Patrick Saux | Curriculum Vitae

83 rue de Monceau - 75008 - Paris

₱ +33671422301 •

□ patrick.jr.saux@gmail.com •
□ https://github.com/sauxpa

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, graph embedding...) : https://github.com/sauxpa

Work Experience

Lille Inria, team Sequel

PhD Candidate November 2020 - November 2023

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

Kayrros, VoK Team **Paris**

Data Scientist Quant Trading June 2020 - October 2020 - Crude oil futures trading strategies based on geospatial intelligence, data analysis and Kubernetes deployment.

Goldman Sachs London

Rates and Credit quantitative strategist

April 2016 - September 2019

- 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)

Oxford-Man Institute of Quantitative Finance

Oxford

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

March 2015 - July 2015

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

CMLA (Machine learning lab at ENS Cachan)

Paris

Research internship with Nicolas Vayatis, Graph inference using diffusion process

January 2014 - June 2014

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

Education

École Normale Supérieure Paris Saclay, ENS Ulm & École Polytechnique **Paris** Master's degree M2 in Machine Learning Mathématiques, Vision, Apprentissage (MVA)

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

2019-2020

École Polytechnique & Université Jussieu Paris 6

Paris 2015-2016

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

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

École Normale Supérieure de Cachan (ENS)

Paris 2013-2015

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

Versailles

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

2011-2013

Interests

Lycée Privé Sainte-Geneviève

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

Paris

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

January 2011