

EDUCATION

PhD – Mila, Université de Montréal

Machine learning

Supervised by Simon Lacoste-Julien and Dhanya Sridhar

started 1/2025

Engineering Master's degree – CentraleSupélec Paris-Saclay

Applied Mathematics and Data Science

One-year academic exchange program at **Politecnico di Milano** and **TU Berlin**

One-year research experience at **Stanford University** and **Mila**

9/2020 – 5/2024

Research Master's degree – École Normale Supérieure Paris-Saclay

Mathematics and Machine Learning

Alongside my engineering degree – Master MVA

9/2023 – 5/2024

Bachelor's degree – Sorbonne Université

Philosophy

Alongside my scientific studies – Direct admission in final year of the bachelor

9/2020 – 6/2021

Preparatory classes to Grandes Écoles – Lycée Sainte-Geneviève

Physics, Mathematics, Chemistry

Intensive undergraduate program for the national competitive entrance exams

9/2017 – 7/2020

WORK EXPERIENCE

Research intern – InstaDeep

with *Jérémie Donà*

Protein **inverse folding** using pretrained protein LMs and **discrete flow matching**, and improving protein structure **tokenization**

5/2024 – 11/2024

6 months

Student project – Inria Saclay & Mila

with *Fragkiskos Malliaros, Alexandre Duval, David Rolnick*

Frame-averaging equivariant GNNs performance-scalability trade-off for catalyst discovery

10/2023 – 5/2024

8 months

Research intern – Mila

with *Yoshua Bengio, Tristan Deleu, Nikolay Malkin*

Bayesian causal discovery, learning large-scale causal networks with **generative flow networks**

4/2023 – 9/2023

6 months

Visiting student researcher – Stanford University

with *Andrew Gentles, Claire Donnat*

Degenerative disease profiling from multiplexed imaging:

- Deriving **Bayesian networks** of protein interactions
- Characterizing **tumor micro-environments** with GNNs

9/2022 – 3/2023

7 months

Statistician intern – CNRS, Signals and Systems Lab.

with *Arthur Tenenhaus*

Identifying bacteria of the microbiota explaining **kidney transplant rejection** using **phylogeny informed kernels**

2/2022 – 4/2022

2 months

REVIEWING SERVICE

AISTATS'26 Main Conference	2025
NeurIPS'25 Workshop Frontiers in Probabilistic Inference	2025
NeurIPS'25 Workshop on Constrained Optimization for Machine Learning	2025
ICLR'25 Workshop Frontiers in Probabilistic Inference	2025
NeurIPS'24 Workshop Causality and Large Models	2024

TEACHING

Teaching Assistant: Adversarial Machine Learning, Université de Montréal – Graduate level	2026
Curriculum conception (week-long course): Introduction to AI, Folie Technique Montréal – High school	2026
Teaching Assistant: Fundamentals of Machine Learning, Université de Montréal – Graduate level	2025
Teacher (weekend): Creativity and AI, Stanford Splash – High school	2022
Teacher (weekend): Philosophy of Time, Stanford Splash – High school	2022
Private tutor (6 students): Mathematics, Physics, Chemistry – Undergraduate level	2019 – 2022

VOLUNTEERING

Technical reviewer of the French translation , International AI Safety Report	2026
Elected member of the academic board , Université Paris-Saclay	2022 – 2024
Student expert , High Council for the Evaluation of Research and Higher Education (HCERES)	2021 – 2022
Project manager , PoliMi Data Scientists	2021 – 2022
Chairman , IEEE Paris-Saclay student branch	2020 – 2021
Tutor , Oser student society (“Daring” in French)	2020 – 2021
Project manager , National Board of French Engineering Students (BNEI)	2020 – 2021

AWARDS

Excellence scholarship of Université de Montréal – 150 recipients among 12,000 grad. students	2025
iGEM Gold Medal – awarded world best Hardware, nominated for world best Software	2023
France-Stanford Center for Interdisciplinary Studies fellowship – 8 recipients nationwide	2022
CentraleSupélec prize for community service and academic excellence – 9 recipients among 4700 students	2021
European Erasmus+ scholarship	2021
1 st prize of CentraleSupélec Alumni project idea	2020
Provence region merit prize for high school students	2017
Cicero national Latin translation contest laureate	2016

OTHER SKILLS

Programming: Python (PyTorch, JAX), R (bnlearn, Stan)
Languages: native French, fluent English (TOEFL 113/120), advanced German (B2 level)

PUBLICATIONS

Saulus, T. , Lacoste-Julien, S., Sridhar, D., <u>Unsupervised Causal Abstractions Discovery</u> . <i>Under review</i> .	2/2026
Joshi, S., Saulus, T. , Brendel, W., Brouillard, P., Sridhar, D., & Reizinger, P., <u>Who Guards the Guardians? The Challenges of Evaluating Identifiability of Learned Representations</u> . In <i>Uncertainty in Artificial Intelligence</i> , PMLR.	2/2026
Bernárdez, G.*, Telyatnikov, L.*, Papillon, M.*, ..., Saulus, T. , ..., Miolane, N., <u>Topological Deep Learning Challenge 2025: Expanding the Data Landscape</u> . In <i>Topology, Algebra, and Geometry in Data Science</i> , PMLR	2/2026

Ramlaoui, A.*, **Saulus, T.***, Terver, B.*, Schmidt, V., Rolnick, D., Malliaros, F. D., & Duval, A. A., Improving Molecular Modeling with Geometric GNNs: an Empirical Study. In *ICML'24 Workshop ML for Life and Material Science: From Theory to Industry Applications*

7/2024

Data for Good, Les grands défis de l'IA générative (The great challenges of generative AI), *White paper*

7/2023