

Rayan Takka

(+33)658 67 38 92 | rayan.takka@student-cs.fr | [linkedin.com/in/rayantakka](https://www.linkedin.com/in/rayantakka) | [rayantakka.github.io](https://github.com/rayantakka) |

Looking for a 6-month internship starting in May 2023

EDUCATION

CentraleSupélec

Sep. 2019 – Apr. 2023

MEng in Applied Mathematics

Paris Saclay, France

- Relevant Coursework : Machine learning, Optimization, Stochastic processes and calculations, Statistics, Stochastic models in finance, Deep learning, Asset structuring and management, Portfolio Allocation, Deep learning in finance

Université Paris Cité

Sep 2022 – Apr. 2023

M2MO (EX- DEA Laure Elie) : Master's degree in quantitative finance

Paris, France

- Main courses: Stochastic calculus and diffuse models, Modeling of derivatives, Markov chain, Data modeling and statistical inference, Financial instruments Machine learning in finance, C++, Quantitative asset management, Algorithmic trading, Statistical learning

ETH Zürich

Feb. 2021 – Aug. 2021

Academic exchange at the Economics/Mathematics Department

Zürich, Suisse

- Main courses: Decisions and Markets, Financial Economics, Business Analytics, Computational Methods for Quantitative Finance

Lycée Masséna

Sep. 2017 – Jul. 2019

Intensive preparation for the entrance exam for French top Engineering Schools

Nice, France

- A French specific two-year undergraduate program leading to a nation-wide competitive examination into the “Grandes Ecoles” (France’s top Graduate Schools in Engineering and Business studies).

EXPERIENCE

Quantitative Investment Strategies Intern

Apr.2022 – Aug. 2022

BNP Paribas Corporate and Institutional Banking

Paris, France

- 6 month internship in the QIS team OF BNP Paribas CIB, in charge of the development of quantitative investment strategies. Main Tasks : development of new intraday strategies and analysis tools, quantitative analysis of high frequency data to identify optimal solutions.

Fixed Income Trading Intern

Sep. 2021 – Feb. 2022

Société générale Corporate and Investment Banking

Paris-La Défense, France

- 6 month internship in the Euro Govies and Inflation trading desk, in charge of the quotation and hedging of European bonds. Development of Relative Value and risk monitoring tools.

PROJECTS

Credit Card Fraud Detection using Machine Learning

Apr. 2021 – Jul. 2021

One month Machine Learning project

Zürich, Switzerland

- Study of machine learning methods and performances comparison for the credit card fraud detection problem

Numerical Approach of Pricing Models

Feb. 2021 – Apr. 2021

Three month project in Applied Mathematics

Zürich, Switzerland

- Introduction and comparison of pricing models (B-S, CEV-SV, Heston), numerical implementation of associated pricing formulas in Python via Numpy, Scipy, Matplotlib, Pandas.

LEADERSHIP AND EXTRACURRICULAR ACTIVITIES

Summer Trainee/Volunteer

Jul. 2020 – Aug. 2020

Alpes-Maritimes Food Bank

Nice, France

- Sorted donations in the cold-room and delivered food packages.
- Created IT tutorials to help volunteers to use the inventory management software. VBA programming in order to automatise various tasks such as inventory reporting.

SKILLS AND HOBBIES

IT: Python, VBA, Microsoft Office, SQL, LaTeX, Git, Adobe Creative Suit

Languages: French/Native – English/Fluent – Spanish/Intermediate

Sport: Member of CentraleSupélec’s Football club, Running, Hiking

Teaching: Mathematics and Physics tutor for undergraduate and high school students