Juliette Marrie

PhD student at Inria THOTH and NAVER LABS Europe

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Education

2021-	**P.h.D**, *Inria THOTH × NAVER LABS Europe* Advisors: Julien Mairal, Diane Larlus, Michael Arbel
2020-2021	**M2 MVA: Mathematics, Vision, Learning**, *ENS Paris-Saclay*, Double Degree *Main courses:* Optimization, Image analysis, Statistical learning.
2017-2021	**Master's degree**, *Mines ParisTech* *Main courses:* Applied Mathematics, Control Theory, Machine Learning, Statistics.
2018	**Visiting student**, *National University of Singapore* *Main courses:* Constrained optimization, Deep Learning, Uncertainty Modelling in AI.
2015-2017	**Preparatory classes**, *Lycée Blaise Pascal - Orsay*, MPSI–MP*
2015	**High school diploma with honors**

Professional experience

2022-	**Inria THOTH × NAVER LABS Europe**, *P.h.D. - Visual Represnetation Learning from Limiter and Heterogeneous Sources*, Advisors: Julien Mairal, Diane Larlus, Michael Arbel ○ 'SLACK: Stable Learning of Augmentations with Cold-start and KL regularization', CVPR 2023 ○ 'On Good Practices for Task-Specific Distillation of Large Pretrained Models', arXiv 2024
2021-2022	**Inria THOTH**, *Research engineer*
2021	**Philips Research France**, *Self-supervised learning on 3D medical images*, Advisor: Antoine Olivier ○ Exploring state-of-the-art pre-training approaches for segmentation and classification. ○ Adapting methods mostly developed for 2D natural images to 3D ultrasound data.
2020 – 2021	**Weill Cornell Medicine / New York Genome Center** - **Landau Lab**, *Cancer Genomics and Evolutionary Dynamics*, Advisor: Dan Landau ○ Exploring Bayesian methods for phylogenetic tree reconstruction from single-cell data. ○ Extensive research for handling high levels of noise and missing values.
2019 – 2020	**EPFL: Neural Concept**, *Bayesian optimization with Neural Network surrogates*, Advisor: Pierre Barqué ○ Leading start-up in Geometric Deep Learning. ○ Development of new optimization methods with direct exploitation for real use cases.

Language proficiency

French (native), English (fluent), Russian (upper-intermediate), Spanish (upper-intermediate)

Publications

CVPR 2023	SLACK: Stable Learning of Augmentations with Cold-start and KL regularization *Juliette Marrie, Michael Arbel, Diane Larlus, Julien Mairal*
TMLR 2024	On Good Practices for Task-Specific Distillation of Large Pretrained Visual Models *Juliette Marrie, Michael Arbel, Julien Mairal, Diane Larlus*

Scientific involvement

Teaching	'Kernel Methods' course at AMMI (African Masters of Machine Intelligence), 2023 and 2024.
Reviewing	Reviewer at CVPR 2024

Hobbies

Music	Cello - Member of Orchestre des Campus de Grenoble (OCG) for two years
Sports	Judo, Ballet and partner dance (rock, salsa).