

Patrick Saux | Curriculum Vitae

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Skills

- Strong technical background in mathematics, in particular probability, stochastic calculus, statistical learning
- Passion to learn and transmit knowledge
- Python (including Scikit-learn, Pandas, Keras, PyTorch, Streamlit); notions of C++; 3 years of Slang
- Github (stochastic simulation, machine learning, bandits...) : <https://github.com/sauxpa>

Work Experience

Inria, team Sequel

PhD Candidate

- Non-stationary bandits; stochastic bandit, reinforcement learning.

Lille

November 2020 - November 2023

Kayros, VoK Team

Data Scientist Quant Trading

- Crude oil futures trading strategies based on geospatial intelligence, data analysis and Kubernetes deployment.

Paris

June 2020 - October 2020

Goldman Sachs

Rates and Credit quantitative strategist

- Stochastic calculus, copula, Monte Carlo, numerical schemes
- Part of the Illiquids/Structured trading desk
- Production code in real-time, distributed environments, in a Python-like language (Slang)

London

April 2016 - September 2019

Oxford-Man Institute of Quantitative Finance

Research internship with Terry Lyons, ranked 1st in ENS Cachan master's thesis

- Rough paths theory and signature of data stream, a to study noisy time series

Oxford

March 2015 - July 2015

CMLA (Machine learning lab at ENS Cachan)

Research internship with Nicolas Vayatis, Graph inference using diffusion process

- Markov diffusions over graphs to predict contagion in social networks.

Paris

January 2014 - June 2014

Education

École Normale Supérieure Paris Saclay, ENS Ulm & École Polytechnique

Master's degree M2 in Machine Learning Mathématiques, Vision, Apprentissage (MVA)

Signal Processing, Deep Learning, Reinforcement Learning, Graphs, Audio Analysis, NLP, Kernel methods.

Paris

2019-2020

École Polytechnique & Université Jussieu Paris 6

Master's degree M2 Probability and Finance (DEA El Karoui), High Honors

Stochastic Calculus, Monte Carlo, Stochastic Control, Derivatives, High-Frequency statistics, Machine Learning.

Paris

2015-2016

École Normale Supérieure de Cachan (ENS)

Master's degree M1 in mathematics, research-oriented, First class honors

Paris

2013-2015

Lycée Privé Sainte-Geneviève

Classe Préparatoire aux Grandes Écoles (intense two-year program in mathematics and physics).

Versailles

2011-2013

Interests

Oenology: Former leading member of ENS Cachan association of oenology.

Mental Health Research: Meeting For Minds (<http://meetingforminds.com>), Philippe et Maria Halphen Foundation (<http://www.pmhalphenfoundation.org/en/>).

Other interest: Music (drums, guitar and piano), literature, theatre (played several roles, including Rodrigue in Pierre Corneille's *Le Cid*), video games.

Awards

Third place in French Physics Olympiads

"The Muon or the Chronicle of a Death Foretold", a work on a cosmic particles detector.

Paris

January 2011