Olivier Pachoud

Junior Graphics and Games Programmer

CONTACT

Email:
olivierpachoud2@gmail.com

Portfolio:
https://chocolive24.github.io/

Linkedin:
linkedin.com/in/olivier-pachoud

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

- Empathic
- Rigorous
- Optimistic
- Teamwork
- 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:

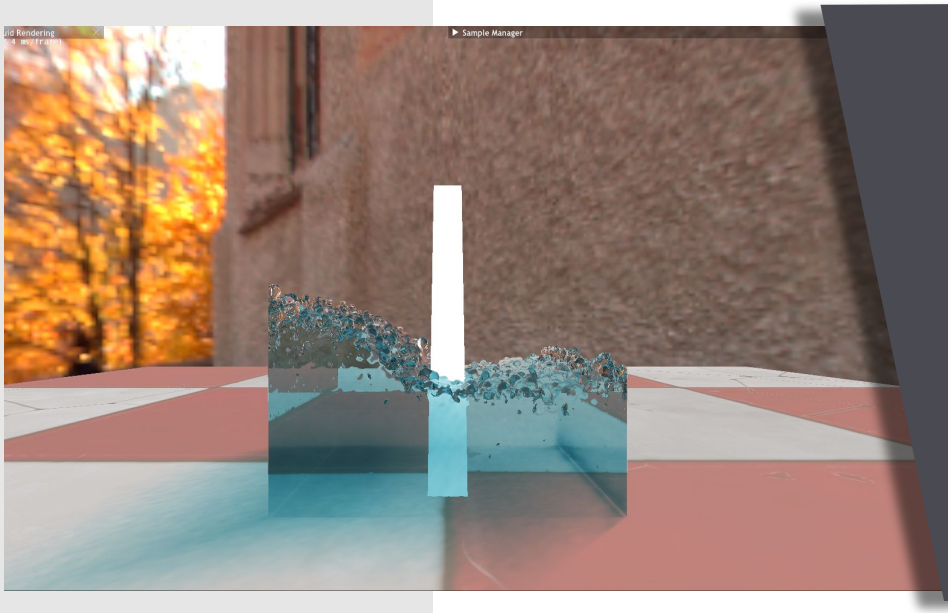
- **Pathtracer in CUDA**
  Programmed a brute-force path tracer in CUDA supporting multiple materials, optimized with BVH.
- **Mini Minecraft clone in DirectX 11**
  Generated a mini minecraft world procedurally with perlin noise and added a player controller with collisions

Portfolio Highlights

[Full portfolio available online here]

Ruby and The Lost Crystals: Unreal 5 Team Game Project

A 3D stylized puzzle shooter game available on steam.



Bachelor's Project: DXR Fluid Simulation Rendering

An SPH fluid simulation rendered with a custom DXR pipeline

OpenGL 3D Scene

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