ALEXANDRE VERINE

MACHINE LEARNING PHD

CONTACT

+33621340114

alexandre.verine@dauphine.eu

www.alexverine.com

Paris, France

SKILLS

Python

Pytorch

Slurm

EDUCATION

MS in Quantitative Economics

Université Paris-Dauphine

2020

One year of Master of Science Degree in Quantitative Economics at Université PSL ranked #40 on the Shanghai ARWU 2023 and #51-75 in Economics.

MS in Machine Learning

École Normale Supérieure Paris-Saclay

2019

Master MVA at Université Paris-Saclay. Ranked #16 on the Shanghai ARWU 2023 and #1 in Mathematics.

MS in Fundamental Physics

Université Paris-Saclay

2018

One year of Master of Science Degree in night classes in fundamental and theoretical physics.

BS in Electrical Engineering

École Normale Supérieure Paris-Saclay

2017-2018

Bachelor of Science in Electrical, Electrotechnical and Automation at Université Paris-Saclay

PROFILE

PhD candidate in Machine Learning, specialising in the expressivity of generative models, targeting job opportunities for January 2024. Demonstrated expertise in Python and PyTorch, deep learning models, and working with computing clusters. Valued for my pedagogical skills and ability to thrive in a research setting.

My goal is to apply my technical proficiency in machine learning within a team where continuous learning is encouraged,

WORK EXPERIENCE

PhD in Machine Learning

Université PSL - Université Paris-Dauphine, France 2020-2023

- 3 years PhD contract at University PSL ranked #40 on the Shanghai ARWU 2023 and #12 in Mathematics.
- Studied the expressivity and the performance of deep generative models via the spectrum of the diversity/precision trade-off. Designed and trained large models to tackle user-specified problems.
- Developed strong programming skills in Python and Pytorch to design training procedures of large generative models on parallelised GPU clusters.
- Active member of the Machine Intelligence and LEarning Systems (MILES) team, part of the Université PSL and PRAIRIE research environment.
- Multiple publications including in Neurips2023
- Taught in Master of Science and Executive Master: Mathematics for Data Science (MS), Machine Learning Project (MS), Introduction to Deep Learning (EM), Trustworthy AI via Data Science Project (EM).

Research Intern and Consultant Intern

Wavestone, France 2019

- 6 month hybrid internship at Wavestone consulting firm and Université Paris-Dauphine MILES research team.
- Engaged in a consulting role with a banking company focused on AI interpretability tools: led the design and facilitation of workshops covering essential AI interpretability tools, offering insight into their advantages, limitations, and Python-based implementation methods.
- Research intern of Machine Learning Robustness: Adversarial Examples generation via Deep Generative Models. Designed a method to generate approximative adversarial examples to accelerate adversarial training of classification models in order to improve robustness.

Research Intern

Advanced Structures & Composites Center, University of Maine, USA 2018

- 4 month research internship focused on developing testing procedure of organic photovoltaic materials and building military applications.

INTEREST

- Photography
- Sponsored motorcycle adventure expeditions
- 3D Printing and embedded system design.
- Climbing and bouldering

LANGUAGE

- English (C1)
- French (native)