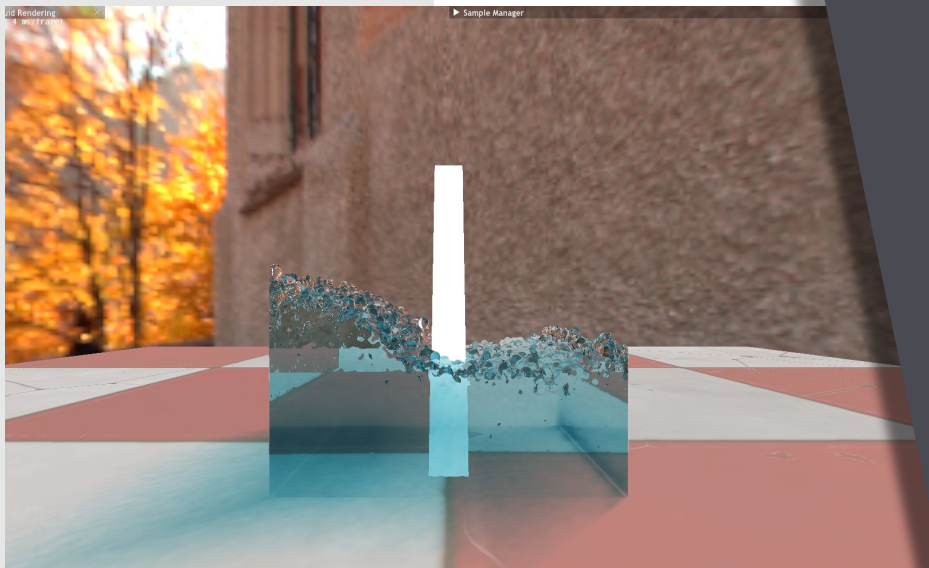
[Available on Steam.](#)

A stylised puzzle-shooter game developed in team with Unreal Engine 5, where players explore ancient ruins using magical projectiles to recover scattered crystals.



Bachelor's Project: DXR Fluid Simulation Rendering

An SPH fluid simulation rendered with Raymarching and Marching Cubes in a custom DXR Pipeline



OpenGL 3D Scene

A Scene made with a from scratch graphics engine including deferred rendering,PBR and IBL.

