Rayan Takka

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Available from 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, Asset structuring and management, Portfolio Allocation, Monte Carlo methods 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, Modelling of derivatives, Markov chain, Financial instruments, 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*
- 5 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
Four months 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, 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, Java
Langues: French/Native – English/Fluent – Spanish/Intermediate
Sport: Member of CentraleSupélec's Football club, Running, Hiking
Teaching: Mathematics and Physics tutor for undergraduate and high shool students