NICOLÁS VIOLANTE GREZZI

nicolas.violante@inria.fr | linkedin.com/in/nicolas-violante-grezzi | github.com/nviolante25

EDUCATION

Inria, Université Côte d'Azur   Sophia Antipolis, France
PhD in Computer Science at GraphDeco group – Supervised by George Drettakis   *Oct. 2022 – present*

École Normale Supérieure Paris-Saclay   Paris, France
MSc in Mathematics, Vision, and Learning (mention très bien)   *Oct. 2021 – Oct. 2022*

Universidad de la República   Montevideo, Uruguay
Electrical Engineering – Supervised by Alberto Bartesaghi and Federico Lecumberry   *Mar. 2015 – Oct. 2020*

EXPERIENCE

Adobe   San Francisco, USA
Research Intern   *Sept. 2023 – Nov. 2023*
- Worked on Gaussian Splatting for 3D reconstruction. Supervised by Thibault Groueix

Inria   Sophia Antipolis, France
Research Intern   *May 2022 – Sept. 2022*
- Developed and trained generative adversarial networks (GAN) to synthesize photorealistic 3D models from images, leveraging neural rendering techniques (NeRF).

Digital Sense   Montevideo, Uruguay
R&D Engineer   *Nov. 2020 – Aug. 2021*
- Improved image enhancement pipelines for large-scale HDR satellite imagery

R&D Assistant   *Oct. 2019 – Oct 2020*
- Deployed a workstation for semi-automatic industrial anomaly detection using deep learning

Universidad de la República   Montevideo, Uruguay
Teaching Assistant   *Mar. 2018 – June 2018*
- Workshop on Audio Processing, guiding students to implement digital guitar effects (delay, wah-wah, flanger, etc) using PureData and a Raspberry

PUBLICATIONS

Splat and Replace: 3D Reconstruction with Repetitive Elements   2025
N. Violante, A. Meuleman, A. Gauthier, F. Durand, T. Groueix, G. Drettakis   *SIGGRAPH*

Physically-based Lighting of 3D Generative Models of Cars   2024
N. Violante, A. Gauthier, S. Diolatzis, T. Leimkühler, G. Drettakis   *Computer Graphics Forum (Eurographics)*

PROJECTS

Generative AI | *Python, Pytorch*
- Implemented several classic generative AI models: VAEs, VQ-VAEs, GANs, Diffusion Models, Flow Matching. Also controlling mechanisms such as LoRA and IP-Adapter for Stable Diffusion.
  Code: github.com/nviolante25/generative

SERVICE

Reviewer
- Eurographics 2024
- SIGGRAPH Asia 2024

SKILLS

Programming: Python (Pytorch, Tensorflow, OpenCV) C/C++, CUDA, Git, Slurm
3D Modeling: Blender
Languages: Spanish (native speaker), English (C1), French (B2)