



# Olivier Pachoud

Junior Graphics and Games Programmer

## CONTACT

✉ **Email:**

olivierpachoud2@gmail.com

in **Linkedin:**

[linkedin.com/in/olivier-pachoud](https://www.linkedin.com/in/olivier-pachoud)

🌐 **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
- Team player
- Good communication

## 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

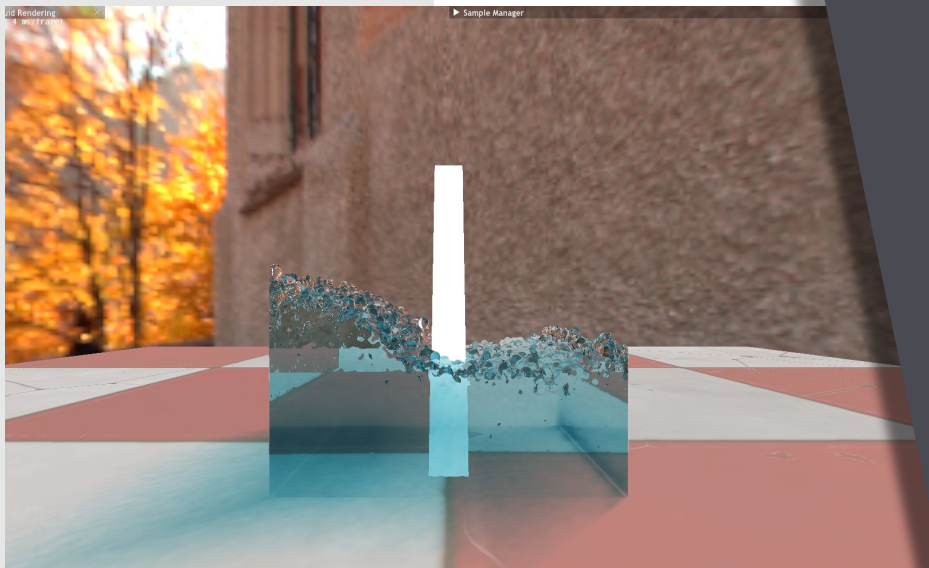
[Available on Steam.](#)

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.

