

MAYSAA RAIS

Quantitative Analyst | Interest Rates – Option Pricing – Risk Models | EN/FR/IT

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Paris, France

<https://github.com/MaysaaRais/portfolio>

SUMMARY

Quantitative analyst trained in finance and data science, with hands-on experience in risk models, pricing, and fixed income. Built internal tools for curve construction and stress testing. Currently developing market-oriented models in Python.

SKILLS

Technical: Python (NumPy, pandas, matplotlib), SQL, VBA, Git, Jupyter, Excel, Bloomberg Terminal

Quant Models: Black-Scholes, Greeks, Heston, Monte Carlo, GARCH, Curve construction, Fixed income risk

EXPERIENCE

09/23 – 10/24
(13 months)

ALM Analyst – Market & Credit Risk Modelling

BNP Paribas

- Automated credit exposure models for fixed-income books; reduced manual reporting time by 20%
 - Monitored IRRBB, VaR, and scenario sensitivities under Basel and internal stress tests
 - Provided input to risk committees on rate curve shifts, portfolio exposures and risk drivers
 - Collaborated with structuring, ALM and reporting teams to align model outputs with regulatory use
- Python / Excel-VBA / SQL

07/23 – 08/23
(2 months)

Markets Analytics & Sales Program

Bloomberg LP

- Analyzed live market data and yield curves on Bloomberg Terminal; assessed pricing mechanisms for corporate bonds and CDS
 - Participated in trading simulations on derivatives pricing, market flows, and execution strategies
 - Shadowed senior sales managers to align client needs with analytics solutions
- Bloomberg Terminal / Excel

10/22 – 02/23
(5 months)

Junior Consultant – Financial Strategy

Alter'Actions – Non-Profit Sector

- Performed risk analysis on a €500k donations-based fund; delivered reallocation strategies
 - Built Power BI dashboards to automate reporting; reduced time-to-insight by 30%
 - Modeled impact metrics to align operational KPIs with grant structures
- SQL / Excel / Power BI

07/22 – 08/22
(2 months)

Financial Data Analyst – Funding & Strategy

Decathlon International – HQ

- Designed financial models to evaluate funding performance across international branches
 - Automated data pipelines and improved reporting reliability and consistency
- SQL / Excel / Tableau

EDUCATION

2023 – 2024

MSc Finance, Technology & Data

Université Paris 1 Panthéon-Sorbonne

Quantitative finance program combining risk modeling, financial products, and data science.

2022 – 2023

Msc PISE – Statistical and Data Science Methods

Université Paris Cité

Trained in statistical learning, time series analysis, and predictive modelling using Python and R.

2021 – 2022

BSc Economics (Erasmus Year)

University of Nottingham

Courses in macro-finance, debt markets, and international economics.

2019 – 2022

BSc Law, Economics & Management

Université de Lille

Solid foundation in financial mathematics, corporate finance, and applied economics.

CERTIFICATIONS

Jul. 2023

Bloomberg Market Concepts (BMC) & ESG Certificates

Bloomberg

Focused on financial markets, asset management, and trading strategies using Bloomberg Terminal.

Aug. 2023

IBM Machine Learning Professional Certificate

IBM Training

Explored algorithmic applications for financial market predictions. (3-month course)

Dec. 2023

Data Scientist Professional Certificate

DataCamp

Program covering Python, SQL, data visualization, machine learning, and predictive analytics.

QUANTITATIVE FINANCE & AI PORTFOLIO

Projects

Key Implementations

GitHub

- Black-Scholes Pricing Engine** – Full implementation with Greeks computation and 3D visualizations.
- Heston Monte Carlo Simulator** – Stochastic volatility simulations with path generation and pricing.
- Exotic Option Greeks Estimator** – Monte Carlo estimation of sensitivities for exotic derivatives.
- Volatility Forecasting Models** – GARCH models and RNNs for volatility prediction.
- Market Anomaly Detector** – Unsupervised learning models to identify microstructure irregularities.

LANGUAGES

English - C1 (Advanced), **French** - Bilingual, **Italian** - Native, **Spanish** - A2 (Beginner).