Diego Gomez

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RESEARCH INTEREST

My research interest lie in the intersection of Computer Vision and Computer Graphics. In the past I have worked with neural radiance fields, gaussian splatting, physically based rendering. I am currently learning about diffusion models and 2D and 3D foundation models. What ultimately motivates me is the creation of beautiful visuals!

EXPERIENCE

• **Adobe Research [🌐]**   *April 2023 - September 2023*
Research Scientist Intern   Paris, France
  ◦ **Conducted** a project tackling the NeRF relighting problem.
  ◦ **Developed** a solution achieving **state of the art** reconstruction on desired metrics, e.g. normals.
  ◦ **Published** and **Presented** paper at **CGI 2024.**
  ◦ **Collaborated** with Élie Michel, Julien Philip, and Adrien Kaiser.

• **LIX - GeomeriX team [🌐]**   *May 2022 - July 2022*
Research Intern   Paris, France
  ◦ Supervised by Prof. **Maks Ovsjanikov**.
  ◦ **Implemented** a Point Cloud Denoiser based on the U-Net architecture, thus improving upon previous methods by treating multiple data points simultaneously. (**Pytorch**,**Docker**)
  ◦ **Addition** of a discriminator component to fine-tune results.
  ◦ **Achieved** better quantitative results than well established methods, e.g. PointCleanNet.

EDUCATION

• **École Polytechnique**   *2024 - 2026*
PhD in Computer Vision and Computer Graphcis   Paris, France
  ◦ Under the supervision of Prof. Maks Ovsjanikov
  ◦ Part of the Geomerix team of the LIX lab.

• **ENS Paris-Saclay**   *2021 - 2023*
Master of Science - Mathematiques Vision Apprentissage (MVA)   Paris, France
  ◦ Graduated **Summa Cum Laude**, CGPA 4.0
  ◦ First year of masters done at **Télécom Paris.**
  ◦ PhD track **Excellence Scholarship** granted by Institut Polytechnique de Paris.

• **École Polytechnique**   *2018 - 2021*
Bachelor of Science - Mathematics and Computer Science Double Major   Paris, France
  ◦ Graduated **Summa Cum Laude**, CGPA 4.0

PATENTS AND PUBLICATIONS

[2024]   **RRM: Relightable assets using Radiance guided Material extraction**
Diego Gomez, Julien Philip, Adrien Kaiser and Elie Michel
CGI 2024
Enabled material extraction of shiny objects while also improving reconstruction quality on all kinds of scenes.