Blaise Delattre

➡ bldelattre@gmail.com

Looking for a postdoctoral position in probabilistic machine learning, uncertainty quantification, deep learning stability.

Publications _____

Bridging the Theoretical Gap in Randomized Smoothing

BLAISE DELATTRE, PAUL CAILLON, ERWAN FAGNOU, QUENTIN BARTHÉLEMY, ALEXANDRE ALLAUZEN AISTATS - Poster - (2025)

Accelerated Training through Iterative Gradient Propagation Along the Residual Path

Erwan Fagnou, Paul Caillon, <u>Blaise Delattre</u>, Alexandre Allauzen ICLR - Oral - (2025)

Chain and Causal Attention for Efficient Entity Tracking

Erwan Fagnou, Paul Caillon, <u>Blaise Delattre</u>, Alexandre Allauzen EMNLP- Poster - (2024)

Spectral Norm of Convolutional Layers with Circular and Zero Paddings

<u>Blaise Delattre,</u> Quentin Barthélemy, Alexandre Allauzen Under review at IEEE TSP

The Lipschitz-Variance-Margin Tradeoff for Enhanced Randomized Smoothing

Blaise Delattre, Alexandre Araujo, Quentin Barthélemy, Alexandre Allauzen ICLR - Poster - (2024)

Efficient Bound of Lipschitz Constant for Convolutional Layers by Gram Iteration

Blaise Delattre, Quentin Barthélemy, Alexandre Araujo, Alexandre Allauzen ICML - Poster - (2023)

A Unified Algebraic Perspective on Lipschitz Neural Networks

Alexandre Araujo^{*}, Aaron Havens^{*}, <u>Blaise Delattre</u>, Alexandre Allauzen, Bin Hu ICLR - Spotlight - (2023)

A Dynamical System Perspective for Lipschitz Neural Networks

Laurent Meunier^{*}, <u>Blaise Delattre</u>^{*}, Alexandre Araujo^{*}, Alexandre Allauzen ICML - Oral - (2022)

Talks _____

Spectral Norm Estimation in Deep Learning

Talk at the reading group of the ENS Lyon (2024)

The Lipschitz-Variance-Margin Tradeoff for Enhanced Randomized Smoothing

Talk at the adversarial attack reading group of the University of Illinois Urbana-Champaign (2023)

A Dynamical System Perspective for Lipschitz Neural Networks

Oral at ICML (2022) and workshop at Sorbonne Center for AI (2023) Mathematical Foundations of AI.

Reviewer _____

ICLR 2025, ICML (2024, 2025), IEEE TACON, L4DC 2024, ACML 2024 Journal Track

Course given _____

Trustworthy machine learning in practice

Executive Master 2023-present. Lecturers: Alexandre Vérine, Blaise Delattre

Université Paris-Dauphine - PSL

Education _____

Université Paris-Dauphine PSL

Ph.D. IN INFORMATICS Thesis on the stability of neural networks.

Université Paris Dauphine - ENS Ulm PSL

MSc (M2 MASH) IN DATA SCIENCE

The diploma is jointly accredited by Université Paris Dauphine and Ecole Normale Supérieure. Courses on convex optimization, optimization for machine learning, object recognition and computer vision, learning theory, kernel methods for learning, reinforcement learning, applied Bayesian statistics graphical models, high dimensional statistics, natural language processing, and digital Humanities and IA.

Ensimag Grenoble INP - IAE Grenoble

MSc in Financial Engineering and MSc in Quantitative Finance Student Three-year program in Applied Mathematics, Finance, and Computer Science. A first year of general theory on mathematics and computer Science followed by two years of studies in financial engineering leading to a Master's in Financial Engineering and a coupled Master's in Quantitative Finance at IAE, a French business institute.

Work experience _____

Foxstream

Ph.D. IN INFORMATICS Thesis on the stability of neural networks.

Université Paris Dauphine PSL

RESEARCH ENGINEER Works on stable recurrent neural networks and adversarial attacks on medical imaging.

Université Paris Dauphine PSL

RESEARCH INTERN Internship on the robustness of neural networks to adversarial attacks with a dynamical system perspective.

BNP Paribas

QUANTITATIVE RESEARCH ANALYST Work on the development and implementation of the pricer of exotic products.

BNP Paribas

April 2019-October 2019 QUANTITATIVE RESEARCH ANALYST INTERN Implementation of a time optimization of the pricing of a large portfolio of options and design a static hedge application for a trader's book with vanilla options.

J.P. Morgan

TECHNOLOGY SUMMER ANALYST July 2018 - August 2018 A 10-week program as a technology analyst in the Electronic Trading Techology division in the Benchmarking Algorithms team.

Skills

Computer skills

• Pytorch

Languages

• French (native), English (fluent)

Grenoble, France

September 2016 - October 2019

September 2020 - March 2021

Paris, France April 2022 - April 2025

Paris, France January 2022-March 2022

Paris, France April 2021-October 2021

Paris, France February 2020-September 2020

Paris, France

London, United Kingdom

FEBRUARY 21, 2025

Paris, France April 2022 - April 2025

Paris, France