

EDUCATION

University Paris Dauphine-PSL <i>Master 2, Mathematics Research Master's degree –MASEF, Financial Mathematics Major</i> <i>Python projects:</i> <ul style="list-style-type: none"> American, European Options, and Worst-Of Autocallables Pricing, using Monte Carlo and Finite Difference Methods. Asian, Lookback, and Digital Options Pricing, using: "Multilevel Monte Carlo Path Simulation." Michael B. Giles, Oxford Man Institute of Quantitative Finance. (2008) 	Paris, France 2020-2021
University Paris Dauphine-PSL <i>Master 1, Mathematics – Statistics Major</i> <i>Master's thesis: "Correlation between toponymy and geography of French municipalities" (Implemented in R), supervisor Robin Ryder</i> <i>C++ project: Vector, Matrix & Tensor classes implementation</i>	Paris, France 2019-2020
University Paris Dauphine-PSL <i>Bachelor of Science, Mathematics– Probability Major</i> <i>Python project: Double Pendulum Chaos Motion</i> <i>R project: Random Variables Simulation Methods, Variance Reduction Methods</i>	Paris, France 2016-2019
University of Greenwich <i>Master of Science, Banking & Finance (Distinction)</i> <i>Master's thesis: "Political risk and foreign exchange market: an exploration of the brexit impact on the sterling", supervisor Lianfeng Quan</i>	London, United Kingdom 2015-2016
IPAG Business School <i>Master 2, Financial Markets</i> <i>Master 1, Corporate Finance</i>	Paris, France 2011-2016
Waterford Institute of Technology <i>Erasmus, Economy</i>	Waterford, Ireland 2013-2014
Lycée Charles Baudelaire <i>Scientific Baccalauréat, Mathematics Major (Honors)</i>	Paris, France 2011

RESEARCH PROJECTS

Multilevel Monte Carlo Path Simulation <i>Implemented with Python the Multilevel Monte Carlo method and reproduced Michael B. Giles' results</i> <ul style="list-style-type: none"> Multilevel Monte Carlo improves the classic Monte Carlo method by reducing the computational complexity For a same level of precision, the multilevel method runs 10 to more than 1000 times faster Priced Asian, Lookback, Digital, and European Options Implemented Black-Scholes and Heston models, Milstein and Euler discretization schemes 	2020-2021
Worst-Of Autocallable <i>Implemented with Python a 2 assets worst-of autocallable pricer (Eurostoxx50 & CAC40)</i> <ul style="list-style-type: none"> Each asset has its own coupon value, its own paying and redemption barriers Used historical correlation, implicit volatility, Black-Scholes model 	2020-2021
Correlation between toponymy and geography of French municipalities <i>Implemented with R different machine learning algorithms to predict French cities' location of using only their toponymy</i> <ul style="list-style-type: none"> Data: 35000x10 Logistic regression to predict regions, random forests for latitude/ longitude Models prediction accuracy exceeded 90% in some areas of France 	2019-2020

SKILLS

Language: French (Mother tongue), English (Fluent), Persian (Fluent), Spanish (Professional proficiency)
IT: R, C++, Python, LaTeX, Microsoft Office (Excel, Word, PowerPoint)
Academic: Probability, Statistics, Stochastic calculus, Monte Carlo methods, Black Scholes model, Machine Learning in finance
Esport: Mobile Legends: Luo Yi Champion, 293 World Rank, Top 10 France, 1st Paris

WORK EXPERIENCE

Killik & Co Analyst <i>Front Office Analyst at KILLIK & Co, first French intern in the firm</i> <ul style="list-style-type: none"> Assisted 4 stockbrokers who trade and advise on a wide range of instruments including equities, corporate bonds, gilts, funds, derivatives and CFDs Produced monthly reports of the 10 branches' trades. Implemented macros on excel to deal with heavy spreadsheets Conducted portfolio analysis and reviewed asset class weighting with a focus on Investment trusts and Unit trusts Formulated reports and did presentations of investment opportunities and prominent equities identified from personal research and study of research notes Regularly attended meetings with companies or fund managers to get updates or IPO presentations 	London, United Kingdom Apr.-Sept. 2015
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