

PERSONAL INFORMATION

Pier Giuseppe Giribone



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Sex Male | Date of birth 29th September 1984 | Nationality Italian

WORK EXPERIENCES

September 2009 – Current

Financial Administration – Capital Market (BPER Banca)

Financial Engineer (Research and Development)

November 2017 – Current

University of Genoa – Department of Economics

Adjunct professor in:

“Risk Management Techniques” (2022/2023) – Master’s Degree in “Economics and Data Science”

“Software R” (2021/2022 and 2022/2023) – Master’s Degree in “Economics and Data Science”

“Software R” (2019/2020 and 2020/2021) – Master’s Degree in “Economics of Financial Intermediaries”

“Matlab” (2017/2018 and 2018/2019) – Master’s Degree in “Economics of Financial Intermediaries”

“Financial Risk Management” (2018/2019) – Master’s Degree in “Economics of Financial Intermediaries”

Lecturer in:

“Programmig and Graphical Analys with R” (2022/2023) – PhD in “Economics and Quantitative Methods”

“Financial Analysts 1” (2016/2017, 2017/2018) – Master’s Degree in “Finance Administration and Control”

“Financial Analysts 2” (2017/2018) – Master’s Degree in “Finance Administration and Control”

“Risk Management” (2017/2018) – Master’s Degree in “Economics of Financial Intermediaries”

Visiting PhD Lecturer in:

Forecasting using Dynamic Neural Networks (University of Leon, June 2020)

June 2022 – Current

24 Ore Business School

Lecturer in the Master’s courses:

“Credit Risk Management” and “Data science, Big Data and Artificial Intelligence in Finance”

September 2009 – November 2023

Financial Administration (Banca CARIGE)

Financial Engineer (Research and Development)

EDUCATION & CERTIFICATES

12th July 2022

Master in Business Administration (MBA) – European School of Banking Management

Exams:

Governance and Ethics [5th July 2022]

Corporate Investment Banking [30th May 2022]

Project Management [21st March 2022]

Human Resources [23rd December 2021]

Customer Relationship Management [20th September 2021]

Marketing [28th July 2021]

Corporate Finance [16th June 2021]

Management Control [7th April 2021]

Corporate Strategy [19th February 2021]

General Management [21st January 2021]

Thesis: “Essay on Banking Credit Management and Measurement” [12th July 2022]
Supervisors: prof. D. Martelli and Dr. M. Pinto

18th May 2021

Doctor of Philosophy (PhD) in Economics – University of Genoa (XXXIII Cycle)

Exams:

Macroeconomics 3 [19th December 2018]
Political Economy 1+2 [10th December 2018]
Macroeconomics 2 [11th September 2018]
Macroeconomics 1 [27th July 2018]
Economic History and History of Economic Thought [27st May 2018]
Game Theory [27th March 2018]
Econometrics [15th February 2018]
Mathematics for Economists 1+2 [19th December 2017]
Microeconomics 1+2 [6th December 2017]

Thesis: “Mathematical modeling in Quantitative Finance and Computational Economics” [18th May 2021]
Supervisors: prof. M. Guerrazzi and prof. O. Caligaris

4th May 2021

Master in “Risk, Compliance and Internal Audit” – European School of Banking Management

Final Exam: [4th May 2021]

Module 1: The role of Risk Management, Compliance and Internal Audit
Module 2: Risks of non-compliance
Module 3: Market and Liquidity Risk
Module 4: Credit Risk
Module 5: Operative Risk and other risk factors
Module 6: Inspections and internal model investigations

28th November 2019

Certified International Wealth Manager (CIWM®) – AIAF Financial School

Exams:

Final Level 1 [8th March 2019]
Wealth Management
Final Level 2 [20th September 2019]
Wealth Planning, Financial Assets and Taxation of Financial Products

13th April 2017

Certified Environmental, Social and Governance Analyst (CESGA®) – EFFAS School

ESG (Environmental Social and Governance) Final Exam: [10th March 2017]
Module 1: Introduction – Link between ESG performance and financial performance
Module 2: Fundamentals – Definitions, strategies, market driver
Module 3: Investment process chain – General integration of ESG in the investment process
Module 4: ESG integration and valuation – Identification, measurement and integration of ESG in the valuation
Module 5: A multi asset framework – Asset allocation, green bonds, impact investing
Module 6: Reporting – Analysis of different reporting standards

14th December 2016

Banking and Financial Diploma (B&FD) – ABI (Italian Banking Association)

Exams:

Banking Management [13th December 2016]
Risk Management [18th October 2016]
Private Banking and Asset Management [21st July 2016]
Financial Investments and Markets [24th May 2016]
Retail and Corporate Lending [25th March 2016]
Financial Intermediation [19th January 2016]

30th November 2015

Certified International Investment Analyst (CIIA®) – AIAF Financial School

Exams:

Final Level 1[2015]
Corporate Finance

Economics
 Financial accounting and statement analysis
 Equity valuation and analysis
 Final Level 2 [2015]
 Fixed Income Valuation and Analysis
 Derivative Valuation and Analysis
 Portfolio Management
 National [2014]:
 Regulation
 Ethics
 Taxation
 Foundation 1 [2014]:
 Equity valuation and analysis
 Financial Accounting and Statement analysis
 Corporate Finance
 Foundation 2 [2013]:
 Fixed Income Valuation and Analysis
 Economics
 Foundation 3 [2013]:
 Derivative Valuation and Analysis
 Portfolio Management

19th December 2013

Doctor of Philosophy (PhD) in Engineering Mathematics – University of Genoa (XXV Cycle)

Exams:

Mathematical instruments for economics [23rd May 2012]
 Simulation and modeling [12th March 2012]
 Numerical methods for Partial Differential Equations [7th December 2011]
 Response Surface Methodology in simulation [5th July 2010]
 Partial Differential Equations and applications [28th May 2010]
 Stochastic Differential Equations and applications [24th May 2010]

Thesis: “Study and implementation of MSPE technique for a reliable control of convergence in stochastic models for option pricing” - Supervisor: prof. R. Mosca,

Short Dissertation: “Metaheuristics for the individuation of optimal regions in complex industrial simulators”
 Supervisor: prof. R. Mosca.

31st July 2009

Chartered Engineer – Order of Engineers

License: A1767

19th December 2008

Master’s Degree in Industrial Engineering and Management – University of Genoa

Thesis: “Study and implementation of mathematical models in banking management: methodologies for pricing financial instruments”

Supervisor: prof. R. Mosca,
 Assistant Supervisor: Dr. A. Currao (CARIGE) and Dr. S. Ventura (CARIGE).

Short Dissertation: “Advanced researches on algorithms for the individuation of optimal regions in complex industrial simulators”

Supervisor: prof. R. Mosca.
 Final mark: 110 out of 110 cum laude.

3rd November 2006

Bachelor’s Degree in Industrial Engineering and Management – University of Genoa

Thesis: “Methodologies for the identification of optimal regions in stochastic and event-driven simulation of complex industrial plants”

Supervisor: prof. R. Mosca.
 Final mark: 110 out of 110 cum laude.

2nd July 2003**High School – Orazio Grassi – Savona**

Scientific High School diploma. Final mark: 100/100 (first class honours).

PROFESSIONAL COURSES

15th – 20th July 2019**“Machine Learning Algorithms for Econometricians” – SIdE Summer School**

A Summer School organized by SIdE (Italian Econometric Association) which took place at the University Residential Center of Bertinoro.

The lecturers were Prof. Arthur Charpentier (University of Quebec at Montreal, Canada) and Prof. Emmanuel Flachaire (AMSE, Aix-Marseille University, France).

Director of the School: Juri Marcucci, PhD (Bank of Italy).

Main Topics:

- GAM (Generalized Additive Models), LASSO (Least Absolute Shrinkage and Selection Operator)
- Random trees, Random forests, boosting, SVM (Support Vector Machine)
- Neural Nets, Deep Learning, Autoencoder, Nonlinear PCA (Principal Component Analysis)
- Cross-validation, bootstrap, optimization routines, causality and time series analysis

17th – 22nd June 2019**“Ideas and theory in econometric time series” – SIdE Summer School**

A Summer School organized by SIdE (Italian Econometric Association) which took place at the University Residential Center of Bertinoro.

The lecturers were Prof. Søren Johansen and Prof. Anders Rahbek (University of Copenhagen).

Director of the School: Juri Marcucci, PhD (Bank of Italy).

Main Topics:

- Cointegration and adjustment in a common trends causal model and the role of weak exogeneity.
- Optimal hedging and cointegration in the presence of heteroscedastic errors.
- Bootstrap based inference in stationary and non-stationary autoregressive models.
- Models, Methods and Big Data

24th – 28th July 2017**Workshop in Computational Econometrics – SEEC 2017**

A Ph.D. Summer School organized by the University of Salento – Faculty of Economics.

Main Topics:

- Matlab and Python languages
- Vector Autoregression (VAR models)
- State Space Models and Kalman Filter
- DSGE (Dynamic Stochastic General Equilibrium) models

5th – 9th June 2017**“Machine Learning: a computational intelligence approach” – MLCI 2017**

A Ph.D. Summer School organized by the University of Genoa – Faculty of Engineering.

Main Topics:

- Fuzzy sets and Fuzzy Logic
- Fuzzy, Spectral and Kernel clustering
- Artificial Neural Networks: Multi-layer feed-forward networks and autoencoders
- Restricted Boltzmann Machines and Deep Learning

PUBLICATIONS

April 2023

Risk Management Magazine, Vol. 18, N. 1

Scientific Paper Title: “Implementation of variance reduction techniques applied to the pricing of investment certificates”.

Authors: A. Bottasso, M. Fusaro, P.G. Giribone, A. Tissone

15th March 2023**Italian Association of Financial Industry Risk Managers (AIFIRM) Educational Book Series**

Book Title: “Notes on Quantitative Financial Analysis”

ISBN: 979-12-80245-19-9

Author: P. G. Giribone

- August 2022** **Risk Management Magazine, Vol. 17, N. 2**
 Scientific Paper Title: "Current and prospective estimate of counterparty risk through dynamic neural networks".
 Authors: A. Agnese, P. G. Giribone, F. Querci
- February 2022** **Bulletin of Economic Research**
 Scientific Paper Title: "The dynamics of working hours and wages under implicit contracts".
 Authors: M. Guerrazzi, P. G. Giribone
- December 2021** **Risk Management Magazine, Vol. 16, N. 3**
 Scientific Paper Title: "Deep Learning for seasonality modelling in Inflation-Indexed Swap pricing".
 Authors: P. G. Giribone, D. Martelli
- August 2021** **Frontiers in Artificial Intelligence: AI in Finance**
 Scientific Paper Title: "Implementation of a Commitment Machine for an Adaptive and Robust Expected Shortfall Estimation".
 Authors: M. Bagnato, A. Bottasso, P. G. Giribone
- August 2021** **Risk Management Magazine, Vol. 16, N. 2**
 Scientific Paper Title: "Certificate pricing using Discrete Event Simulations and System Dynamics theory".
 Authors: P. G. Giribone, R. Revetria
- July 2021** **Springer Nature (SN) Business & Economics, Vol. 1, N. 102**
 Scientific Paper Title: "Dynamic wage bargaining and labour market fluctuations: the role of productivity shocks".
 Authors: M. Guerrazzi, P. G. Giribone
- April 2021** **Risk Management Magazine, Vol. 16, N. 1**
 Scientific Paper Title: "Design of an algorithm for an adaptive Value at Risk measurement through the implementation of robust methods in relation to asset cross-correlation".
 Authors: M. Bagnato, A. Bottasso, P. G. Giribone
- December 2020** **Risk Management Magazine, Vol. 15, N. 3**
 Scientific Paper Title: "Critical analysis of the most widespread methodologies for the simulation of the short rate dynamics under extreme market conditions".
 Author: P. G. Giribone
- August 2020** **Risk Management Magazine, Vol. 15, N. 2**
 Scientific Paper Title: "Study and implementation of a pricing system for the risk analysis of the EAKO (European American Knock-Out option) structured product".
 Authors: M. Fabbri, P. G. Giribone
- March 2020** **Risk Management Magazine, Vol. 15, N. 1**
 Scientific Paper Title: "Prospective estimation of financial and risk measures using dynamic neural networks: an application to the US market".
 Authors: C. Decherchi, P. G. Giribone
- December 2019** **International Journal of Financial Engineering, Vol.6, N. 4**
 Scientific Paper Title: "Design, implementation and validation of advanced lattice techniques for pricing EAKO – European American Knock-out option".
 Authors: M. Fabbri, P. G. Giribone
- September 2019** **Risk Management Magazine, Vol. 14, N. 3**
 Scientific Paper Title: "Design, validation and implementation of an advanced lattice model for pricing a Flexible Forward on currencies".
 Authors: P. G. Giribone, P. Raviola
- August 2019** **Risk Management Magazine, Vol. 14, N. 2**
 Scientific Paper Title: "Design of quantitative measures for monitoring financial risks in the emerging market of Guarantees of Origin".
 Authors: A. Bottasso, P. G. Giribone, M. Martorana

- April 2019** **Risk Management Magazine, Vol. 14, N. 1**
 Scientific Paper Title: "Option pricing using Radial Basis Functions: an application to Garman-Kohlhagen framework".
 Authors: S. Fioribello, P. G. Giribone
- March 2019** **Italian Association of Financial Industry Risk Managers (AIFIRM) Position Paper N. 14**
 Position Paper Title: "Artificial Intelligence: Applications of Machine Learning and Predictive Analytics in Risk Management".
 Authors: S. Bonini, G. Caivano, P. Cerchiello, P. G. Giribone
- January 2019** **Springer – Chapter 22 in "Neural Advances in Processing Nonlinear Dynamic Signal"**
 Chapter Title: "Yield curve estimation under extreme conditions: do RBF networks perform better?"
 Authors: A. Cafferata, P. G. Giribone, M. Neffelli, M. Resta
- December 2018** **International Journal of Financial Engineering, Vol.4, N. 4**
 Scientific Paper Title: "Combining robust Dynamic Neural Networks with traditional technical indicators for generating mechanic trading signals".
 Authors: P. G. Giribone, S. Ligato, F. Penone
- December 2018** **Risk Management Magazine, Vol. 13, N. 3**
 Scientific Paper Title: "Modeling seasonality in inflation indexed swap through machine-learning techniques: analysis and comparison between traditional methods and neural networks"
 Authors: O. Caligaris, P. G. Giribone
- December 2018** **International Journal of Financial Engineering, Vol.4, N. 4**
 Scientific Paper Title: "Design of an artificial Neural Network battery for an optimal recognition of patterns in financial time series".
 Authors: S. Fioribello, P. G. Giribone
- August 2018** **Risk Management Magazine, Vol. 13, N. 2**
 Scientific Paper Title: "Implementation of AFO technique for the estimation of GARCH(1,1) parameters: performance comparison with traditional solvers".
 Authors: P. G. Giribone
- April 2018** **Risk Management Magazine, Vol. 13, N. 1**
 Scientific Paper Title: "Accounting for derivatives in non-financial companies in light of Legislative Decree no. 139/2015 and of accounting standard OIC 32".
 Authors: M. Fabbri, P. G. Giribone
- December 2017** **Risk Management Magazine, Vol. 12, N. 3**
 Scientific Paper Title: "Volatility surface reconstruction through auto-associative neural networks: a case-study based on Nonlinear Principal Component Analysis".
 Authors: O. Caligaris, P. G. Giribone, M. Neffelli
- November 2017** **International Journal of Circuits, Systems and Signal Processing, Vol. 11**
 Scientific Paper Title: "An innovative nature-inspired heuristic combined with Response Surface Methodology to find the optimal region in Discrete Event Simulation Models".
 Authors: P. G. Giribone, L. Cassettari, M. Mosca, R. Mosca
- September 2017** **International Journal of Financial Engineering, Vol.4, N. 2**
 Scientific Paper Title: "Negative interest rates effects on option pricing: Back to basics?".
 Authors: G. Burro, P. G. Giribone, S. Ligato, M. Mulas, F. Querci
- September 2017** **Risk Management Magazine, Vol. 12, N. 2**
 Scientific Paper Title: "Non supervised learning paradigms for neural networks in financial markets: design of a self-organizing maps to track market anomalies".
 Authors: A. Cafferata, P. G. Giribone
- June 2017** **Modern Economy, Vol. 9, N. 6**
 Scientific Paper Title: "The effects of negative nominal rates on the pricing of American Calls: some theoretical and numerical insights".
 Authors: A. Cafferata, P. G. Giribone, M. Resta

- March 2017** **AIFIRM Magazine – Financial Industry Risk Managers Association, Vol. 12, N. 1**
 Paper Title: "Fuzzy C-means clustering as automatic algorithm for the detection of market anomalies".
 Authors: P. G. Giribone, O. Caligaris, S. Fioribello
- March 2017** **International Journal of Financial Engineering, Vol.4, N. 1**
 Scientific Paper Title: "The effects of negative interest rates on the estimation of option sensitivities: the impact of switching from a log-normal to a normal model".
 Authors: P. G. Giribone, S. Ligato, M. Mulas
- September 2016** **AIFIRM Magazine – Financial Industry Risk Managers Association, Vol. 11, N. 3**
 Article Title: "Fuzzy Logic implementation for the optimal portfolio management: modeling an investor risk aversion through soft-computing techniques".
 Authors: P. G. Giribone, O. Caligaris, S. Fioribello, S. Ligato
- August 2016** **International Journal of Financial Engineering, Vol.3, N. 2**
 Scientific Paper Title: "Flexible-Forward pricing through Leisen-Reimer trees: implementation and performance comparison with traditional Markov chains"
 Authors: P. G. Giribone, S. Ligato
- June 2016** **AIAF (Italian Association of Financial Analysts) Magazine, Vol. 99**
 Article Title: "Consideration on the current state of option pricing having Euribor as underlying parameter"
 Authors: P. G. Giribone, S. Ligato
- June 2016** **AIFIRM Magazine – Financial Industry Risk Managers Association, Vol. 11, N. 2**
 Article Title: "Design of a robust calibration of the Hull-White stochastic tree through the implementation of global search heuristic"
 Authors: P. G. Giribone, S. Fioribello, S. Ligato
- March 2016** **Applied Mathematical Sciences, Vol. 10, N. 20**
 Scientific Paper Title: "Attraction Force Optimization (AFO): a deterministic nature-inspired heuristic for solving optimization problems in stochastic simulation"
 Authors: P. G. Giribone, L. Cassettari, S. Fioribello, I. Bendato
- October 2015** **Applied Mathematical Sciences, Vol. 9, N. 124**
 Scientific Paper Title: "Monte Carlo method for pricing complex financial derivatives: an innovative approach to the control of convergence"
 Authors: P. G. Giribone, R. Mosca, L. Cassettari, I. Bendato
- September 2015** **AIFIRM Magazine - Financial Industry Risk Managers Association, Vol. 10, N. 3**
 Article Title: "Modeling the yield curves through machine-learning techniques: analysis and comparison between traditional regressive methods and neural networks"
 Authors: P. G. Giribone, O. Caligaris
- June 2015** **AIFIRM Magazine - Financial Industry Risk Managers Association, Vol. 10, N. 2**
 Article Title: "Application of a feed-forward Neural Network for the reconstruction of volatility surfaces"
 Authors: P. G. Giribone, S. Ligato, O. Caligaris
- June 2015** **International Journal of Financial Engineering, Vol. 2, N.2**
 Scientific Paper Title: "Option pricing via Radial Basis Functions: Performance comparison with traditional numerical integration scheme and parameters choice for a reliable pricing"
 Authors: P. G. Giribone, S. Ligato
- December 2014** **AIFIRM Magazine - Financial Industry Risk Managers Association, Vol. 9, N.4**
 Article Title: "Proposal and validation of a new heuristic applied to the calibration of stochastic interest-rate trees: the Attraction Force Optimization (AFO)"
 Authors: P. G. Giribone, S. Ligato, S. Fioribello
- June 2014** **ASSIOM Forex – The Financial Markets Association – Journal**
 Article Title: "Study and implementation of the Credit Value Adjustment in an automatic pricing framework"
 Authors: P. G. Giribone, P. Raviola, S. Ligato

- June 2014** **AIFIRM Magazine - Financial Industry Risk Managers Association, Vol. 9 N.1**
 Article Title: "Designing a reliable control of the error committed by the introduction of low-discrepancy sequences in a Monte Carlo pricing framework".
 Authors: P. G. Giribone, S. Ligato
- July 2013** **MathWorks – User Story**
 Article Title: "Carige Bank integrates a MATLAB based valuation library with its enterprise pricing and risk platform".
 Authors: P. Raviola, S. Ligato, P. G. Giribone
- June 2013** **AIFIRM Magazine - Financial Industry Risk Managers Association, Vol. 8 N.2**
 Article Title: "Methodologies for improving the rate of convergence in Monte Carlo simulations: Analysis and implementation in a pricing framework".
 Authors: P. G. Giribone, S. Ligato
- June 2012** **AIFIRM Magazine - Financial Industry Risk Managers Association, Vol. 7 N.2**
 Article Title: "Bias correction using conditional montecarlo technique: analysis and implementation in an automatic pricing system".
 Authors: P. G. Giribone, S. Ligato, S. Ventura
- December 2011** **AIFIRM Magazine - Financial Industry Risk Managers Association, Vol. 6 N.4**
 Article Title: "Critical analysis of methods for the generation of valid correlation matrix: Theory and comparison in pricing systems based on Monte Carlo".
 Authors: P. G. Giribone, S. Ligato
- March 2011** **AIFIRM Magazine - Financial Industry Risk Managers Association, Vol. 6 N.1**
 Article Title: "Study of convergence in discrete multinomial equity pricing models: theory and applications for controlling errors".
 Authors: P. G. Giribone, S. Ventura
- December 2010** **Applied Mathematical Sciences, Vol.4, N. 76**
 Scientific Paper Title: "The stochastic analysis of investments in industrial plants by simulation models with control of experimental error: theory and application to a real business case".
 Authors: L. Cassettari, P. G. Giribone, M. Mosca, R. Mosca
- March 2010** **AIFIRM Magazine - Financial Industry Risk Managers Association, Vol. 5 N.1**
 Article Title: "MSPE and Monte Carlo pricing method: techniques of convergence in financial models".
 Authors: R. Mosca, L. Cassettari, P. G. Giribone

 CONFERENCE PROCEEDINGS

- 4th April 2023** **European School of Banking Management – Risk, Compliance and Internal Audit**
 Title: "Artificial Intelligence and the new scenarios for Risk Management".
 Author: P. G. Giribone
- 26th November 2021** **XXVI National Conference of Labour Economics**
 Title: "The dynamics of Working Hours and Wages under Implicit Contracts".
 Authors: M. Guerrazzi, P. G. Giribone
- 28th May 2021** **Network Models for Financial Contagion and Systemic Risk – Session: Models for risks**
 Title: "Implementation of a Commitment Machine for an adaptive and robust Expected Shortfall estimation"
 Authors: M. Bagnato, P. G. Giribone
- 25th October 2020** **DATA ANALYTICS 2020 – Special Session: FinTech Risk Management**
 Title: "Seasonality Modeling through LSTM Network in Inflation-Indexed Swaps"
 Author: P. G. Giribone
- 23th October 2020** **SIE (Italian Economist Association) Annual Scientific Meeting**
 Title: "Dynamic Wage Bargaining and Labour Market Fluctuations: the role of productivity shocks".
 Authors: M. Guerrazzi, P. G. Giribone

- 10th June 2020** **International Conference on Environment and Electrical Engineering - IEEEIC 2020**
 Title: "Electricity Spot Prices Forecasting for MIBEL by using Deep Learning: a comparison between NAR, NARX and LSTM networks". (Technical Area: Regulation and Electricity Markets)
 Authors: M. de Simon-Martin, S. Bracco, E. Rosales-Asensio, G. Piazza, F. Delfino, P. G. Giribone
- 5th February 2020** **Labour Economics Conference – University of Pisa**
 Title: "The dynamics of Working Hours and Wages under Implicit Contracts".
 Authors: M. Guerrazzi, P. G. Giribone
- 24th October 2019** **SIE (Italian Economist Association) Annual Scientific Meeting – Palermo**
 Title: "The dynamics of Working Hours and Wages under Implicit Contracts".
 Authors: M. Guerrazzi, P. G. Giribone
- 24th July 2019** **Accounting, Finance and Economics Conference – University of Waikato (New Zealand)**
 Title: "The dynamics of Working Hours and Wages under Implicit Contracts".
 Authors: M. Guerrazzi, P. G. Giribone
- 11th April 2019** **AIFIRM (Italian Association of Risk Management) Position paper presentation – Milan**
 Title: "Artificial Intelligence in Risk Management: Machine Learning methods in application to market risk".
 Authors: A. Agosto, P. G. Giribone
- 6th December 2018** **XIV Convention AIFIRM (Italian Association of Risk Management) – Milan**
 Title: "Artificial Intelligence: Applications of Machine Learning and Predictive Analytics in Risk Management".
 Authors: S. Bonini, G. Caivano, P. Cerchiello, P. G. Giribone
- 25th January 2018** **XIX Quantitative Finance Workshop, QFW2018 – UniRoma3**
 Title: "Interest rates term structure models and their impact on actuarial forecasting".
 Authors: A. Cafferata, P. G. Giribone, M. Resta
- 28th November 2017** **XIII Convention AIFIRM (Italian Association of Risk Management) – Milan**
 Title: "Machine Learning: a diagnostic tool for the detection of market anomalies".
 Authors: A. Cafferata, P. G. Giribone
- 14th June 2017** **ABI (Italian Banking Association) "Risk and Supervision 2017", Market Risk – Rome**
 Title: "Pricing and Hedging problems linked with negative interest rates".
 Author: P. G. Giribone
- 15th June 2017** **WIRN 2017, 27th Italian Workshop on Neural Networks Proceedings**
 Title: "Yield curve estimation under extreme conditions: do RBF networks perform better".
 Authors: A. Cafferata, P. G. Giribone, M. Neffelli, M. Resta
- 16th November 2016** **XII Convention AIFIRM (Italian Association of Risk Management) – Milan**
 Title: "Quantitative finance studies and insights".
 Author: P. G. Giribone
- 28th August 2016** **IEEE International Conference on Mathematics and Computers in Sciences and Industry MCSI'16 Conference Proceedings**
 Title: "Optimization of stochastic discrete event simulation models using AFO heuristic".
 Authors: P. G. Giribone, L. Cassettari, S. Fioribello, I. Bendato
- 4th November 2014** **MATLAB EXPO (Milan) - Conference Proceedings, session: Technical Computing**
 Title: "MATLAB in CARIGE: Estimation of the Credit and Debt Value Adjustment (CVA/DVA)".
 Authors: P. Raviola, P. G. Giribone, S. Ligato
- 14th June 2012** **WSEAS International Conference on Mathematics and Computers in Business and Economics - MCBE'12 Conference Proceedings**
 Title: "Reliable control of convergence in Monte Carlo pricing methods for options based on MSPE techniques".
 Authors: R. Mosca, L. Cassettari, P. G. Giribone
- 25th November 2010** **DOGE.I (Organizational and economic management disciplines) – University of Genoa**
 Title: "An innovative approach to the Monte Carlo Pricing method: the control of convergence in financial options through the evolution of experimental error".
 Author: P. G. Giribone

LECTURES AND SEMINARS

23rd May 2022	Master's Degree in Industrial Engineering and Management – University of Genoa Lecture: "Certificate Risk Analysis using a Monte Carlo framework".
11th March 2022	Master's Degree in Industrial Engineering and Management – University of Genoa Lecture: "Bellman's Principle of Optimality and Option Pricing".
20th May 2021	Master's Degree in Industrial Engineering and Management – University of Genoa Online Lecture: "Option Pricing: the Radial Basis Functions (RBF) approach".
14th April 2021	DEM Seminar Series, Faculty of Economics – University of Pavia Online Lecture: "The impact of seasonality on Inflation-Indexed Swaps Valuation".
12th April 2021	Master's Degree in Industrial Engineering and Management – University of Genoa Online Lecture: "Option Pricing: the Finite Elements Method (FEM) approach".
14th July 2020	AIFIRM – REFINITIV Webinar – Valuation Risk Management in the age of crisis Webinar: "The impact of negative interest rates on pricing: considerations and methods for the fair value and risk measures"
June 2020	Visiting Lecture Notes, University of Leon (Depto. De Ing. Electrica y de Sistemas) Online Lectures: "Prices forecasting using Dynamic Neural Networks: from NAR to LSTM networks".
29th May 2020	Master's Degree in Industrial Engineering and Management – University of Genoa Online Lecture: "EAKO Option Pricing: Advanced Lattice Techniques".
22nd May 2020	Master's Degree in Industrial Engineering and Management – University of Genoa Online Lecture: "Artificial Bee Colony: theory and applications in Response Surface Methodology".
27th May 2019	Phd in Economics – University of Genoa Seminar: "Introduction to Matlab modeling".
24th May 2019	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Implementation of Fuzzy Logic for modeling investor's risk aversion".
10th May 2019	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Continuous Ant Colony Optimization: theory and applications in Response Surface Methodology".
11th March 2019	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Design, Implementation and Validation of a Financial Forecasting Neural Network".
15th May 2018	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Deep Learning and technical analysis: Design of a neural networks battery for the automatic identification of financial patterns".
2nd April 2018	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Analytical derivation of the plain vanilla option greeks".
21st March 2018	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Particle Swarm Optimization: theory and applications in Response Surface Methodology".
3rd May 2017	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Attraction Force Optimization in application to stochastic discrete event simulation".
26th April 2017	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Statistical analysis of the optimal region in industrial stochastic simulators: the Box-Hunter methodology".
22nd March 2017	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Numerical approximation of finite difference methods in application to Black-Scholes-Merton pricing model".

17 th November 2016	Master's Degree in Energy Engineering – University of Genoa Lecture: "Symbolic analysis using Maple".
6 th April 2016	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Theory and applications of feed-forward neural networks in Response Surface Methodology".
16 th March 2016	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "A modified version of k-opt methodology in application to Response Surface Methodology".
9 th March 2016	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Triangular mesh methodologies in RSM (Response Surface Methodology)".
24 th November 2015	Master's Degree in Energy Engineering – University of Genoa Lecture: "Stochastic processes for modeling the price of Italian electricity".
23 rd October 2015	Mathworks – Programming Techniques with Matlab 2015 – Genoa Seminar: "Research and Development in the Financial Administration of CARIGE Bank".
3 rd September 2015	Ph.D. in Mathematics Engineering – University of Genoa Seminar: "Critical analysis of AFO (Attraction Force Optimization) heuristic".
8 th May 2015	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Optimization inspired by thermodynamic simulations: theory and applications".
6 th May 2015	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Multi-objective optimization techniques: theory and applications".
10 th April 2015	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Tabu search metaheuristic: theory and applications".
27 th January 2015	Mathworks Webinar Webinar: "Counterparty risk and Credit Valuation Adjustment (CVA) using Matlab".
24 th July 2014	Ph.D. in Mathematics Engineering – University of Genoa Seminar: "Implementation of AFO heuristic for the calibration of interest rates stochastic trees".
7 th May 2014	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Attraction Force Optimization: Proposal and validation of a new technique".
16 th April 2014	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Geometric generalization of the Nelder and Mead simplex".
16 th April 2014	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Analytical derivation of the Black-Scholes closed formula".
2 nd April 2014	Master's Degree in Mathematics – University of Genoa Seminar: "Numerical control of the error in Black-Scholes alternative Monte Carlo pricing methods".
19 th March 2014	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Quasi Monte Carlo methods in financial simulators: theory, applications and control".
10 th April 2013	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Techniques for reducing variance in financial simulators".
28 th November 2012	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Techniques for controlling variance in financial simulators".
3 rd May 2012	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Stochastic models for the dynamics of shares".
4 th April 2012	Ph.D. in Public Finance and Economics – University of Genoa Lecture: "Matlab Fundamentals".
25 th May 2011	Master's Degree in Industrial Engineering and Management – University of Genoa Seminar: "Numerical methodologies for optimization".

PERSONAL SKILLS

Mother tongue Italian

Other language(s) English

First Certificate in English language (FCE Exam session: June 2006)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
B2	B2	B2	B2	B2

OTHER SKILLS

- **Information Technology: Software :**

Operating System:

- Microsoft Windows (all versions);
- Linux Ubuntu;
- Android

Programming Languages:

- DOT. NET C#;
- Visual Basic;
- VBA (Visual Basic for Applications);
- SQL;
- Python
- Java (Base);
- Javascript (Base);
- PHP (Base);
- C++ (Base)

Word Processor:

- TeX;
- LaTeX

Software for mathematical and statistical analysis:

- Matlab;
- R;
- Julia;
- Maple;
- Wolfram Mathematica;
- Design Expert

Software for numerical simulation:

- Simulink;
- Simul8;
- Stella;
- Power Sim

Software for web editing:

- Joomla;
- Wordpress;

Software for graphics:

- Adobe Photoshop;
- Gimp

Software for database management:

- Microsoft Access;
- Sybase;
- Aquadata Studio;
- IBM-DB2 (Base)

Software for office applications:

- Microsoft Office;
- Apache - Open Office
- The Document Foundation – Libre Office

- **Communication Skills**

Good propensity for teamwork and a goal oriented approach

- **Organization / Managerial Skills**

Good inclination to manage university research group

- **Membership**

AIFIRM (Financial Industry Risk Managers Association) – Author, Scientific Referee,
Member of the Editorial Board and Coordinator of Artificial Intelligence committee
FINMAB – Finance MathWorks Advisory Board Member
ALIMA (Association for the teaching of Mathematics) – Member
UMI (Italian Mathematics Association) – Member
SIdE (Italian Econometric Association) – Member
AIAF (Italian Association of Financial Analysts) – Member and Author
Frontiers Research Foundation – Review Editor (Artificial Intelligence in Finance)
Reviewer of the American Mathematical Society (AMS)