29 years old – french

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romain-ilbert

https://romain.ilbert.com

LONDON - UK

SKILLS

- **Mathematics**

Statistical Learning, Statistics, Optimization, Linear Algebra, Probabilities, Topology

- **Python**

PyTorch, Tensorflow, Cuda, Numpy, Pandas, Scikit-Learn, Scipy, Keras, GPU Cluster Utilization, Matplotlib, Seaborn, Hugging Face Transformers

- **Finance**

Stochastic calculus, Arbitrage, Binomial and Black-Scholes models, Pricing, Replications of derivatives, Options, Portfolio Management, Trading, Quantitative Models

- **Microsoft Office, Overleaf, Git, Coding in Solidity**

LANGUAGES

- **French** Native Speaker
- **English** C1 (IELTS 7.5)
- **Spanish** B2

INTEREST

- **Sports**
  - Soccer
  - Volley
  - Table Tennis
  - Gym
- **Travels**
- **Music**
  - Drums
  - Rock
- **Theater, Chess, Poems author**

Romain ILBERT

Research Scientist at Meta

WORK EXPERIENCE

Research Scientist

From 09/2025 to Present — **META - LONDON**

Research on long horizon optimization, planning, and reliability of machine learning systems under delayed and noisy feedback, deployed to production systems serving billions of users

PhD in Representation Learning For Multivariate Time Series

From 12/2021 to 04/2025 — **PARIS-CITE UNIVERSITY & HUAWEI - PARIS AREA**

Fixed-Term Contract and PhD supervised by Ievgen Redko and Themis Palpanas

- **Lead and developer of SAMformer**: a lightweight state-of-the-art sharpness-aware transformer-based forecasting model *Oral at ICML (top ~1%)*
- **Analyzing Multi-Task Regression via Random Matrix Theory**, *Spotlight at NeurIPS (top ~2%)*
- **Mantis: Lightweight Calibrated Foundation Model for User-Friendly Time Series Classification**, widely adopted by the community with tens of thousands of downloads per month on HuggingFace, ICML Workshop : Foundation Models for Structured Data
- Enhancing Multivariate Time Series Forecasting via Multi-Task Learning and Random Matrix Theory, *NeurIPS Workshop: Time Series in the Age of Large Models*
- Foundation Models for Multivariate Time Series Classification *ICDE workshop* (A*)
- Data Augmentation for Multivariate Time Series Classification, *ICDE workshop* (A*)
- Adversarial Machine Learning for Time Series Forecasting, *ACM CCS workshop* (A*)

Machine Learning Engineer Intern

From 05/2021 to 11/2021 — **SNCF - LA DEFENSE**

Machine Learning internship in Time Series Forecasting

- Crafted a model to predict train ticket sales across thousands of stations in France, (MAPE 10% at 92 days, nationwide rollout)
- Used Microsoft Azure virtual machines and Jenkins for efficient model deployment
- Performed extensive SQL queries on large-scale datasets

Machine Learning Research Intern

From 06/2020 to 10/2020 — **CNRS - PALAISEAU**

Research Internship in Computational Finance and Deep Learning

- Developed a quantitative strategy for maximizing wind energy producers' profits
- Utilized TensorFlow and Stochastic Calculus to solve complex partial differential equations modeling optimal trading strategies
- Explored the Universal Approximation Theorem to apply neural network solutions

Quantitative Research Intern

From 06/2019 to 08/2019 — **ROTHSCHILD & CO - MONACO**

Internship in Quantitative Finance and Portfolio Management

- Developed a quantitative model outperforming Euro Stoxx 50 over 20 years (x3.13)
- Use of financial software (Facstet, Bloomberg) for data manipulation

EDUCATION

2018-2021 France — **ENSAE Paris and Ecole Polytechnique – Palaiseau**

- **Master in Data Science at Ecole Polytechnique**

Deep Learning (M. Cuturi), Reinforcement learning (E. Le Pennec), Statistical Learning, Recommendation systems, Auction and matching (V. Perchet), Computer Vision, Hackathon with Carrefour, Data Camp Astrophysics Project (A.Gramfort and T. Moreau), GPU Programmation (in C)

- **Master in Data Science and Statistical Learning at ENSAE**

Advanced Optimization, Optimal Transport (M. Cuturi), Statistics (A.Dalalyan), Compressed Sensing (G. Lecué), Online Learning (A. Tsybakov), NLP
Applied statistics project with Banque de France : Co-clustering and PCR algorithm with missing data for the identification of underlying states of an economic and financial system

2014-2018 France — **Lycée Masséna - Nice**

- **Classe préparatoire aux grandes écoles MPSI - MP & ECS**

Mathematics (HEC 20/20, Essec 20/20 [url], Edhec 20/20), Computer Science, Physics, Geopolitics, English, Spanish, Philosophy, History & Geography

OTHER EXPERIENCES

- **Recurrent reviewer for ICML, NeurIPS and VLDB**
- **Treasurer at KryptoSphère ENSAE (Crypto currency Association)**
  - **Coding in Solidity**
- **Mathematics Tutor (3 students)**