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WPI Business School · 100 Institute Road #WB 103 · Worcester MA 01609

SELECTED EDUCATION

2021	Université Paris-Saclay: Ph.D. in quantitative finance Thesis: "Static replication of European options and dynamic replication of correlation swaps" Advisors: Peter Carr, Stéphane Crépey, Andrew Papanicolaou Readers: Areski Cousin, Jean-Pierre Fouque, Antoon Pelsser Committee: Bruno Dupire, Robert Jarrow, Stéphane Menozzi (President), Adil Reghaï
2011	Columbia University, New York: M.S. degree
2002	The University of Chicago: M.S. Financial Mathematics
2001	HEC Paris: *Diplôme Grande École* (M.S. in Management) Concentration in Finance
1999	Sorbonne Université (fmr Paris-6): B.S. Applied Mathematics Concurrently with studies at HEC Paris

SELECTED ACADEMIC POSITIONS

2021—	WPI Business School, Worcester MA: Visiting Professor of Finance • BUS 2070.A21 & D22: "Risk Analysis for Decision-Making", FIN 1250.B21: "Personal Finance", FIN 500.Sp22: "Financial Management" • Co-advising two PhD students at Université de Paris with Stéphane Crépey
2017—	NYU Courant: Adjunct Professor of Mathematics in Finance MATH-GA.2801.001: "Advanced Topics in Equity Derivatives"
2017—2019	Johns Hopkins Carey Business School, Baltimore: Adjunct Faculty in Finance BU.232.710: "Derivatives"
2014—2016	Pace University Lubin School of Business, New York: Adjunct Associate Professor of Finance FIN 650: "Applied Analytical Methods in Finance", FIN 672: "Strategies in Investments, Options & Futures & investments", FIN 356 "Options, Futures & Swaps"
2013	Fordham University, New York: Adjunct Instructor MATH 3009: "Mathematics of Finance"
2008	HEC Paris: Adjunct Lecturer of Finance
1998—2001	Université de Paris (fmr Paris-7): Adjunct Lecturer of Finance
1998	Lycée Carnot, Paris: Adjunct Instructor, undergraduate computer programming

SELECTED PROFESSIONAL EXPERIENCE

2011— Principal, Ogee Group LLC (startup company), New York

- Investment management: +60% gross return since inception with focus on macro options and futures. Tail risk arbitrage & hedging. Volatility trading: short straddle, variance futures, VIX futures & options. Opportunistic: bond futures, oil and gold futures & options, stock futures, stocks.
- Consulting: repriced 100+ exotic energy derivative transactions on behalf of the California Department of Justice.
- Authorship: CBOE white paper; textbook; several online articles.
- Research: option trading strategies, correlation modelling and pricing.
- Technology: developed the first portion of electronic trading platform in C#; supervised website development; created productivity tools using graph theory in C#; created and maintained company mail server.

2005—2008 Director, Commerzbank (fmr Dresdner Kleinwort), London: Head of Equity Derivatives Structuring team (6 permanent members)

- Product development: trade ideas / new product design on a weekly basis.
- Indicative pricing of all equity exotic derivatives. My team handled over 2500 pricing requests per year.
- Productivity tool development: automatic script generator, historical correlation and volatility, automatic backtesting, basket optimizer, intranet website.
- Structurer the first European Investment Bank Climate Awareness Bond. Issue size €600mn.

2003—2005 Associate, J.P. Morgan, London: Equity Exotics & Hybrids Structurer

- Indicative pricing and product development: options on hedge fund indices, variance and correlation swaps, target redemption notes, synthetic portfolio insurance, reverse convertible notes.

2000 Junior Trader (intern), Goldman Sachs, Paris: repo trading desk

ACADEMIC ARTICLES & TEXTBOOKS

		citations
2022e	"Static replication of European multi-asset options with homogeneous payoff", under review	
2022	"Static replication of European standard dispersion options", *Quantitative Finance*, forthcoming (with Peter Carr and Andrew Papanicolaou)	2
2021	"A functional analysis approach to the static replication of European options", *Quantitative Finance*, 21 (4), pp. 637–665 (with Peter Carr and Andrew Papanicolaou)	4
2014	*Advanced Equity Derivatives: Volatility and Correlation*, John Wiley and Sons. Foreword by Peter Carr, NYU Courant and Morgan Stanley	12

2012	*An Introduction to Equity Derivatives: Theory and Practice*, 2nd Ed., John Wiley and Sons (with Philippe Henrotte) Back cover endorsements by Emanuel Derman and Paul Wilmott	17
2010	"Put-Call Parity" and "Correlation Swaps", in Rama Cont (ed), *Encyclopaedia of Quantitative Finance*, John Wiley and Sons	1
2001	*L'oral de mathématiques aux concours des écoles de commerce*, Ellipses Collection of undergraduate honors math problems with full solutions	

SELECTED INDUSTRY PUBLICATIONS

		citations
2022e	"Variance Futures Reborn", Chicago Board Options Exchange (by commission)	
2016	"A primer on correlation trading via equity derivatives", KNect365 Finance	
2016	"Introduction to Variance Swaps", Wilmott Magazine (reprint from 2006)	14
2014	"A simple option trading strategy that beats the S&P 500", TheStreet Reprinted on EQDerivatives	
2007	"A new approach for modelling and pricing correlation swaps", Dresdner Kleinwort (based on my J.P. Morgan paper "Arbitrage pricing of equity correlation swaps", 2005)	38
2005	"Just what you need to know about variance swaps", J.P. Morgan (with Eva Strasser and Régis Guichard)	33
2004	"Fundamental relationship between an index's volatility and the correlation and average volatility of its components", J.P. Morgan (with Yi Gu)	5

SELECTED CONFERENCES, PRESENTATIONS AND INVITED TALKS

- Boston University research seminar, 2022e
- WPI Financial Mathematics seminar, 2021
- Princeton Fintech and Quant Seminar Series, 2021
- 5th Eastern Conference on Mathematical Finance, Cornell University, 2021
- Society of Financial Econometrics Summer School 2021, Kellogg School of Management, Northwestern University
- SIAM Conference on Financial Mathematics and Engineering, 2019 and 2021: top academic conference in the field
- QuantMinds (fmr Global Derivatives) conference, 2006, 2007, 2011—2014, 2016, 2017, 2019—2021: leading academic-practitioner conference in the field with over 500 attendees.
- Credit Suisse Quant Seminar, 2020
- Mathematical Finance Seminar, NYU Courant, 2020

- Fifth International IMS-FIPS Workshop, Rutgers University & Columbia University, 2015
- Faculty Seminar, NYU Tandon, 2019
- Financial Mathematics Seminar, Johns Hopkins Whiting School of Engineering, 2018
- Quantitative Finance Club Symposium, Rutgers University, 2018
- Master of Science in Finance Lecture Series, Johns Hopkins Carey Business School, 2015—2017
- Bloomberg Quant Seminar (BBQ) Lightning Talk, 2016
- Morgan Stanley Quant Seminar, 2016
- Master of Science in Financial Engineering Lecture Series, University of California in Los Angeles, 2014—2016
- Masterclass, Certificate in Quantitative Finance, New York, 2008
- Executive Education, Certificate in Portfolio Management, Columbia University, 2009 and 2010
- Equity Derivatives Workshop, The University of Chicago, 2005, 2007, 2009 and 2014
- 14th Annual CAP Workshop on Derivatives Pricing and Risk Management, Columbia University, 2007
- Risk07, London, 2007
- Discussion on “The perception of time, risk and return during periods of speculation” (Emanuel Derman, 2002) at Ehess & Collège de France seminar organized by Prof. Henri Berestycki and Roger Guesnerie, 2006

SERVICE, DISTINCTIONS & OTHER QUALIFICATIONS

Organizing	Co-hosted a mini-symposium on “multi-asset financial models” for the SIAM Financial Mathematics and Engineering conference 2021
Refereeing	*Quantitative Finance, SIAM Journal on Financial Mathematics* (2021) *Stochastic Models*, *Applied Quantitative Finance* (2020)
Chairing	Chaired 3 half-day streams, moderated 1 panel and led 2 full-day post-conference workshops at the QuantMinds conference series
Training	New York Institute of Finance: workshop instructor 2017—2019 Masterclass, Certificate in Quantitative Finance, New York, 2008 Executive Education, Certificate in Portfolio Management, Columbia University, 2009 & 2010
Mentoring	Advised two groups of NYU MS students for their capstone research projects
Socializing	Creating a student investment club for my WPI students Hosted lunches for two groups of 10 NYU Courant incoming students
Computer	C#, Mathematica, Matlab, Python, Linux/Html/PhP
Languages	English: fluent. French: native. Italian: advanced.
General	Dual citizen. Former O-1 Visa holder (“alien of extraordinary ability”).