

Baptiste Nicolet

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PhD student at EPFL

Education

2020 - 2024 **PhD, Computer Science, EPFL**, Lausanne, Switzerland.
PhD student in the Realistic Graphics lab, supervised by Prof. Dr. Wenzel Jakob. Working on differentiable rendering.

2019 - 2020 **M.S., Computer Science, Télécom Paris**, Palaiseau, France.
"Computer Graphics and Human-Computer Interaction" track.

2018 - 2019 **M.S., Computer Science, École polytechnique**, Palaiseau, France, *3.87 GPA*.
"Image, Vision, and Machine Learning" track.

2016 - 2018 **Gradué en Ingénierie (Bachelor equivalent), École polytechnique**, Palaiseau, France, *3.62 GPA*.

2014 - 2016 **Classes Préparatoires, Collège Stanislas**, Paris, France, *4.0 GPA*.
As France's most prestigious universities (Grandes Écoles) select their student from a highly competitive entrance examination, students must go through two years of preparation, called *Classes préparatoires*

Publications

Dec 2021 **Large steps in inverse rendering of geometry**, *ACM Transactions on Graphics (Proceedings of SIGGRAPH Asia)*, 2021 .
Baptiste Nicolet, Alec Jacobson, Wenzel Jakob

May 2020 **Repurposing a relighting network for realistic compositions of captured scenes**, *Proceedings of the ACM SIGGRAPH Symposium on Interactive 3D Graphics and Games*, May 2020.
Baptiste Nicolet, Julien Philip, George Drettakis.

May 2020 **Pair correlation functions with free-form boundaries for distribution inpainting and decomposition**, *Eurographics*, 2020.
Baptiste Nicolet, Pierre Ecormier-Nocca, Pooran Memari, Marie-Paule Cani.

Experience

Community

2021 - **Technical papers reviewer**.

present *Transactions on Graphics*, *Computer Graphics Forum*

2021 **Invited speaker, Toronto Geometry Colloquium**,  Recording.
Presented my work on inverse rendering of geometry.

Internships

2022 **Research Intern**, *NVIDIA*, Zürich, Switzerland,
Supervisor: **Aaron Lefohn**.
o Investigated different approaches to leverage control variates for differentiable rendering.

2019 **Master Thesis**, *INRIA*, Sophia-Antipolis, France,
Supervisor: **Prof. Dr. George Drettakis**.
o Explored using a relighting network to allow compositions of IBR scenes.
o Work published at *I3D 2020*.

2018 **Software Developer Intern**, *PM SCADA*, Montréal, Canada.
o 3-month internship working along with the Montréal computer science research center (CRIM) to develop innovative solutions in cybersecurity.
o Designed and programmed automated penetration testing tools.

2016 - 2017 **Emergency Response Team Leader**, *Paris Military Fire Brigade (BSPP)*, Vitry-sur-Seine, France.
o Leader of an emergency response vehicle (3 EMTs).
o Managed urgent and difficult emergency situations, during 24h shifts.
o Coached servicemen for promotion exams.

Teaching

2021 - Today **Teaching Assistant**, *EPFL*, Lausanne, Switzerland.
Advanced Computer Graphics (Master), Numerical Methods for Visual Computing (Bachelor)

2017 - 2018 **Teaching Assistant**, *Collège Stanislas*, Paris, France, 2h.
In charge of weekly oral examinations in mathematics for first-year undergraduates.

Skills

Programming C++, Python, Java,
Frameworks CUDA, OpenGL/GLSL, PyTorch, TensorFlow/Keras
Languages French - Native; English - Fluent (*TOEFL 115*); Spanish - Intermediate; German - Beginner