

# Robin Magnet

PhD Candidate at *École Polytechnique*

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👤 RobinMagnet

27 years old

Driving Licence

## Education

- 2021–2024 **École Polytechnique**, Palaiseau, France, PhD.  
Analysis of variability in shape collections, supervised by Maks Ovsjanikov at LIX laboratory.
- 2019–2020 **ENS Paris-Saclay**, France.  
Master's degree MVA - Mathematics, Vision, Learning
- 2016–2020 **Ecole Centrale Paris**, France.  
Graduate Engineering School. Major in Applied Mathematics
- 2017–2018 **University of Paris-Sud (Paris 11)**, France.  
First year of Master's degree in Fundamental Mathematics (Algebra, Differential Geometry, Probability and Statistics)

## Work Experience

- 2023 **Meta**, 4 month, Pittsburgh, USA, Research internship.  
Part of Meta Reality Labs, working on learning compact deformation models.
- 2020 **LIX**, 6 month, Palaiseau, France, Research internship.  
Part of Maks Ovsjanikov's shape analysis group working 3D shape correspondences using deformations
- 2019 **Inria Grenoble**, 6 month, Grenoble, France, Research work.  
Part of Edmond Boyer's Morpheo team working on deep learning for unsupervised 3D faces scans registration and generation
- 2018 **IDEMIA**, 6 month, Bochum, Germany, Research intern.  
Part of Idemia's R&D team working on facial recognition and face matching for airport security

## Skills

### Computer Skills

- Programming Python [scikit-learn, Tensorflow, PyTorch] (advanced level)  
L<sup>A</sup>T<sub>E</sub>X, C++, SQL, R, Julia, MATLAB (intermediate level)
- Software Microsoft Office, Adobe Photoshop Lightroom

### Languages

- French Mother tongue
- English Read, written, spoken – C1 level
- German Read, written, spoken – B2 level

## Interests

Music, sports, photography

## Publications

- 2024 Robin Magnet, Maks Ovsjanikov. Memory-Scalable and Simplified Functional Map Learning, in *Proceedings of the IEEE/CVF Computer Vision and Pattern Recognition Conference* (2024)
- 2023 Robin Magnet, Maks Ovsjanikov. Scalable and Efficient Functional Map Computations on Dense Meshes, in *Computer Graphics Forum* (2023)

- 2023 Robin Magnet, Kevin Bloch, Maxime Taverne, Simone Melzi, Maya Geoffroy, Roman H Khonsari, Maks Ovsjanikov. Assessing craniofacial growth and form without landmarks: A new automatic approach based on spectral methods, in *Journal of Morphology* (2023)
- 2022 Robin Magnet, Jing Ren, Olga Sorkine-Hornung, Maks Ovsjanikov. Smooth Non-Rigid Shape Matching via Effective Dirichlet Energy Optimization, in *International Conference on 3D Vision (3DV)* (2022), **Best paper award**
- 2021 Robin Magnet, Maks Ovsjanikov. DWKS: A Local Descriptor of Deformations Between Meshes and Point Clouds, in *Proceedings of the IEEE/CVF International Conference on Computer Vision* (2021)