Tanguy Magne

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Graduated with a double master's degree between Mines Paris - PSL and ENS Paris Saclay. Interested in shape modeling and geometry processing.

Education

École Normale Supérieure Paris-Saclay — **Paris, France**
Master's degree in Mathematics, Computer Vision and Machine Learning (MVA) — *2021 – 2022*

Key Courses : Convex Optimization, Computational Optimal Transport, 3D Computer Vision, Satellite Image Processing, Graphs in Machine Learning, Machine Learning for Time Series, 3D Point Clouds and Modeling.

Mines Paris - PSL — **Paris, France**
Master's degree in science and engineering. Top French master's degree. (5% admission rate) — *2018 – 2022*

Major : Digital Engineering and Complex Systems : machine learning applied to engineering.
Key Courses : Differential and Integral Calculus, Complex Analysis, Theory of Probability, Statistics, Stochastic Processes, Artificial Learning, Information Systems, Operations Research, High performance computing.

Lycée du Parc — **Lyon, France**
Intensive coursework in science (Mathematics, Physics, Computer Science) — *2016 – 2018*

Lycée Chaptal — **Mende, France**
Baccalauréat (High School Diploma). Obtained with highest honors - 19.8/20 — *2016*

Professional Experience

Interactive Geometry Lab (ETHZ), *Visiting Researcher* — **Zurich, Switzerland**
Research project aimed at designing a new document unwarping algorithm using geometric priors on the shape of a sheet of paper. — *2022 – 2023 (5 months)*
Conducted under the supervision of Prof. Dr. Olga Sorkine-Hornung.

Eyeware, *Computer Vision Research Intern* — **Martigny, Switzerland**
Research to leverage synthetic data for head and gaze tracking — *2022 (6 months)*

- Literature reading about state-of-the-art methods in facial landmarks detection and efficient neural networks.
- Datasets analysis to understand the differences between real and synthetic ones, using OpenCV.
- Implementation of a complete pipeline for model training, using PyTorch.

Neural Concept, *Research Intern* — **Lausanne, Switzerland**
Research in the field of transfer learning for geometric deep learning — *2020 – 2021 (12 months)*

- Read literature about state-of-the-art methods in transfer learning and multitask learning.
- Used 3D libraries allowing to work with meshes inside Python (PyMesh, PyVista).
- Implementation of new models fitting the framework of the company, using Python and Tensorflow.
- Worked within an international team with 10 engineers inside a booming start-up.

Computer skills

Proficient :	Python, PyTorch, TensorFlow, git, SQL LaTeX, Microsoft Office, Gimp
Intermediate :	C++, Java, MATLAB, BASH

Language Skills

English :	Professional Proficiency	(Toefl : 108/120)
French :	Native Speaker	
Spanish :	Intermediate	(B1)

Extra-curricular activities

Student's Union, *Member* — **Paris, France**
In charge of welcoming new eligible candidates. — *2019 – 2020*

Hobbies

Sport: Table Tennis (Competition) - Outdoor Sport : Canyoning, Hiking

Others: Handiwork (full arrangement of a van for traveling), Car Mechanics, Interest in Zythology