Contact

www.linkedin.com/in/mounir-azmy-5869421 (LinkedIn)

Top Skills

Quantitative Finance

Quantitative Analytics

Equity Derivatives

Languages

Spanish (Professional Working)

Arabic (Native or Bilingual)

English (Full Professional)

French (Native or Bilingual)

Mounir Azmy

Senior Consultant - Quantitative Research

Washington, District of Columbia, United States

Summary

I am a seasoned professional with 20+ experience accumulated in Financial Derivatives Markets, in high added-value Technical Consulting and Entrepreneurship, with a demonstrated capacity to work and adapt to various international and multicultural environments.

During my career I have applied in-depth inter-disciplinary knowledge to solve problems in my various professional roles, and provided training on a variety of fields, ranging from Quantitative Finance, Mathematical and Statistical Modeling, to Operation Research and Bio-Mathematics. In particular, I have an expertise in designing and implementing quantitative solutions based on advanced mathematical tools and models.

Graduated in both Pure and Applied Mathematics, I have the necessary strong mathematical background and multiple resources to address a wide spectrum of complex modeling and operational topics. This translates into the ability to come up with solutions to R&D challenges, starting from early-stage modeling equations, to analytic tools as well as software proof of concept implementations, and ultimately supervision of integration into production systems when needed.

Moreover, besides this versatile skills-set, my engineering training coupled with my entrepreneurial ventures as well as teaching experience have all helped me fostering an operational mindset, based on good sense of details and efficient communication, while keeping a clear vision of scope in terms of 'the big picture'.

Please do not hesitate to reach out to discuss any projects or R&D challenges you may have. I am always eager to exchange on interesting subjects and bring in relevant contributions whenever possible.

Experience

Independent Consultant
Senior Consultant - Quantitative Research
January 2021 - Present (3 years)
Washington, District of Columbia, United States

Consulting in Quantitative Research, Model and Process Auditing for Capital Markets and Investment Management. In-depth and independent expertise in Pricing and Risk Modeling for Exotic Derivative Products, as well as Statistical Modeling and Data Science tools for decision making.

Independent Consulting
Senior Consultant - Quantitative Research Projects
January 2017 - December 2020 (4 years)
London, United Kingdom

Providing bespoke consulting in the field of Quantitative Research and Model Auditing for Capital Markets and Investment Management. In-depth expertise in Pricing and Risk Modeling for exotic derivative products, as well as Statistical Modeling and Data Science tools for decision making.

AQX R&D Solutions
Founder & Managing Director
January 2014 - December 2016 (3 years)
Paris Area, France

AQX is an independent consulting firm providing services in the field of Mathematical Research and Engineering as well as the Organization and the implementation of the related Business Processes.
It specializes in Quantitative Finance (for Investment Banking and Asset Management), Risk Modelling and Assessment (in Finance, Insurance, and Industrial Processes), Biomathematics (Biostats, Pharma, Bioinformatics), and can provide help on any subject that rely on intensive use of Computational Statistics.
AQX R&D Solutions strives to provide its clients with fresh approaches and cutting edge methodologies to successfully conduct their projects and address their daily challenges.
We intervene on the whole spectrum of the business process to help our clients to achieve their goals, from the early stage research and conceptualization to proof of concepts and proper implementations. Driven by

the added value R&D philosophy according to which new problems usually need new ways of thinking.
For more information please visit our website : http://www.aqx-rd.com/

Freelance Research
Freelance Consultant - Quantitative Finance & Engineering
January 2010 - December 2013 (4 years)
Dublin, Ireland

Providing consulting primarily in in the field of Quantitative Finance, Risk Identification and Evaluation, and other areas related to Mathematical Modeling (Biostats, Biotech, Pharmacogenomics).

Universidad de San Andrés
Lecturer - Quantitative Finance
October 2007 - December 2009 (2 years 3 months)
Buenos Aires, Argentina.

Lectures and Seminar Courses in the Quantitative track of the Postgraduate Program in Finance (“catedra of postgrados in finanzas”).
Subjects: Static Replication techniques, Volatility and Correlation Modeling, Monte Carlo techniques for Pricing and Risk Management, and Dynamic Programming (with introduction to Stochastic Control).

Alpha Quant-X
Director, R&D
June 2007 - December 2009 (2 years 7 months)

Start-Up project aimed at providing Quantitative Analytics and Modeling tools to firms operating in the sectors of Pharmaco-genomics, Bio-Math and Finance.

Barclays Capital
Associate Director - Model Validation
June 2005 - June 2007 (2 years 1 month)
London, United Kingdom

Worked mainly on IRD Exotics (plus related Hybrids), Equity Exotics as well as FX models.
Conducted the Validation of the main exotics models for the Fixed Income: LMM, QGM (as well as the related exotic products + migration of vanilla product to SABR); LSV for the FX, Equity Derivatives Monte Carlo Pricing (Asian Tiggers + Lookbacks on Baskets). Volatility Index (VIX) Trackers pricing methodology.

Credit Lyonnais - Calyon
Quantitative Research Analyst - New Products Engineering
June 2003 - June 2005 (2 years 1 month)

GRM Quants, IRD Exotics.
Worked on QGM calibration, SABR calibration, Correlation issues, Model risks, Model-independent strategies, as well as the validation of various -latest generation- exotic structures.

Credit Lyonnais Asset Management
2 years 9 months

Quantitative Research – Projects Management
January 2002 - June 2003 (1 year 6 months)

Position within the Risk Management Department. I also had to supervise the technical and methodological parts in a Front-to-Back Integrated Risk Management project. My main contribution resided in building an independent pricing system (architecture and analytics) for the Exotic Options (mainly Equity and Credit) involved in the structuring of the managed funds (to be compliant with the COB - the then French regulatory body, now AMF).
Also worked on various methodologies for Credit Valuation and Exposure, as well as the validation process of one of the first Credit indexed funds (Synthetic CDO equity tranche) on the Parisian place.

Consultant - Quantitative Research
October 2000 - December 2001 (1 year 3 months)

During this period, my work covered various quantitative subjects: Exotic Options Pricing (Equity Indices), Enhanced Monte Carlo/QMC, Credit Derivatives (Intensity and Structural Models). This was consecutive to an internship (Jul. 2000 – Sept. 2000) at the same department, within the scope of my graduating from Paris-Tech ENSAE. Internship subjects: Credit risk evaluation, VaR implementations and related issues.

Education

ENSAE Paris
Post Graduate, Mathematical Modelling, Stochastics, Computational Statistics · (1998 - 2001)

Université Pierre et Marie Curie (Paris VI)
MSc., Fundamental Mathematics. Stochastic Modelling applied to Finance