Cheryl Kouadio

Paris, France | cheryl.s.kouadio@gmail.com | 06 26 34 08 00 | my-personal-website |
linkedin.com/in/cheryl-kouadio | github.com/cheryl-kdio

Looking for a **6-month internship** starting **april 2026** in **Quantitative Research** or **Structuring**.

Education

Master 2 - Modélisation aléatoire(M2MO), Ex-DEA Laure Elie, Université Paris Cité - Paris — Sept 2025-May 2026

- **Specialization:** Quantitative finance, advanced probability, statistics, and stochastic modelling

Engineer's degree in Statistics, Master degree equivalent, ENSAI – National School for Statistics and Information Analysis - Rennes — Sept 2022 – Sept 2025

- **Major:** Risk management and financial engineering

Experiences

Quantitative analyst, IFRS9, Internship, Société Générale - La Défense — Apr. 2025 – Aug. 2025

- Developed obligor-level PD Point-in-Time model for the retail portfolio and designed a supervised SICR framework for bucket allocation according IFRS 9 standard, in a team of 4 (Paris, Bengaluru - India), enhancing risk assessment granularity in line with a recommendation from IGAD (Inspection Générale Audit Division).

Research Internship – Mixture Cure Models, Inserm - Paris — May 2024 – Aug. 2024

- Carried out simulations studies using MLE and EM algorithms to assess adequacy of mixture cure models in the context of survival data; Contributed to a research paper with Pr. Sylvie Chevret.

Projects

Yield Curve Models (Project link), ENSAI - Rennes — Jan. 2025 - March 2025

- Constructed zero-coupon and forward rate curves from interbank market instruments using a bootstrapping methodology complemented with cubic spline interpolation for derivative pricing.
- Priced and simulated plain-vanilla and exotic interest rate derivatives using Black, Hull-White, and Monte Carlo models under the risk-neutral measure, analyzing sensitivities to volatility and mean reversion parameters.

Asset pricing & Asset management Project (Project link), ENSAI - Rennes — Jan. 2025 - March 2025

- Developed option pricing frameworks for European, American, and Asian options under the Black–Scholes model, including parameter calibration and computation of Greeks for risk management.
- Designed asset allocation strategies with Markowitz mean–variance optimization and built interactive monitoring dashboards in Dash for real-time portfolio analytics.

Stochastic Process Calibration, ENSAI - Rennes — Feb. 2025 - March 2025

- Calibrated Black–Scholes and Heston stochastic volatility models to market data, and implemented Kalman and particle filters (bootstrap, auxiliary) for parameter estimation, benchmarking performance and robustness through simulations.

Technical skills

Methods: Applied mathematics, probability & statistics, time series, econometrics, stochastic processes & modeling, derivative pricing, quantitative finance, risk management, optimization & numerical methods, machine learning, object-oriented programming.

Programming: C++, Java, Python, R, SQL, VBA, Bash

Tools: Git/GitHub/GitLab, LaTeX, Dash, Streamlit, Microsoft Office

Additional skills

Languages: French (native), English (B2+, Toeic)

Certifications: AMF (Autorité des marchés financiers)