

# Louis LACAPERE

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<https://github.com/louislacapere/portfolio/upload>

## EDUCATION

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### University of Cambridge

2022-2023

*Master of advanced Studies in Mathematics, Part III, Homerton College*

*Cambridge, UK*

- **Relevant Coursework:** Statistical Learning in Practice, Modern statistical methods, Statistics in Medicine, Survival data analysis, Statistical theory, Causal inference, Functional data analysis, Advanced Probability, Stochastic Calculus

Followed lectures from the *MPhil in Machine Learning and Machine Intelligence* (Computational statistics and Machine Learning, Deep Learning and Structured Data).

### CentraleSupélec, Paris-Saclay University

2019-2023

*Engineering program, BSc & MSc*

*Paris, France*

- **Relevant Coursework:** Applied Mathematics, Machine Learning, Algorithmics, Optimization, Advanced Probability and Statistics, Economics, Market Finance, Corporate Finance
- **Main Projects:** Bitcoin trading-bot based on Recurrent Neural Networks in partnership with Capgemini, Innovative Electric motor design and simulations for a vertical take-off ambulance - ranked 2<sup>nd</sup> at the IEEExCS project competition

## PROFESSIONAL EXPERIENCE

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### BNP Paribas

Jan-Jun 2022

*Fixed Income and Hybrid products sales assistant*

*Paris, France*

- Pricing of structured product (credit, rate, and forex products), mainly tranches, Credit Linked Notes with variable payment, Targeted Accrual Redemption Note (TARN), and Drakar.
- Redesigned the database of the team allowing a follow up and an analysis of the products sold over the last 10 years.

### AXA

July-Dec 2021

*Portfolio manager intern in the allocation team for AXA France investments.*

*Paris, France*

- Redesigned, coordinated, and semi-automated the €100 billions investment plan tool in Python allowing to reduce the time spent on the investment plan from 2 weeks to 2 days.
- Daily monitored the investments within the portfolios (bonds, shares, real estate, loans, etc.), and analyzed the duration of the portfolios vs the duration of the contracts.

### CentraleSupélec, Paris-Saclay University

Feb-May 2021

*Quantum physics Teaching Assistant*

*Paris, France*

- Responsible for the exam preparation of a group of 20 first year students, answering their questions and giving them lectures once a week.
- Taught them ways to perform and be more efficient in their thinking, helping them to think outside the box and consider scenarios from different angles.

### Kearney

Feb-May 2021

*Student Part-Time Consultant*

*Paris, France*

- Conducted a market analysis of the last-mile delivery for e-commerce in Paris. Quantified and forecasted the weekly number of deliveries in Grand Paris.
- Provided solutions for an efficient delivery to deal with congestion in the center of Paris, taking account of proposed legislation to reduce vehicle access to the center of Paris.

## SKILLS

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**Languages:** French (native), English (fluent), Spanish (Intermediate)

**Programming:** Python (Numpy, Pandas, Scikit-Learn, Tensorflow), SQL, R, Matlab, VBA, Bloomberg

## HOBBIES

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### Sports:

- **Rowing in competition (8 trainings/week):** Main competitions: French Championships (6<sup>th</sup> place), Garona Cup (1<sup>st</sup> place in 2014 and 2015), Head of the River Race  
Vice-President of CentraleSupélec's rowing team, Member of Homerton College first men boat

**Cooking:** Good amateur pastry chef, enjoy baking regularly and sharing my bakes with friends and colleagues.