# Mathieu Tancrez

Senior Risk Manager & Financial Engineer

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## Professional Summary

Senior Risk Manager with 10+ years of experience specializing in quantitative finance and market risk. Expert in fixed income derivatives, options pricing, and financial modeling. Strong technical background combining advanced mathematics with modern programming (Python, AI/ML). FRM-certified professional with proven track record in developing innovative risk management solutions.

## Professional Experience

Jan. 2021 – Present **Risk manager, VP**, *CACIB*, New York.
- Lead market risk management for interest rate and inflation portfolios,
- Built a Python risk analytics suite, improving reliability and cutting reporting time by 80%,
- Developed an internal Python library for Excel UDFs (interfacing with xlwings),
- Created interactive risk dashboard using Plotly Dash (Plotly Dash, Python, MDX queries on OLAP cube),
- Spearheaded LIBOR transition to RFR benchmarks (SOFR, CORRA, TIIE de Fondeo).

Nov. 2016 – Dec. 2020 **Manager**, *Nexialog Consulting*, Paris.
**Risk Manager**, *CACIB* – 2 years
- Lead market risk management for interest rate and inflation portfolios,
- Spearheaded LIBOR transition to RFR benchmarks (SOFR and ESTR).
- Developed a Python tool to compute VaR and MVaR.

**Credit Stress Tests**, *CACF* – 2 months. Led the EBA stress tests, computing the cost of risk, expected loss and provisions gap.
**Structured Products Analyst**, *CNP Assurances* – 5 months. Led structured products risk management, focusing on credit, rates, and equity instruments.
**IFRS9**, *CNP Assurances* – 1 year. Designed PD/LGD methodology and ECL assessment framework.
**R&D Initiative** Authored research paper on Jarrow-Lando-Turnbull credit spread modeling.

Dec. 2015 – Oct. 2016 **Risk management analyst**, *Deloitte*, Luxembourg.
- Developed quantitative risk analytics for UCITS funds,
- Automated SRRI computation system, improving efficiency by 60%,
- Built PRIIPS category 2 calculation engine using MATLAB.

## Education & Certifications

May 2018 **Financial Risk Manager (FRM)**, *GARP*.
Globally recognized certification in financial risk management
`http://my.garp.org/DigitalBadgeFRM?id=0034000001wVnqqAAC`

2012 – 2015 **Engineering Degree in Financial Mathematics**, *Ecole Centrale de Lyon*, France.
Top-tier French engineering school (Grande École)
Project : Pricing of variance swap and volatility swap (based on Javahery et al. paper)

## Technical Projects

Jun. 2024 – Present Developing StressGen, an AI-powered stress testing engine using LangChain and RAG architecture, integrating LLMs for automated scenario generation and analysis.

May 2018 – Sep. 2018 Developed a Python script to spot arbitrage opportunities amongst cryptocurrencies' exchanges.

## Skills & Expertise

Technical Python, AI/ML, SQL, MDX, VBA
Market Risk Derivatives Pricing, Stress Testing, VaR Modeling
Languages English (Fluent), French (Native)
Interests Cooking (Instagram: cook_a_booo), Chess (ELO: 1400), Running, Piano.