French
22 years old
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France / Europe

Social networks

@Patoche692
@patrick-attimont

Languages

French
Native

English
C1

Spanish
B1

Skills

Computer graphics

- Graphics API: OpenGL
- Shading: GLSL and HLSL
- GPU architecture and programming with CUDA
- Theoretical knowledge: linear algebra, probability theory and sampling techniques, light transport theory and physically based rendering

Programming languages
C, C++, Java, Python, Kotlin

Video game development
Unreal Engine

Project management
Teamwork, communication, problem solving, adaptability

Interests

Sports
Soccer (8 years), ski, badminton

Music
Piano (6 years)

Patrick ATTIMONT

3D rendering internship

Currently in my final year of engineering studies at Ensimag (France), I am seeking a 4 to 6-month internship in 3D rendering, beginning in February 2025. Driven by a passion for computer graphics since high school, I am particularly interested in research positions focused on physically based rendering for both real-time and offline applications. I am also considering pursuing a PhD to deepen my contribution to the field.

Professional experiences

Graphics engineer intern

From June 2024 to September 2024 CORYS Grenoble, France
Shader development using Unreal Engine's render dependency graph to enhance the windscreen effects system in the CORYS train simulator.

Gameplay programmer (voluntary)

From January 2024 to June 2024 BFME-Reforged
BFME-Reforged is a community project to recreate the Battle for Middle-Earth (BFME) games by EA. Under the lead developer's guidance, I implemented new gameplay features with Unreal Engine 5 and C++.

Personal projects

- **Nexus Renderer**: interactive physically based GPU Monte Carlo path tracer developed from scratch in C++ and CUDA. It implements a range of advanced rendering techniques including microfacet material models, sampling techniques (BSDF importance sampling, next event estimation, multiple importance sampling), and GPU optimizations (wavefront path tracing, dynamic ray fetching, compressed wide BVHs). GitHub

- **Zendite Engine**: small scale game engine in C++ and OpenGL. I was part of a team and implemented the rendering system (shading, lighting system, and shadow mapping). GitHub

Education

Master of Science - M2 MoSIG (double degree)

Since 2024 Grenoble INP - UGA Grenoble, France
Major in artificial intelligence for graphics, interaction, vision and robotics. Relevant coursework includes advanced computer graphics, GPU computing, robotics and computer vision.

Engineer's degree

Since 2022 Ensimag Grenoble, France
Three-year program in one of France's leading engineering schools, specializing in computer science and applied mathematics.

Academic exchange

2024 Chalmers Unitversity of Technology Göteborg, Sweden
Erasmus semester with a focus on computer graphics, game engine architecture and machine learning.

Scientific preparatory school (PCSI - PSI*)

From 2020 to 2022 Lycée Chateaubriand Rennes, France
Two-year intensive program in mathematics and physics, preparing for competitive exams to enter France's top engineering schools.