

## ARIANNA AGOSTO - CURRICULUM VITAE

Surname and Name                      Agosto Arianna  
Title    PhD  
Position                                        Assistant Professor (Ricercatore a Tempo Determinato tipo A)  
Department of Economics at Management  
University of Pavia

**CURRENT POSITION**  
(since 1 March 2021)                      Assistant Professor in Statistics (Ricercatore a Tempo Determinato tipo A) at  
Department of Economics and Management, University of Pavia

Main research topics:

Univariate and multivariate count time series models applied to financial and epidemic contagion; Vector AutoRegressive models for financial and credit risks; Multivariate score-driven models; Study of interdependence and explosive dynamics in the cryptocurrency market; Environmental, Social and Governance (ESG)-based credit risk models; Network models for systemic risk; Statistical models for fintech risk management.

**NATIONAL HABILITATIONS**                      Habilitated as Associate Professor (ASN II Fascia).  
Validity: 12 November 2020 – 12 November 2031.

### PREVIOUS ACADEMIC POSITIONS

January 2019 – February 2021                      Post-doctoral research fellow (Assegnista di Ricerca) at Department of  
Economics and Management, University of Pavia

September 2013 – January 2014                      Post-doctoral research fellow (Assegnista di Ricerca) at Department of  
Statistical Sciences, University of Bologna

### WORK EXPERIENCE

2016 – 2019    Risk Modeling, Gruppo Banca Carige

2014 – 2016    Risk Management, Gruppo Bancario Credito Valtellinese

## EDUCATION

- 2011-2014 PhD in Statistics, University of Bologna
- 2007-2009 Master degree in Finance and Risk Management (with honors), University of Parma
- 2004-2007 Bachelor degree in Economics and Finance (with honors), University of Parma

## TEACHING

- A.Y. 2023-2024 *Risk Management* course (EC2U joint master degree, University of Pavia)  
*Laboratory on Financial Management* (master degree in Finance), Department of Economics and Management, University of Pavia
- A.Y. 2022-2023 *Applied Finance Lab* course (master degree in Economics, Finance and International Integration), Department of Economics and Management, University of Pavia  
*Statistica* course (bachelor degree in Economics), Department of Economics and Management, University of Pavia
- A.Y. 2021-2022 *Statistica* course (bachelor degree in Economics), Department of Economics and Management, University of Pavia
- A.Y. 2020-2021 *Data Science* course (master degree in Economics, Finance and International Integration), Department of Economics and Management, University of Pavia  
*Statistica per la ricerca sperimentale e tecnologica* course (bachelor degree), Faculty of Medicine, University of Pavia
- A.Y. 2019-2020 *Data Science* course (master degree in Economics, Finance and International Integration), Department of Economics and Management, University of Pavia
- A.Y. 2012-2013 Tutor for *Econometrics and Advanced Econometrics* courses, Department of Statistics, University of Bologna

## MAIN SCIENTIFIC PUBLICATIONS

- Zambon, L., Agosto, A., Giudici, P., and Corani, G. (2024). Properties of the reconciled distributions for Gaussian and count forecasts. *International Journal of Forecasting*.
- Agosto, A., and Cerchiello, P. (2024). A data-driven test approach to identify COVID-19 surge phases: an alert-warning tool. *Statistics*, 58(2), 422-436.
- Agosto, A., Cerchiello, P., and Giudici, P. (2023). Bayesian learning models to measure the relative impact of ESG factors on credit ratings. *International Journal of Data Science and Analytics*, 1-12.
- Agosto, A., Giudici, P., and Tanda, A. (2023). How to combine ESG scores? A proposal based on credit rating prediction. *Corporate Social Responsibility and Environmental Management*.
- Agosto, A., and Giudici, P. (2023). Cyber Risk Contagion. *Risks*, 11(9), 165.
- Agosto, A., Cerchiello, P., and Pagnottoni, P. (2022). Sentiment, Google queries and explosivity in the cryptocurrency market. *Physica A: Statistical Mechanics and its Applications*, 605, 128016.
- Agosto, A., and Ahelegbey, D. F. (2022). Default count-based network models for credit contagion. *Journal of the Operational Research Society*, 73(1), 139-152.
- Agosto, A., Campmas, A., Giudici, P., and Renda, A. (2021). Monitoring COVID-19 contagion growth. *Statistics in medicine*, 40(18), 4150-4160.
- Adelfio, G., Agosto, A., Chiodi, M., and Giudici, P. (2021). Financial contagion through space-time point processes. *Statistical Methods & Applications*, 30(2), 665-688.
- Agosto, A., Ahelegbey, D.F., and Giudici, P. (2020). Tree Networks to Assess Financial Contagion. *Economic Modelling*, 85, 349-366.
- Agosto, A., and Cafferata, A. (2020), Financial Bubbles: A Study of Co-Explosivity in the Cryptocurrency Market. *Risks*, 8(2), 34.
- Agosto, A., and Giudici, P., (2020), A Poisson Autoregressive Model to Understand COVID-19 Contagion Dynamics. *Risks*, 8(3), 77.
- Agosto, A., and Giudici, P. (2020). COVID-19 contagion and digital finance. *Digital finance*, 2(1), 159-167.
- Agosto, A., Giudici, P., and Leach, T. (2019). Spatial Regression Models to Improve P2P Credit Risk Management. *Frontiers in Artificial Intelligence*, 2, 6.
- Agosto, A., Mainini, A., and Moretto, E. (2019). Stochastic Dividend Discount Model: covariance of random stock prices. *Journal of Economics and Finance*, 43, 552-568.
- Agosto, A., Cavaliere, G., Kristensen, D., and Rahbek, A (2016). Modeling corporate defaults: Poisson autoregressions with exogenous covariates (PARX). *Journal of Empirical Finance*, 38(B), 640-663.
- Agosto, A., and Moretto, E. (2015). Variance matters (in stochastic dividend discount models). *Annals of Finance*, 11(2), 283-295.
- Agosto, A., and Moretto, E. (2012). Exploiting default probabilities in a structural model with nonconstant barrier. *Applied Financial Economics*, 22(8), 667-679.

**EDITORIAL ACTIVITY**

October 2023 - current      Associate Editor of the *Statistics* journal

2020 - current      Associate Editor of the *Frontiers in Artificial Intelligence* journal

**LANGUAGE SKILLS**      Italian (mother tongue), English (fluent)

**PROGRAMMING SKILLS**      R, Matlab, SAS, SPSS