Olivier Pachoud

Junior Graphics and Games Programmer

CONTACT

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

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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

- **Languages:** C++, C, C#, Python, GLSL, HLSL

- **Graphics APIs:** DirectX 11 & 12, DXR, CUDA, OpenGL

- **Game Engines:** Unreal Engine 4 & 5, Unity

- **Tools:** Git, Perforce, Cmake, Vcpkg, Docker, Emscripten

- **Networking:** 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.

- **DXR Raytracing Rendering of Dynamic and Implicit Fluid**
  - Implemented raymarching in a custom intersection shader.
  - Integrated Marching Cubes algorithm to generate a dynamic mesh for the DXR acceleration structure.

- **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 media (dielectrics, density volumes), 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