

Massyle DENDENE

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Paris, Ile-de-France, France

Resume

Education

- **École Polytechnique (IP Paris)** Palaiseau, France
2025-2028 (expected)
PhD Student
 - Topic : Optimal stochastic control of intensity of Hawkes process with Bayesian learning.
- **Université Paris-Cité** Paris, France
2024 - 2025
MSc in Quantitative Finance (M2MO)
 - Stochastic control, Derivatives modeling, Markov Chains, Stochastic calculus, Backward Stochastic Differential Equations.
- **ENSAE (IP Paris)** Palaiseau, France
2023 - 2025
Double degree - Major: Actuarial Sciences
 - Mathematical Finance, Statistics, Financial Markets, Econometrics, Linear Time Series, Economics, Extrem Value Theory (GPA : 4/4)
- **UBO (Université de Bretagne Occidentale)** Brest, France
2022 - 2023
Bachelor - Mathematics & Economy
 - Analysis, Public economy, Information economy, Game theory
- **IMT Atlantique (ex Telecom Bretagne)** Brest, France
2021 - 2023
MSc of Engineering
 - Major : Applied Mathematics (GPA : 3.71/4)
 - Machine learning, Numerical Calculation Method, Signal processing

Experiences

- **Exiom Partners** Paris, France
May 2025 - Oct. 2025
Quantitative researcher intern
 - Option pricing in illiquid market using fractional jump diffusion
- **Aon Global Risk Consulting** Luxembourg, Luxembourg
June 2024 - Sept. 2024
Non-Life Actuary intern
 - Reserving for non-life reinsurance captives (chain ladder, Bornhuetter-Ferguson, bootstrap)
- **SAF Laboratory - ISFA** Lyon, France
Apr. 2023 - Aug. 2023
Research intern (mentored by Stéphane LOISEL)
 - JRI Axa Project (Joint Research Initiative) : Longevity model selection and change detection in the covid-19 era. Topics: Change-Point Detection, Model Selection, Longevity Risk (used tools: martingales, stopping time, stochastic calculus...)
 - Project related to hail damage insurance: Creating a map of France using **Python** to model hail trajectories and incorporate data on hailstone size
- **School Projects** Paris, France
Sept. 2021 - sept. 2024
In team
 - Project in Finance with CMAP of Polytechnique: Deep portfolio allocation and path signatures (Louis-Amand GERARD)
 - QuantLib project: Implemented optimization techniques in **C++** to enhance Monte Carlo engines, specifically addressing performance issues in the Generalized Black Scholes Process class

Skills

- **Soft skills** : Result driven, Detail oriented, Proactive problem solver, Adapting to changing circumstances
- **Technical skills** : Python, R, Git
- **Languages** : English : C1 level (IELTS 7/9), German : B2 level, Italian : A2 level, French : native

Hobbies

- Table tennis
 - Playing for 8 years, participating in competitions for 5 years. Responsible for the table tennis club at school: organizing weekly training sessions.
- Piano
 - Practicing at an advanced level for 16 years (conservatory training for 10 years). Participated in various concerts, including one at the Philharmonie de Paris.
- Blood donation
 - Since turning 18, I've been a regular blood donor. I'm now at 46 donations.