Clément Jambon
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Education

Sept. 2024 - **present**	**MIT, Cambridge, USA**, *PhD program.* GPA: 5.0/5.0. Advised by Mina Konaković Luković in the Algorithmic Design Group.
2022 - 2024	**ETH, Zürich, Switzerland**, *Master of Science in Computer Science.* Grade: 5.71/6.0. Major in *Visual and Interactive Computing* and Minor in *Machine Learning.* "Honorable Mention" at the rendering competition of the Computer Graphics 2022 course.
2019 - 2023	**École Polytechnique, Paris, France**, *Postgraduate engineering degree.* GPA: 3.9/4.0. One of France's leading schools of science and engineering. Military training.
2017 - 2019	**Lycée Faidherbe, Lille, France**, *Undergraduate studies* Two-year intensive university-level (undergraduate) preparation in mathematics and physics to prepare for highly competitive nationwide exams (*Classes Préparatoires*).

Work Experience

March 2024 - Aug. 2024	**Visiting Student, Seoul National University, Seoul, South Korea** Visited the 3D Vision Lab for my Master's Thesis. Supervised by Prof. Young Min Kim (SNU) and Prof. Olga Sorkine-Hornung (ETH Zürich).
Oct. 2023 - Feb. 2024	**Research Intern (Internship), NVIDIA, Zürich, Switzerland** Worked on a confidential high-performance graphics research project. Supervised by Thomas Müller, Merlin Nimier-David and Alex Keller.
Jan. 2023 - June 2023	**Semester project, CVG lab, ETH, Zürich, Switzerland** Research project supervised by PhD student Silvan Weder and Prof. Marc Pollefeys
March 2022 - Aug. 2022	**Research Intern (Internship), Inria, GraphDeco Team, Sophia-Antipolis, France** Research project supervised by George Drettakis. Resulted in *NeRFshop* (I3D 2023). Received the Best Research Internship Award from École Polytechnique. Collaborated on *Neural Point Catacaustics* (SIGGRAPH Asia 2023).
June 2021 - Aug. 2021	**Computer Vision Engineer (Internship), Wemap, Montpellier, France** Devised a state-of-the-art visual positioning system from scratch. See demo.
Oct. 2019 - March 2020	**Teacher and Research Assistant (Internship), Institute of Technology of Cambodia, Phnom-Penh, Cambodia** Provided 40 Cambodian students with a preparation for l'École Polytechnique's entrance exam. Led a five-month research project on Reinforcement Learning in the robotics laboratory.
Oct. 2015 - Sept. 2017	**Software Developer, Artenpik, Lille, France** Created an augmented-reality platform for street-artists. Won two hackathon prizes including First Place at the "*Happy Hacking Days*" in 2015.

Publications

Under review	*Interactive Scene Authoring with Specialized Generative Primitives*, **Clément Jambon**, Changwoon Choi, Dongsu Zhang, Olga Sorkine-Hornung, Young Min Kim.
SIGGRAPH 2025	*BrepDiff: Single-stage B-rep Diffusion Model*, Mingi Lee*, Dongsu Zhang*, **Clément Jambon***, Young Min Kim.
I3D 2023	*NeRFshop: Interactive Editing of Neural Radiance Fields*, **Clément Jambon**, Bernhard Kerbl, Georgios Kopanas, Stavros Diolatzis, Thomas Leimkühler, George Drettakis.
SIGGRAPH Asia 2022	*Neural Point Catacaustics for Novel-View Synthesis of Reflections*, Georgios Kopanas, Thomas Leimkühler, Gilles Reiner, **Clément Jambon**, George Drettakis.

Languages

French: native. **English**: proficient. **German**: professional (beginner).

Skills

Software development: C, C++, CUDA, Python, Java, C#, OpenGL API, GLSL, Vulkan API (beginner, mostly *compute* pipeline). **Computer Graphics**: neural and inverse rendering (e.g. *NeRF*, *Mitsuba3+drjit*, *nerfstudio*, *Instant-NGP*, *3DGS*), Monte Carlo rendering, physically-based simulation, geometry processing, game development with Unity. **Computer Vision**: image processing, multiple view geometry, SLAM and SfM pipelines. **Machine Learning**: PyTorch, JAX, Scikit-Learn, Topological Data Analysis, NLP, Reinforcement Learning, NeRF, Diffusion Models, Statistical learning theory, advanced formal languages. **Web development**: JavaScript, Typescript, React, Node.js, Express.js, Django, SQL, Hugo. **Driving licence**.