

# Guillermo Enguita Lahoz

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GitHub: [genguita](https://github.com/genguita) - [genguita.github.io](https://genguita.github.io)



## Experience

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### Graphics & Imaging Lab

#### Research Engineer

January 2024 – February 2026

Universidad de Zaragoza, Spain

Hired by the ENLIGHTEN european project, focused on non-line-of-sight imaging, which manages to see around corners by leveraging the time-of-flight of light. My responsibilities included:

- Implementation of physically based rendering and imaging algorithms.
- Study of the quality of existing non-line-of-sight imaging algorithms in Infrared light ranges.
- Study of the connection between the time-of-flight of light and its polarization to improve imaging algorithms.
- Design and evaluation of experiments, technical writing of reports, publications and dissemination work.
- Collaboration with international colleagues, through email, video conference and occasional visits.

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### Graphics & Imaging Lab (collaboration with BSH)

#### Academic research internship

February 2023 – September 2023

Universidad de Zaragoza, Spain

- Analysis of machine learning techniques for automatic action detection in cooking video sequences.
- Worked on dataset processing, feature extraction, and fine-tuning of previous models.

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## Open source contributions

Contributor to the [mitransient](#) and [y-tal](#) libraries, developed by students in the Graphics & Imaging Lab, used for transient rendering applications that take into account the time-of-flight of light. Some of my contributions include:

- Reimplementation of a transient rendering algorithm, obtaining a speed increase up to two orders of magnitude.
- Implementation of a realistic sensor model, allowing users to simulate noise and artifacts seen in real hardware.
- Helped with the implementation of polarized transient rendering and implemented its visualization.
- Help with bug fixing, documentation and creation of tutorials.
- Offer support to users of the libraries, helping with installation, usage doubts and trouble-shooting.

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## Academic

- **mitransient: Transient light transport in Mitsuba 3** 2025  
D.Royo, J.Garcia-Pueyo, M.Crespo, O.Pueyo-Ciudad, **G.Enguita**, D.Bielsa  
DOI: <https://doi.org/10.48550/arXiv.2510.25660>
- **Non-line-of-sight imaging in the Short-Wave Infrared** 2024  
**G.Enguita**, D.Royo, F.Christnacher, S.Schertzer, M.Laurenzis, D.Gutierrez, A.Redo-Sanchez  
Poster on the International Conference on Computational Photography (ICCP) [\[Link\]](#)

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## Education

### Master's Degree in Robotics, Graphics and Computer Vision

2023 – 2025

Universidad de Zaragoza - GPA: 9.14/10

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### Bachelor's Degree in Computer Science. Specialization in computing

2019 – 2023

Universidad de Zaragoza - GPA: 8.85/10

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## Skills

- **Languages:** Spanish (native), English C1 (Cambridge Level 2 Certificate in ESOL International).
- **Main programming languages:** C++, C, Python, Go, MATLAB.
- **Compute and graphics APIs:** OpenCL, OpenGL and Vulkan, using Renderdoc for debugging.
- **Libraries:** Mitsuba 3, Dr.Jit, NumPy, Matplotlib, GLM, Assimp, Dear ImGui.
- **Version control**, using Git and GitHub.
- **Technical writing**, using LaTeX.