

Ngoc Minh NGUYEN

Quantitative Risk Analyst · Bordeaux, France
minhnn238@gmail.com · nnm-psd.github.io · linkedin.com/in/minhnn238 · github.com/nnm-psd

Education

Master 2 Advanced Studies and Research in Finance - Research Track (M.Sc. in Finance) 2023-2024

IGR-IAE — Rennes, France
Ranked first in class, graduated with the mention Très Bien (highest honors).
Coursework in quantitative finance, risk management, and financial econometrics. Thesis on Machine Learning in French stock markets under the supervision of Mr. Souleymane LAMINOUE ABDOLAH.

Msc of Engineering in Applied Mathematics 2019-2024

INSA de Rennes — Rennes, France
Coursework in applied mathematics, numerical methods, and optimization. Thesis on the application of Applied Mathematics in Model Risk Management at BNP Paribas.

Exchange Program in Mathematics Department Feb 2023 – Jun 2023

Korean Advanced Institute of Science and Technology (KAIST) — Daejeon, South Korea
Coursework in Business Intelligence, Data Science, and Bayesian Statistics. GPA: 90.33/100.

Baccalauréat, Mathematics Option 2016-2019

High School for Gifted Students, Hanoi University of Education — Hanoi, Vietnam

Experience

Quantitative Risk Analyst Nov 2024 – Present

BNP Paribas · Risk Architecture — Bordeaux, France
Lead the monthly IFRS 9 provisions reporting, ensuring reliability and on-time delivery.
Analyze the Retail portfolio (exposure above €100M), identifying the main risk concentrations.
Run impact simulations on EAD, LGD, and PD.
Optimize existing reporting tools, cutting the reporting process from several days to 2 hours.
Study the risk factors driving PD changes across customer segments.
Tech stack: SAS, Python, VBA, Power BI.

Model Risk Analyst May 2024 – Oct 2024

BNP Paribas — Bordeaux, France
Developed a Model Risk Rating (MRR) model used to rank the risk of more than 100 models: data collection, machine learning, hyper-parameter tuning, and continuous optimization.

Data Scientist Jun 2023 – Sep 2023

NexGuard (now part of NAGRA) — Rennes, France

Skills

Programming	Python (pandas, scikit-learn, Streamlit), SAS, VBA, JavaScript
Quantitative methods	Credit risk (PD, LGD, EAD), IFRS 9 provisioning, model risk, VaR / expected shortfall, Monte Carlo simulation, stochastic calculus, machine learning, credit scorecards (WOE / IV)
Tools	Power BI, Dataiku, Bloomberg, Git / GitHub Actions
Languages	Vietnamese (native), English (full professional), French (full professional)

Projects

SYM	NAME	TYPE
PULSE	France Economic Pulse Daily open-data nowcast of French industrial production — 5% lower error than a naive benchmark over a 127-month walk-forward backtest.	Macro / Nowcasting
PD	PD Credit Scorecard Interactive PD scorecard on 150k Kaggle loans — WOE binning, a score simulator, and validation (test AUC 0.85, Gini 0.70, KS 0.55).	Credit Risk / Scoring
SDE	Visual Stochastic Calculus From Brownian motion to Black–Scholes, Heston, and diffusion models — 11 interactive chapters with runnable Python.	Stochastic Calculus / Learning
DIST	Distribution Lab 16 probability distributions to explore, fit to data by MLE, and run through Monte Carlo VaR scenarios.	Probability / Statistics
EARLIER PROJECTS		
SENT	Financial Sentiment Dashboard Market data + financial news, scored locally with VADER & FinBERT — no API cost.	NLP / Markets
RISK	PEA Risk Lab Risk analysis for 20 French stocks and 7 UCITS ETFs — VaR, CVaR, beta, and a minimum-variance optimizer.	Risk / Portfolio Management
SIM	Strategy Simulation Market data + strategy testing — DCA, momentum, and a 1,000-path block-bootstrap Monte Carlo.	Strategy / Backtesting

Certifications

SAS Programming 1: Essentials SAS	Dec 2024	Core Designer Certificate Dataiku Academy	Jul 2024
Bloomberg Market Concepts Bloomberg for Education	Nov 2023	Neural Networks and Deep Learning DeepLearning.AI · Coursera	Apr 2023
AMF Certification Autorité des marchés financiers (AMF)			

Competitions

Cod'INSA Programming competition between the schools of the INSA Group in France	2024
Hanoi Open Mathematics Competition (HOMC) First Prize	2015