Research Engineer

Neural Rendering

Paris / Île-de-France | Hybrid Preferred | Remote Considered | Start: Q4 2026

ABOUT EXOVERSE

Exoverse develops physically accurate rendering and optical simulation technologies for industrial applications. Our expertise includes spectral rendering, polarization-aware light transport, high-performance GPU rendering, AI-powered accelerated rendering, material appearance simulation and validation methodologies.

THE ROLE

We are looking for a Research Engineer to contribute to the next generation of rendering and simulation technologies.

This role sits at the intersection of computer graphics, machine learning, optical simulation, and industrial visualization. You will explore how neural, optimization-based, and AI-assisted techniques can improve rendering performance, appearance modeling, inverse rendering workflows, and simulation capabilities.

Working closely with the CTO and engineering team, you will evaluate emerging research, prototype new approaches, and contribute to technical decisions around AI-assisted rendering and neural graphics.

KEY RESPONSIBILITIES

• Research, evaluate, and prototype AI-assisted rendering and neural graphics techniques for industrial simulation workflows.
• Explore neural rendering, inverse rendering, appearance modeling, relighting, rendering acceleration, and learned scene representations.
• Design experiments, benchmarks, validation methodologies, and technical evaluation frameworks.
• Read, reproduce, and critically evaluate academic and industrial research.
• Prepare state-of-the-art reports for customer projects, including technical landscape reviews, feasibility assessments, benchmark comparisons, and implementation recommendations.
• Build experimental pipelines and prototypes.
• Identify AI techniques that provide measurable value for rendering and simulation workflows.
• Contribute to technical decisions, AI strategy, and long-term R&D directions.
• Collaborate with rendering engineers, researchers, and technical stakeholders.

CANDIDATE PROFILE

• Master’s degree (Bac+5) with a research-oriented background, or PhD, in computer science, computer graphics, machine learning, optics, applied mathematics, physics, engineering, or a related field.
• Relevant research or R&D experience in neural graphics or physics-based rendering. Experience may come from a PhD, postdoctoral work, industrial R&D, open-source projects, or significant research prototypes.
• Solid understanding of physically based rendering, light transport, materials, shading, and rendering algorithms.
• Practical experience with C++, Python, and PyTorch.
• Ability to read, implement, evaluate, and communicate research findings clearly in English.
• Ability to work autonomously on open-ended R&D topics within a collaborative engineering environment.
• Experience with differentiable rendering, inverse rendering, appearance capture, material estimation, or relighting.
• Familiarity with neural rendering techniques such as NeRF, Gaussian Splatting, neural materials, or neural radiance caching.
• Exposure to shader languages such as Slang, HLSL, or GLSL, or to GPU computing frameworks such as OpenCL, SYCL, ROCm, CUDA, or equivalent technologies.
• Experience with DCC tools, scene authoring, asset preparation, material setup, lighting setup, or dataset creation for

rendering experiments would be appreciated.
• Publications, patents, open-source contributions, or shipped features in rendering, neural graphics, or machine learning would be valuable.
• French language proficiency is welcome.

WHAT WE OFFER

- Competitive salary package, commensurate with experience, skills, and qualifications.
- BSPCE equity package.
- Meal vouchers.
- Hybrid work policy. Remote work may be considered for exceptional candidates within a compatible time zone.

HOW TO APPLY

Please send your resume and a short note to careers@exo-verse.com. Please briefly describe your experience in computer graphics, rendering, machine learning, or related R&D activities, including any relevant projects, publications, patents, open-source contributions, or technical achievements.