

CURRICULUM VITAE OF CINZIA FRANCESCHINI

PERSONAL DATA

Name	Franceschini Cinzia
Place of birth	Rome (Italy)
Date of birth	01 April 1970
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EDUCATION

1. **Ph.D in Statistics**, 14 February 2000, University “G. D’Annunzio”, Chieti-Pescara. Thesis title: “Analysis of the conditionally independence among the components of multivariate spatial series through graphical models”;
2. **M.Sc Business and Economics**, 5 March 1996, University “G. D’Annunzio”, Chieti-Pescara. Final mark 105/110. Topic and thesis title: Statistics, “Dynamic Analysis of the employee demand in Abruzzo”;

TRAINING COURSES

1. English language course "B1/B2 level, Scientific English" (40 hours course, period 01 March - 17 May 2021), University Language Center, Urbino University;
2. Tutorial: R and mixture models. Title: Introduction to R Programming and EM algorithm for Gaussian mixtures, *Prof. Jochen Einbeck, Durham University, UK*. Conference CFE-CMStatistics 2019, London 13 December 2019;
3. English language course "A2/B1 level" (40 hours course period second term 2017.2018), University Language Center, Urbino University;
4. English language course "Presenting and Communicating in English in Academic Contexts", 06/02/2017 - 10/02/2017 (20 hours), University Language Center, Urbino University;
5. Tutorial COMPONENT-BASED PATH MODELING, Vincenzo ESPOSITO VINZI, ESSEC Business School, Paris. Pisa, 05/12/2014;
6. Course "Programming with R", Andrea Spanò, Quantide srl, Hotel Michelangelo Milan, 30 and 31 January 2014;
7. Introduction to Bootstrap techniques, Professor Rosa M. Crujeiras Casais. Department of Statistica, Informatica, Applicazioni “G. Parenti”, Florence, 23 - 24 January 2013.

8. "Multivariate Statistics with R", Department of Scienze Statistiche, University of Rome, 27-29 February 2008;
9. Italian Statistical Society summer school "Statistical Methods for Quality", University of Naples "Federico II", 20-24 September 1999;
10. "Generalised Linear Models and Introduction to Graphical Models" organized by Socrates Program, International Biometric Society, Numerical Algorithms Group of Oxford, Royal Statistical Society Statistics OR and Probabilistic Methods Research Centre (STORM) of London, Istituto di Statistica Medica e Biometria di Milano, Florence 14-18 September 1998;
11. English language course (60 lessons), in the Callan School in London, March 1998.
12. "Modelling Multivariate Dependencies in Epidemiology" jointly organized by the Biometric Italian Society and the Statistical Department of the University of Florence, San Miniato (PI) 1-5 December 1997;
13. The Fourth Statistical Summer School on "Theory and Sampling techniques", Paestum (SA) 8-13 September 1997;
14. "One Day Advanced Course in Classification", Prof. Allan Gordon. Pescara, 2 July 1997.

LANGUAGE SKILLS

	Listening	Reading	Speaking	Writing
ENGLISH	B2	C1	B2	C1

SOFTWARE SKILLS

- Matlab, R, SPSS;
- Windows environment applications as Excel, Word, PowerPoint;
- Programming in Visual Basic.

PROFESSIONAL EXPERIENCES

- 2014 Collaboration with "Comitato Unico di Garanzia per le Pari Opportunità, la valorizzazione del benessere di chi lavora e contro le discriminazioni (CUG)", Urbino University, as member of the project CUG "Stiamo bene!". Survey on the conditions of organizational well-being of the University of Urbino staff.
- 2013 Collaboration with COOMUNICA SO.C.COOP in Fano. Political Survey.
- 2008 Collaboration with CIMA, "Centro Interuniversitario di ricerca in Monitoraggio Ambientale", University of Genova;

- 2007 Collaboration with CIMA, "Centro Interuniversitario di ricerca in Monitoraggio Ambientale", University of Genova;
- 2004 Collaboration to the report preparation on the customer satisfaction of users of Amtab services S.p.A.;
- 2001/2002 Employee of OnLine Telemarketing s.r.l., as commercial adviser and team leader;
- 2000 Collaboration with the marketing research institute Sinetica Marketing Service s.r.l. as supervisor and interviewer, room assistance, organizational control of some research processes, briefing, management of appointments and interviews, room assistant in two focus groups.

TEACHING ACTIVITIES

From the academic year 2003-2004 to the academic year 2020-2021:

Bologna University: Biometry and Statistics, Statistical Analysis and Modelling, Crash Course in Mathematics and Statistics, Crash Course in Statistics, Business data Analysis, Market Analysis, Quantitative Methods For Decision Analysis, Statistical Methods for Economic Analysis, Crash Course and Laboratory in Statistics, R software.

Tuscia University: Introduction to exploratory statistics, Ph.D in Science of Plant and Animal Production, Exploratory data analysis with the R software".

University of Rome Tor-Vergata: Laboratory of data analysis, Master in Data Science.

Urbino University: IT and statistical skills, Statistical models for the job and security markets.

Macerata University: Social Statistics.

Foggia University: Economic Statistics.

For the academic year 2008-2009 and 2014-2015, the following teaching support:

University of Ancona: Statistics.

University of Urbino: Statistical Methods for Marketing.

RESEARCH ACTIVITIES

07/03/2022

06/03/2023 Post doc in statistics, University of Scienze Gastronomiche (Pollenzo, Bra, Italy). Research project "Nourishing the School".

15/04/2021 28/08/2021	Post doc in Applied Economic, Center for Advances Studies in Tourism (CAST), Dipartimento di Scienze Statistiche Paolo Fortunati, Bologna University. Research Project: "The economic and social impact of sporting events on the territory"
01/11/2020 30/11/2020	Post doc in Statistics, Tuscia University. Research Project "Biodiversity and sustainable use of natural and agro-forestry-pastoral ecosystems: biostatistical methods".
02/11/2018 31/10/2020	Post doc in Statistics, Tuscia University. Title "Biodiversity and sustainable use of natural and agro-forestry-pastoral ecosystems: biostatistical methods".
01/03/2016 28/02/2016	Post doc in Economic Statistics. University of Chieti-Pescara. Research Project " Spatial econometrics models for local productivity estimation".
16/06/2008 15/12/2008	Research contract in Statistics, University of Urbino.
2007	Temporary collaboration in the Italian Research Project of National Interest (PRIN 2006), "Flexible classes of distributions obtained by symmetry perturbation: probabilistic, statistical and applicative aspects";
2007	Data processing in the research "Corporate Social Responsibility and Disability", Dipartimento di Metodi Quantitativi e Teoria Economica, University of Chieti-Pescara;
2006	"Statistical analysis for research management and globalization in collaboration with Scuola di Direzione aziendale (SDA) Bocconi", Bergamo University (School of Management);
2004	Temporary collaboration for software development activities for the Skew Normal as part of the research project entitled "Multilevel models for the analysis of the Apulian university system", Foggia University, Dipartimento di Scienze Economiche, Matematiche e Statistiche;
2004	Statistical consultancy for the Scuola di Direzione Aziendale (SDA) "Luigi Bocconi", Milan;
2003	Statistical Analysis and computation in the research project "Survey on the diffusion of ICT in the Public Administration of the Marche region", Urbino University;

2000 Collaboration in the statistical and computational contents of a research work conducted on the Italian movies industry by the "Luigi Bocconi" University of Milan.

CONFERENCE PRESENTATIONS

2019 *Multivariate kurtosis with the R package MultiKurt* (with Nicola Loperfido). Conference CFE-CMStatistics 2019, London 14-16 December 2019. Organized-Invited Session. (speaker)

2019 *Toward a sustainable ecotourism development in five Italian Apennine National Parks* (with Sonia Ferrari, Stefano Poconi, Alessandro Ruggieri, Goffredo Filibeck, Gianluca Piovesan). Conference TNC2019 Tourism Naturally, University of Derby Buxton, UK, 4-6 June, 2019

2018 *A multivariate approach to measure the dimension of a bank* (with Alessandro Berti and Nicola Loperfido). Conference CFE-CMStatistics Pisa 14-16 December 2018. (Organized-Invited Session)

2018 *MultiKurt: An R package for kurtosis-based data analysis* (with Nicola Loperfido). Conference CFE-CMStatistics 2018 Pisa 14-16 December 2018. (Organized-Invited Session) (speaker)

2018 *Exploratory Projection Pursuit for Multivariate Financial Data*. Conference MAF 2018. Madrid 4-6 April 2018, Organized-Invited Session (speaker)

2016 *MultiSkew: An R package for skewness-based data analysis* (with Nicola Loperfido). Conference CFE-CMStatistics 2016 Seville 9-11 December 2016. (speaker)

2016 *An Algorithm for Finding Projections with Extreme Kurtosis* (with Nicola Loperfido). 48th Meeting of the Italian Statistical Society, Salerno 8-10 June 2016

2015 *MaxSkew: An R package for skewness-based projection pursuit* (with Nicola Loperfido). Conference CFE-CMStatistics 2015 London 12-14 December 2015. (speaker)

2014 *Linear transformations to symmetry* (with Nicola Loperfido). Conference CFE-ERCIM 2014.

2014 *Il progetto Benessere organizzativo: Stiamo Bene! Indagine sulle condizioni di benessere organizzativo del personale dell'Università degli Studi di Urbino Carlo Bo. Mettiamola in positivo!!!* Presentazione del Piano di Azioni Positive dell'Università degli Studi di Urbino. (speaker)

- 2013 *Stress lavoro-correlato: un approccio statistico.* Conference LA PREVENZIONE DEI RISCHI DA STRESS-LAVORO CORRELATO PROFILI NORMATIVI E METODICHE DI VALUTAZIONE. (SPEAKER)
- 2012 *Quality in Cinema. Preliminary Analysis.* (with Nicola Loperfido and Federica Murmura). 18th IGWT Symposium.
- 2012 *Testing for Normality when the Sampled Distribution is Extended Skew-Normal* (with Nicola Loperfido). Conference MAF 2012.
- 2011 *Modelling predictive asymmetry in multivariate financial time series* (with Nicola Loperfido). Conference CFE-ERCIM 2011.
- 2010 *Some Inequalities between Measure of Multivariate Kurtosis, with Application to Financial Returns* (with Nicola Loperfido). Conference MAF 2010.
- 2008 *A Skewed GARCH-Type Model for Multivariate Financial Time Series.* (with Nicola Loperfido). Conference MAF 2008.
- 2005 *Spatial prediction Based on Skew Normal Models (Previsioni spaziali basate su modelli normali asimmetrici)* (with Nicola Loperfido). Conference SIS 2005.

ORGANIZED CONFERENCES

- 2022 Session organizer “Advances in multivariate statistics”, CMStatistics2022 Conference (15th International Conference of the ERCIM WG on Computational and Methodological Statistics).

PUBLICATIONS

- 2022 Franceschini C., Loperfido N. The Mardia’s Kurtosis of a Multivariate GARCH Model. Accepted for publication in the Springer book MAF2022
- 2022 Scoppola, A.; Angeloni, D.; Franceschini, C. Classical Morphometrics in *V. arvensis* and *V. kitaibeliana* (*Viola* sect. *Melanium*) Reveals Intraspecific Variation with Implications for Species Delimitation: Inferences from a Case Study in Central Italy. *Plants* **2022**, *11*, 379. <https://doi.org/10.3390/plants11030379>
- 2021 Viola P, Adriani S, Rossi CM, Franceschini C, Primi R, Apollonio M, Amici A. Anthropogenic and Environmental Factors Determining Local Favourable Conditions for Wolves during the Cold Season. *Animals*. 2021; *11*(7):1895. <https://doi.org/10.3390/ani11071895>

- 2020 Stefano Poponi, Jordan Palli, Sonia Ferrari, Goffredo Filibeck, T'ai Forte, Cinzia Franceschini, Alessandro Ruggieri, Gianluca Piovesan (2020). Towards the development of sustainable ecotourism in Italian National Parks of the Apennines: Insights from hiking guides. *ECOLOGY AND SOCIETY*, 25 (4): 46, <https://doi.org/10.5751/ES-11996-250446>
- 2019 Franceschini, C., Loperfido, N. MaxSkew and MultiSkew: Two R Packages for Detecting, Measuring and Removing Multivariate Skewness. *Symmetry* **2019**, *11*, 970.
- 2018 Franceschini C. (2018) Exploratory Projection Pursuit for Multivariate Financial Data. In: Corazza M., Durbán M., Grané A., Perna C., Sibillo M. (eds) *Mathematical and Statistical Methods for Actuarial Sciences and Finance*. Springer, Cham DOI https://doi.org/10.1007/978-3-319-89824-7_64, Print ISBN 978-3-319-89823-0, Online ISBN 978-3-319-89824-7, pp 357-361
- 2017 N. Loperfido, C. Franceschini, *An Algorithm for Finding Projections with Extreme Kurtosis*. volume Springer, *Studies in Theoretical and Applied Statistics* (Eds. Cira Perna, Monica Pratesi, Anne Ruiz-Gazen)
- 2016 Franceschini C., Loperfido N., *An Algorithm for Finding Projections with Extreme Kurtosis*. PROCEEDINGS of the 48th scientific meeting of the Italian Statistical Society. Editors: Monica Pratesi and Cira Pena ISBN: 9788861970618
- 2014 Franceschini, C., (2014). Stress, Lavoro e Malattie. "*Statistica & Società/Anno 3, N. 2 / Lavoro, Economia, Finanza*", ISSN 2282-233X
- 2014 Franceschini, C., (2014). Stress lavoro-correlato: un approccio statistico. In "*La prevenzione dei rischi da stress lavoro-correlato Profili normativi e metodiche di valutazione*" a cura di Luciano Angelini, I WORKING PAPERS DI OLYMPUS 31/2014, ISSN 2239-8066, pag. 122-151.
- 2014 Franceschini, C., Loperfido, N., (2014). Testing for Normality when the Sampled Distribution is Extended Skew Normal. In "*Mathematical and Statistical Methods for Actuarial Sciences and Finance*", Corazza M. and Pizzi C. (Eds.), Springer, pag.159-170.
- 2013 Cinzia Franceschini, Un'applicazione dell'Analisi delle Corrispondenze agli infortuni sul lavoro denunciati all'INAIL nella regione Marche durante l'anno 2011. In *Approfondimenti Olympus-Osservatorio per il monitoraggio permanente della legislazione e giurisprudenza sulla sicurezza del lavoro*. <http://olympus.uniurb.it/>

- 2012 F.Murmura, C. Franceschini, N.M,R, Loperfido (2012). Quality in Cinema. Preliminary Analysis. 18th IGWT Symposium "TECHNOLOGY AND INNOVATION FOR A SUSTAINABLE FUTURE: A COMMODITY SCIENCE PERSPECTIVE", Rome, September 24-28, 2012, ISBN 9788882862695.
- 2012 Franceschini, C., Loperfido, N., (2012). Some inequalities between measures of multivariate kurtosis, with application to financial returns. In "*Mathematical and Statistical Methods for Actuarial Sciences and Finance*", PERNA, CIRA, SIBILLO, MARILENA EDS., Springer, ISBN 978-88-470-2342-0, pag.211-218.
- 2010 Franceschini, C., Loperfido, N., (2010). A Skewed GARCH-Type Model for Multivariate Financial Time Series. In "*Mathematical and Statistical Methods for Actuarial Sciences and Finance XII*", Corazza M. and Pizzi C. (Eds.), Springer, ISBN: 978-88-470-1480-0, pag. 143-152.
- 2009 Franceschini, C., Loperfido, N., (2009). *Bolt: il velocista lento?* SIS-Magazine_ On line magazine della Società Italiana di Statistica.
- 2005 Spatial predictions based on skew-normal models (con Nicola Loperfido). *Atti del Convegno Intermedio SIS 2005*, 249-252. ISBN 88-7178-531-2.
- 2000 *Analisi dell'indipendenza condizionata tra le componenti delle serie spaziali multivariate attraverso l'utilizzo dei modelli grafici*, **Ph.D thesis**.

PROCEEDINGS

- 2005 Spatial predictions based on skew-normal models (with N. Loperfido). *Atti del Convegno Intermedio SIS 2005*, 249-252.
- 2008 A Skewed GARCH-Type Model for Multivariate Financial Time Series. (with N. Loperfido). *Proceedings of the International Conference MAF 2008-Mathematical and Statistical Methods for Actuarial Sciences and Finance*, Venice March 26-28.
- 2012 Quality in Cinema. Preliminary Analysis (with Murmura F. and Franceschini C.). In *Proceedings of the 18th Symposium on Technology and Innovation for a Sustainable Future: a Commodity Science Perspective*, 24-28 September 2012, Rome. ISBN 97888862695.
- 2016 An Algorithm for Finding Projections with Extreme Kurtosis (with N. Loperfido). *Proceedings of the 48th Scientific Meeting of the Italian Statistical Society*. Editors: Monica Pratesi and Cira Perna, ISBN 9788861970618.

SOFTWARE

- R package Cinzia Franceschini and Nicola Loperfido (2021). Kurt: Performs Kurtosis-Based Statistical Analyses. R package version 1.1.
<https://CRAN.R-project.org/package=Kurt>
- R package Cinzia Franceschini and Nicola Loperfido (2017). MaxSkew: Orthogonal Data Projections with Maximal Skewness. R package version 1.1.
<https://CRAN.R-project.org/package=MaxSkew>
- R package Cinzia Franceschini and Nicola Loperfido (2017). MultiSkew: Measures, Tests and Removes Multivariate Skewness. R package version 1.1.1.
<https://CRAN.R-project.org/package=MultiSkew>

EDITORIAL ACTIVITIES

Peer Review Activities: *The European Journal of Finance, Journal of Applied Statistics, Statistical Papers, Journal of Statistical Planning and Inference, Metron, Communications in Statistics, Metrika, Test, Statistical Methodology, Computational Statistics and Data Analysis, Statistical Methods and Applications, Communications in Statistics-Simulation and Computation, Statistics and Probability Letters, Journal of Multivariate Analysis, Journal of Nonparametric Statistics, Expert Systems With Applications, Social Indicators Research, Symmetry, Agronomy, International Journal of Environmental Research and Public Health.*

MEMBERSHIPS

Società Italiana di Statistica (Italian Statistical Society).

Date, 17/03/2022

Signature

Cinzia Franceschini