

- Research focus: optimization for deep learning, reliable ML

- Graduation date: May 2026

## Research experience

### Laboratoire Jean Kuntzmann

PhD, under the supervision of F. Iutzeler, J. Malick, P. Mertikopoulos

Grenoble, France

March 2022 - Current

- Developed and analyzed distributionally robust optimization methods

- Established large deviation estimates for the global convergence of neural network training

### Morgan Stanley Machine Learning Research

PhD internship, under the supervision of Ali Hasan

New York, USA

August 2025 - October 2025

- Investigated the in-context-learning capabilities of Large Language Models

- Contributed to internal option pricing algorithms

### Apple Machine Learning Research

PhD internship, under the supervision of Marco Cuturi

Paris, France

February 2025 - May 2025

- Evaluated the robustness of uncertainty quantification methods for Large Language Models

### INRIA

Research internship, under the supervision of Marc Lelarge

Paris, France

November 2021 - February 2022

- Developed Online parameter estimation methods in state-space models

### Mila

Research internship, under the supervision of Simon Lacoste-Julien

Montréal, Québec, Canada

March - July 2019

- Analyzed and improved game optimization methods for machine learning

## Education

### École Normale Supérieure Paris-Saclay

Master in Machine learning “Mathematics, Vision, Learning” (MVA)

Saclay, France

2020 - 2021

Obtained with highest honors

### École Normale Supérieure de Paris

First year of Master (M.Sc.) in both Mathematics and Computer Science

Paris, France

2018 - 2020

Licences (B.Sc.) in both Mathematics and Computer Science

2017 - 2018

## Publication statistics

**Conferences:** 8 conference papers (6 first-author), incl. NeurIPS/ICML/ICLR/COLT/AISTATS

**Journals:** 3 journal publications, incl. SIAM Journal on Optimization

**Citations:** 600+ (Google Scholar)

## Technical skills

- Deep Learning Frameworks: PyTorch, JAX/Flax, vLLM.
- Research Tools: Git, Hydra, Docker, Singularity.
- High-Performance Computing: Linux, SLURM, OAR, CUDA, GPU scheduling, cluster infrastructure.
- Mathematical expertise: Probability, statistics, optimization, stochastic calculus, large deviations.

## Academic Activities

- Reviewer for NeurIPS, ICML, ICLR, Mathematical Programming, SIAM J. Optimization.
- Mentored junior PhD students on research projects in robust optimization and large deviations.
- Teaching assistant: Numerical Optimization (1<sup>st</sup> year MSc.); Statistics for Biology (2<sup>nd</sup> year BSc.).