Marta Nai Ruscone

Curriculum Vitae

Education

14/09/11 **Ph.D., Applied Statistics (XXIII)**, *Università degli Studi di Milano-Bicocca*, Milano.

Title *Hierarchical models: methodological aspects and applications*

Supervisors Prof. Giuseppe Boari, Prof. Roberta Paroli

Research interest

Multivariate dependence models with copulas; Mixture Models; Model-based clustering and classification; Robust statistics; Measures of association; Dissimilarity measures; High-dimensional Data; Multivariate longitudinal data; Multivariate count data; Categorical data; Ordinal Data; Rank Data; Statistical applications in economics and social science in general

Academic positions

07/24-Pres **Associate Professor in Statistics (STAT-01/A - Statistics)**, *Department of Economics*, University of Genova, Genova (GE).

12/23-Pres **Italian Habilitation for Associate Professor in Statistics**, *(Abilitazione Scientifica nazionale a Professore di II fascia STAT-01/A - Statistics)*, Validity: 01 December 2023 - 01 December 2034.

07/21-06/24 **Assistant Professor in Statistics (B) art. 24, L. 240/2010 (STAT-01/A - Statistics)**, *Department of Economics*, University of Genova, Genova (GE).

12/19-06/21 **Assistant Professor in Statistics (A) art. 24, L. 240/2010 (STAT-01/A - Statistics)**, *Department of Mathematics*, University of Genova, Genova (GE).

10/16-11/19 **Assistant Professor in Statistics (A) art. 24, L. 240/2010 (STAT-01/A - Statistics)**, *School of Economics and Management*, LIUC - Università Carlo Cattaneo, Castellanza (VA).

09/15-09/16 **Assistant Professor in Statistics (A) art. 24, L. 240/2010 (part time) (STAT-01/A - Statistics)**, *School of Economics and Management*, LIUC - Università Carlo Cattaneo, Castellanza (VA).

05/13-08/15 **Research Fellow in Statistics art. 22, L. 240/2010 (STAT-01/A - Statistics)**, *Statistical department, Università Cattolica del Sacro Cuore*, Milano (MI).

Research projects

2010-2016 **Research projects, Linea D.1**, *Supervisor Prof Giuseppe Boari*, Models for measuring socio-economic latent variables, Università Cattolica del Sacro Cuore.
Milan

2008-2009 **Research projects FAR (Fondo d'Ateneo per la Ricerca)**, *Sampling from finite population and inferential problems*, Supervisor Prof P. Quatto, Università degli Studi di Milano Bicocca.
Milan

2009 **Research projects, Linea D.1**, *Supervisor Prof Luigi Santamaria*, Statistical studies in macroeconomics and business economics. Methodological statistical studies in technologies, Università Cattolica del Sacro Cuore.
Milan

2008 **Research projects, Linea D.1**, *Supervisor Prof Umberto Magagnoli*, Statistical methodologies and application studies in the fields of technological and business economics, Università Cattolica del Sacro Cuore.
Milan

2007 **Research projects, Linea D.1**, *Supervisor Prof Umberto Magagnoli*, Inferential statistical methodologies for technological, social and economic financial problems, Università Cattolica del Sacro Cuore.
Milan

Visiting positions

25/11/24 -29/11/24 **Visiting Researcher in Statistics**,
Hochschule Stralsund, University of Applied Sciences, Stralsund, Germany,
(Prof. Gero Szepannek).

26/06/23 -30/06/23 **Visiting Researcher in Statistics**, *Department of Statistics and Operations Research*,
UPC - Polytechnic University of Catalonia-BarcelonaTech, Barcelona, Spain,
(Prof. Daniel Fernández Martinez).

04/07/22 -08/07/22 **Visiting Researcher in Statistics**, *Department of Statistics and Operations Research*,
UPC - Polytechnic University of Catalonia-BarcelonaTech, Barcelona, Spain,
(Prof. Daniel Fernández Martinez).

30/09/19 -07/10/19 **Visiting Researcher in Statistics**, *Department of Statistics*,
AUEB - Athens University of Economics and Business, Athens, Greece,
(Prof. Dimitris Karlis).

26/03/19 -10/04/19 **Visiting Researcher in Statistics**, *Department of Statistics*,
AUEB - Athens University of Economics and Business, Athens, Greece,
(Prof. Dimitris Karlis).

01/04/19- 05/04/19 **Visiting Researcher in Statistics funded by the Erasmus+ program of the EU**, *Department of Statistics*, AUEB - Athens University of Economics and Business, Athens, Greece,
(Prof. Dimitris Karlis).

02/18-09/18 **Visiting Researcher in Statistics**, *School of Mathematics and Statistics*, University College Dublin, Dublin, Ireland, (Prof. Thomas Brendan Murphy).

05/17-09/17 **Visiting Researcher in Statistics**, *School of Mathematics and Statistics*, University College Dublin, Dublin, Ireland, (Prof. Thomas Brendan Murphy).

Editorial work

01/01/2020-31/12/2021 Assistant Editor of Dependence Modeling, De Gruyter, ISSN: 2300-2298

Collaboration with scientific journals

Referee activity for: Computational Statistics & Data Analysis, Journal of Statistical Software, The R Journal, Statistical Methods & Applications, Metron, Computational Statistics, Journal of Classification, The Canadian Journal of Statistics, Stat, eJasa, Studies in Theoretical and Applied Statistics, Statistical Modeling, Econometrics and Statistics, Computational Intelligence, Risk Analysis, Quality and Quantity, Social Indicators Research, International Journal of Approximate Reasoning, Annals of Operational Research, Symmetry, Statistical Modelling: An international Journal, Statistica, Statistics, Behaviormetrika, Spatial Statistics, Journal of Statistical Computation and Simulation

Honors, awards certifications, research grants and scholarships

2019 Research Award, LIUC - Università Carlo Cattaneo: A. Bonanomi, M. Nai Ruscone, S. A. Osmetti, Dissimilarity measure for ranking data via mixture of copulae, Statistical Analysis and Data Mining, ASA data Science Journal 4 vol. 12, p. 412-425, 2019

2016 Best Poster Award conferred to Nai Ruscone M. for the Scientific Quality of the Poster 'Mixture of vine copulas for clustering' presented at MBC^2: Model-Based Clustering and Classification, Catania (IT), September 5-7 2016.

2015 Research Award area 13, Università Cattolica del Sacro Cuore: A. Bonanomi, G. Cantaluppi, M. Nai Ruscone, S. A. Osmetti, A new estimator of Zumbo's Ordinal Alpha: a copula approach, Quality and Quantity, 49 (3), 941-953, 2015

Member of conference committee

2026 Member of the Local Organizing Committee of IFCS 2026 (19th conference of the International Federation of Classification Societies Conference) - Milan, 14 - 16 July 2026.

2026 Member of the Local Organizing Committee of DSSV 2026 (Data Science, Statistics & Visualisation) - Trento, 29 June - 1 July 2026.

2025 Member of the Scientific Committee of CLADAG (15th Scientific Meeting Classification and Data Analysis Group) - Naples, 08 - 10 September 2025.

2025 Member of the Local Organizing Committee of SIS 2025 (SIS 2025 - Statistics for Innovation) - Genoa, 16 - 18 June 2025.

2023 Member of the Programme Committee of CMStatistics 2023 (16th International Conference of the ERCIM WG on Computational and Methodological Statistics) - Berlin, 16 - 18 December 2023.

2022 Member Scientific Program Committee of ASA 2022 (Conference of the Association for Applied Statistics) - Genoa, 12 - 14 September 2022. "Data Driven Decision Making".

Organized session

2025 Invited session organizer, 15th Scientific Meeting Classification and Data Analysis Group CLADAG - International Scientific Joint Meeting of the Italian and Dutch/ Flemish Classification Societies - Naples, Italy, September 8 - 10 2025.
Topic: "Advanced clustering methods for complex data I".
Speakers: Pietro Coretto, Igor Melnykov, Brendan Murphy, John Thompson.

2025 Invited session organizer, 15th Scientific Meeting Classification and Data Analysis Group CLADAG - International Scientific Joint Meeting of the Italian and Dutch/ Flemish Classification Societies - Naples, Italy, September 8 - 10 2025.
Topic: "Advanced clustering methods for complex data II".
Speakers: Roberto Rocci, Shen Jia, Christian Hennig, Francesca Greselin.

2025 Invited session organizer, SIS Statistics for Innovation - Genoa, Italy, June 16 - 18 2025.
Topic: "Innovative developments in clustering and classification for complex data structures".
Speakers: Alessandro Casa, Roberto Rocci, Volodymyr Melnykov, Luca Coraggio.

2024 Invited session organizer, 18th International Joint Conference of the Joint Conference CFE-CMStatistics - London, UK, December 14 - 16 2024 (together with Daniel Fernández).
Topic: "Latest trends in clustering and classification of complex data II".
Speakers: Volodymyr Melnykov, Xuwen Zhu, Luis Sousa.

2024 Invited session organizer, 18th International Joint Conference of the Joint Conference CFE-CMStatistics - London, UK, December 14 - 16 2024 (together with Daniel Fernández).
Topic: "Latest trends in clustering and classification of complex data I".
Speakers: John Thompson, Yana Melnykov, Christopher Saunders, Michael Semhar.

2024 Invited session organizer, SMPS 2024 - 11th International Conference on Soft Methods in Probability and Statistics - Salzburg, Austria, September 03 - 06 2024.
Topic: "Latest Trends in Clustering and Classification Methods".
Speakers: Christophe Biernacki, Mackenzie Rose Neal, Marianthi Markatou, Roberto Rocci, Jeffrey Durieux.

2024 Invited session organizer, SIS 2024 - The 52nd Scientific Meeting of the Italian Statistical Society - Bari, 17 - 20 June 2024.
Topic: "Latest trends in clustering and classification methods".
Speakers: Alessandro Casa, Volodymyr Melnykov, Valentina Veronesi.

2024 Invited session organizer, SIS 2024 - The 52nd Scientific Meeting of the Italian Statistical Society - Bari, 17 - 20 June 2024.
Topic: "Recent advances in clustering and classification".
Speakers: Jana Cibulkova, Antonio Lucadamo, Aurora Gatto, Yana Melnykov.

2023 Invited session organizer, 16th International Conference of the ERCIM WG on Computational and Methodological Statistics & CFE-CMStatistics - Berlin, Germany, December 16-18 2023 (together with Daniel Fernández).
Topic: "Recent advances in clustering and classification with missing data".
Speakers: Rabea Aschenbruck, Vincent Audigier, Wouter van Loon.

2023 Invited session organizer, 16th International Conference of the ERCIM WG on Computational and Methodological Statistics & CFE-CMStatistics - Berlin, Germany, December 16-18 2023 (together with Daniel Fernández).
Topic: "Model and copula-based clustering with missing data".
Speakers: Aurora Gatto, Cristina Tortora, Hung Tong, Brian Franczak.

2022 Invited session organizer, 15th International Conference of the ERCIM WG on Computational and Methodological Statistics & CFE-CMStatistics - London, UK December 17-19 2022 (together with Daniel Fernández).
Topic: "Recent advances in clustering of mixed-type data".
Speakers: Marianthi Markatou, Robin Fuchs, Michel van de Velden, Gero Szepannek.

2022 Invited session organizer, ECDA 2022 (European Conference on Data Analysis - Naples, 14 - 16 September 2022.
Topic: "Latest trends in clustering and classification methods".
Speakers: Christian Hennig, Alessandro Casa, Keefe Murphy, Pietro Coretto.

2022 Invited session organizer, ECDA 2022 (European Conference on Data Analysis - Naples, 14 - 16 September 2022.
Topic: "Novelty in clustering".
Speakers: Cristina Tortora, Roberta Pappadà, Di Nuzzo Cinzia.

2022 Invited session organizer, ECDA 2022 (European Conference on Data Analysis - Naples, 14 - 16 September 2022 (together with Cristina Tortora).
Topic: "Recent advances in complex data analysis".
Speakers: Katrijn Van Deun, Marta Di Lascio, Marta Nai Ruscone.

2022 Invited session organizer, 24th International Conference on Computational Statistics - COMPSTAT 2022 - Bologna, 23 - 26 August 2022 (together with Eva Riccomagno).
Topic: "Algebraic Statistics".
Speakers: Liam Solus, Carlos Amendola, Fabio Rapallo, Guido Montufar, Elisa Perrone.

2021 Invited session organizer, 14th International Conference of the ERCIM WG on Computational and Methodological Statistics & CFE-CMStatistics - London, UK December 18-20 2021 (together with Daniel Fernández).
Topic: "Latest trends in clustering and classification methods".
Speakers: Bettina Gruen, Cristina Tortora, Matthieu Marbac, Irene Epifanio.

2020 Invited session organizer, 13th International Conference of the ERCIM WG on Computational and Methodological Statistics & CFE-CMStatistics - London, UK December 19-21 2020 (together with Marta Di Lascio).
Topic: "Clustering of multivariate dependent data".
Speakers: Christian Hennig, Pier Giovanni Bissiri, Raffaella Calabrese, Chiara Masci, Claudia Czado.

2019 Invited session organizer, CRoNoS & MDA 2019 - Limassol, Cyprus April 14-16 2019 (together with Daniel Fernández).
Topic: "Recent developments in clustering and classification methods".
Speakers: Roberto Rocci, Matthieu Marbac, Christophe Biernacki, Nema Dean.

2018 Invited session organizer, SIEDS - Varese May 24-25 2018.
Topic: "Well-being".
Speakers: Valentina Rotondi, Andrea Venegoni, Elena Siletti, Emiliano Sironi.

Discussant of Sessions

2024 Title of the Specialized Session: "Latest trends in clustering and classification methods".
SIS 2024 - The 52nd Scientific Meeting of the Italian Statistical Society - Bari, Italy June 17-20 2024.
Speakers: Alessandro Casa, Volodymyr Melnykov, Valentina Veronesi.

2024 Title of the Contributed Session: "Advances in data analysis: clustering and regression models".
SIS 2024 - The 52nd Scientific Meeting of the Italian Statistical Society - Bari, Italy June 17-20 2024.
Speakers: Roberto Ascari, Elena Ballante, Maria Felice Arezzo, Paolo Giordani, Amir Khorrami Chokami.

2023 Title of the Specialized Session: "Clustering and classification I".
SIS 2023 - Statistical Learning, Sustainability and Impact Evaluation - Ancona, Italy June 21-23 2023.
Speakers: Cinzia Di Nuzzo, Fabio Rapallo, Christophe Biernacki, Xuwen Zhu, Jana Cibulkova, Alfonso Iodice D'Enza.

Peer Reviewed Journals

2025 Amati, V., Nai Ruscone, M., A Quantitative Analysis of the Relationships between the Sustainable Development Goals, Italian Journal of Economic, Demographic and Statistical Studies, vol. 2, p. 43-54, DOI: 10.71014/sieds.v79i2.382

2024 Nai Ruscone, M., Fernández, D., D'Ambrosio A., Copula-Based Non-Metric Unfolding on Augmented Data Matrix, Journal of Classification, vol. 41, p. 678-697, DOI: 10.1007/s00357-024-09495-x

2023 Preedalikit, K., Fernández, D., Liu, I., McMillan, L., Nai Ruscone, M., Costilla, R., Row mixture-based clustering with covariates for ordinal responses, Computational Statistics, p. 1-45, DOI: 10.1007/s00180-023-01387-9

2023 De Luca, G., Nai Ruscone, M., Amati, V., The use of conditional copula for studying the influence of economic sectors, Expert Systems With Applications, vol. 131, DOI: 10.1016/j.eswa.2023.120582

2021 Nai Ruscone, M., Fernández, D., Dynamics of HDI index: temporal dependence based on D-vine copula model for three-way data, Social Indicators Research, vol. 158, p. 563-593, DOI: 10.1007/s11205-201-02682-y

2021 Fernández, D., Giné-Vázquez, I., Liu, I., Yucel, R., Nai Ruscone, M., Morena, M., García, V. G., Haro, J. M.,Pan, W., Tyrovolas, S., Are environmental pollution and biodiversity levels associated to the spread and mortality of COVID-19? A four-month global analysis, Environmental Pollution, vol. 271, p. 1- 13, ISSN: 0269-7491, DOI: 10.1016/j.envpol.2020.116326

2020 Deldossi, L., Nai Ruscone, M., R Package OBsMD for follow-up designs in an objective Bayesian framework. Journal of Statistical Software, vol. 94(2), p. 1-37, DOI: 10.18637/jss.v094.i02

2019 Bonanomi, A., Nai Ruscone, M., Osmetti, S. A., Dissimilarity measure for ranking data via mixture of copulae. Statistical Analysis and Data Mining, vol. 12, p. 412-425, ISSN: 1932-1864, DOI: 10.1002/sam.11402

2017 Bonanomi, A., Nai Ruscone, M., Osmetti, S. A. Defining subjects distance in hierarchical cluster analysis by copula approach. Quality & Quantity, vol. 51, p. 859-872, ISSN: 1573-7845, DOI: 10.1007/s11135-016-0444-9

2015 Bonanomi, A., Cantaluppi, G., Nai Ruscone, M., Osmetti, S. A. A new estimator of Zumbo's Ordinal Alpha: a copula approach. Quality & Quantity, vol. 49, p. 941-953, ISSN: 0033-5177, DOI: 10.1007/s11135-014-0114-8

2015 Boari, G., Nai Ruscone, M. A procedure simulating Likert scale item responses. Electronic Journal of Applied Statistical Analysis, vol. 8, p. 288-297, ISSN: 2070-5948, DOI: 10.1285/i20705948v8n3p288

2012 Bonanomi, A., Nai Ruscone, M., Osmetti, S. A. Reliability measurement for polytomous ordinal items: the empirical polychoric ordinal Alpha. Quaderni di Statistica, vol. 14, p. 53-56, ISSN: 1594-3739

Encyclopedia Entries

2021 Nai Ruscone, Marta (2021). Copula-based measures of association. In: Maggino F. (eds) Encyclopedia of Quality of Life and Well-Being Research. Springer, Cham. DOI:10.1007/978-3-319-69909-7-104677-1, ISBN: 978-3-319-69909-7

Book Chapters

2018 Bonanomi, Andrea, Nai Ruscone, Marta, Osmetti, Silvia Angela (2018). Dissimilarity measure for ranking data via mixture of copulae. In: Capecchi, Stefania; Di Iorio, Francesca; Simone, Rosaria, ASMOD 2018: Proceedings of the Advanced Statistical Modeling for Ordinal Data Conference. ISBN: 978-88-6887-042-3, DOI: 10.6093/978-88-6887-042-3, ISSN Collana: 2499-4774, FedOAPress, 2018, Naples (Italy), 24-26 October 2018

2016 Nai Ruscone, M., Osmetti, S. A. Modeling the dependence in multivariate longitudinal data by pair copula decomposition. In: Ferraro, Maria Brigida, Soft methods for data science. Advances in Intelligent System and Computing, vol. 456, p. 373-380, Springer, ISBN: 978-3-319-42972-4, ISSN: 2194-5357, doi: 10.1007/978-3-319-42972-4_46

2015 Bonanomi, A., Nai Ruscone, M., Osmetti, S. A. Defining the subjects distance in hierarchical cluster analysis by copula approach. In: Mola, Francesco; Conversano, Claudio, Cladag 2015: 10th. scientific meeting of the classification and data analysis group of the Italian statistical society: book of abstracts. p. 582-587, Cagliari: CUEC, ISBN: 978-88-8467-949-9

2014 Boari, G., Cantaluppi, G., Nai Ruscone, M. Scale reliability evaluation for a-priori clustered data. In: Vicari, D.; Okada, A.; Ragozini, G.; Weihs, C., Analysis and modeling of complex data in behavioral and social sciences. Studies in Classification, Data Analysis and Knowledge Organization, p. 37-45, Springer, ISBN: 978-3-319-06691-2, ISSN: 1431-8814, doi: 10.1007/978-3-319-06692-9

Books

2012 Zappa, D., Nai Ruscone, M., Bramante, R. Appunti di metodi statistici per la finanza e le assicurazioni. p. 1-229, Milano: EDUCatt, ISBN: 978-88-8311-964-4

2012 Nai Ruscone, M. Strumenti statistici e informatici per l'analisi dei dati del questionario GGP (Generation & Gender Programme). p. 1-86, Milano: EDUCatt, ISBN: 978-88-8311-971-2

Conference Publications

2025 Nai Ruscone, Marta (2025). Robustness. In: di Bella, Enrico; Gioia, Vincenzo; Lagazio, Corrado; Zaccarin, Susanna. Statistics for Innovation IV. SIS 2025. Italian Statistical Society Series on Advances in Statistics. Springer, Cham. DOI: 10.1007/978-3-031-96033-815

2025 Nai Ruscone, Marta, D'Ambrosio, Antonio (2025). Non-metric Unfolding via Copula. In: Pollice, Alessio; Mariani, Paolo. Methodological and Applied Statistics and Demography I, SIS 2024, p. 46-49, DOI:10.1007/978-3-031-64346-08, ISSN: 978-3-031-64345-3, Bari, 17-20 June 2024

2023 Nai Ruscone, Marta, Fernández, Daniel, Preedalikit, Kemmawadee, McMillan, Louise, Liu, Ivy, Costilla, Roy (2023). One dimensional mixture-based clustering for ordinal responses. In: Coretto, Pietro; Giordano, Giuseppe; La Rocca, Michele, Parrella, Maria Lucia, Rampichini, Carla. CLADAG 2023 Book of abstracts and short papers, p. 604- 607, ISBN: 9788891935632, Salerno, 11-13 September 2023

2023 Nai Ruscone, Marta, Bissiri, Pier Giovanni (2023). Concordance measure for rankings. In: Bucci, Andrea; Cartone, Alfredo; Evangelista, Adelia, Marletta, Andrea. IES 2023 Statistical Methods for Evaluation and Quality: Techniques, Technologies and Trends. Book of short papers, p. 350- 354, DOI: 10.60984/978-88-94593-36-5-IES2023, ISBN: 979-12-803-3369-8, Pescara, 21-23 June 2023

2023 Nai Ruscone, Marta, Fernández, Daniel, Preedalikit, Kemmawadee, McMillan, Louise, Liu, Ivy, Costilla, Roy (2023). Mixture-based clustering with covariates for ordinal responses. In: Chelli, Franco Maria; Ciommi, Mariateresa, Ingrassia, Salvatore, Mariani, Francesca, Recchioni, Maria Cristina, SIS 2023. Book of short papers, p. 617-622, ISBN: 9788891935618AAVV, Ancona, 21-23 June 2023

2023 Nai Ruscone, Marta, D'Ambrosio, Antonio (2023). Non-metric unfolding via copula. In: Durante, Fabrizio, Saminger-Platz Susanne, Trutschnig, Wolfgang, Vetterlein, Thomas, 40th Linz Seminar on Fuzzy Set Theory. Copulas Theory and Applications, p. 69-72, ISBN: 978-3-903480-02-05, Linz (Austria), 6-9 June 2023

2022 Nai Ruscone, Marta, De Luca, Giovanni (2022). Conditional copula: a financial application. In: Lombardo, Rosaria; Camminatiello, Ida; Simonacci Violetta. IES 2022 Innovation & Society 5.0: Statistical and Economic Methodologies for Quality Assessment. Book of short papers, p. 307- 312, ISBN: 978-88-94593-35-8, Capua, 27-28 January 2022

2021 Nai Ruscone, Marta, Karlis, Dimitris (2021). Robustness methods for modeling count data with general dependence structures. In: Porzio, Giovanni Camillo; Rampichini, Carla; Bocci, Chiara. CLADAG 2021 Book of abstracts and short papers, p. 396- 399, DOI: 10.36253/978-88-5518-340-6, Florence, 9-11 September 2021

2021 Nai Ruscone, Marta, Karlis, Dimitris (2021). Robustness of statistical methods for modeling paired count data using bivariate discrete distributions with general dependence structures. In: Perna, Cira; Salvati, Nicola; Schirripa Spagnolo, Francesco, SIS 2021. Book of short papers SIS2021, p. 1654-1659, ISBN: 9788891927361, Pisa, 21-25 June 2021

2020 Nai Ruscone, Marta, D'Ambrosio, Antonio (2020). Non-metric unfolding on augmented data matrix: a copula-based approach. In: Pollice, Alessio; Salvati, Nicola; Schirripa Spagnolo, Francesco , SIS 2020. Book of short papers SIS2020, p. 1189-1193, ISBN: 978-88-91910-77-6 , Pisa, 23-25 June 2020

2019 Nai Ruscone, Marta, D'Ambrosio, Antonio (2019). Copula-based non-metric unfolding on augmented data matrix. In: Porzio, Giovanni C; Greselin, Francesca; Balzano, Simona, ClaDAG 2019: book of short papers. University of Cassino, Cassino, 13-15 September 2019

2019 Nai Ruscone, Marta, D'Ambrosio, Antonio (2019). Copula-based non-metric unfolding on augmented data matrix. In: 5th meeting on statistics, Statistics5@Aegina: book of abstract. Athens, 6-8 September 2019

2019 Nai Ruscone, Marta (2019). Clustering ranking data via copulas. In: 10th international workshop on simulation and statistics: workshop booklet p. 25. Salzburg, 2-6 September 2019

2019 Nai Ruscone, Marta (2019). Clustering ranked data using copulas. In: 16th Conference of the International Federation of Classification Societies: workshop booklet p. 127. Thessaloniki, 26-29 August 2019

2019 De Luca, Giovanni, Nai Ruscone, Marta, Rivieccio, Giorgia (2019). Partial dependence with copula and financial applications. In: Arbia, Giuseppe; Peluso, Stefano, Pini, Alessia, Rivellini, Giulia, SIS 2019 - Smart Statistics for Smart Applications: proceedings of the Conference of the Italian Statistical Society. Book of short papers SIS2019, p. 799-803, ISBN: 978-88-91915-10-8, Milan, 18-21 June 2019

2017 Nai Ruscone, Marta (2017). Comparing clusterings by copula information based distance. In: Greselin, Francesca; Mola, Francesco; Zenga, Mariangela, ClaDAG 2017: book of short papers. http://www.fedoabooks.unina.it, ISBN: 978-88-99459-71-0, University of Milano-Bicocca, Milan (Italy), 13-15 September 2017

2017 Bonanomi, Andrea, Nai Ruscone, Marta, Osmetti, Silvia Angela (2017). Mixture of copulae based approach for defining the subjects distance in cluster analysis. In: Greselin, Francesca; Mola, Francesco; Zenga, Mariangela, ClaDAG 2017: book of short papers. ISBN: 978-88-99459-71-0, University of Milano-Bicocca, Milan (Italy), 13-15 September 2017

2017 Nai Ruscone, Marta (2017). Exploratory factor analysis of ordinal variables: a copula approach. In: Petrucci, Alessandra; Verde, Rosanna, SIS 2017. Statistics and Data Science: new challenges, new generations: 28-30 June 2017 Florence (Italy): proceedings of the Conference of the Italian Statistical Society. Proceedings and report, vol. 114, p. 737-742, ISBN: 978-88-6453-521-0, Firenze, 28-30 June 2017

2013 Bramante, Riccardo, Nai Ruscone, Marta, Spani, Pasquale (2013). Credit risk measurement and ethical issue: some evidences from the Italian banks. In: Minerva, Tommaso; Morlini, Isabella; Palumbo, Francesco, Cladag 2013: 9th meeting of the classification and data analysis group. p. 1-4, ISBN: 978-88-6787-117-9, Modena, 18-20 September 2013

2013 Deldossi, Laura, Nai Ruscone, Marta (2013). OBsMD: an R package for objective Bayesian model discrimination in follow-up design. In: Sco 2013: proceedings of the 8th complex data modeling and computationally intensive statistical methods for estimation and prediction, Milano, Italy. p. 1-4, ISBN: 978-88-6493-019-0, Milano, 9-11 September 2013

2013 Bonanomi, Andrea, Nai Ruscone, Marta, Osmetti, Silvia Angela (2013). The Polychoric Ordinal Alpha, measuring the reliability of a set of polytomous ordinal items. In: Brentari, Eugenio; Carpita, Maurizio, Advances in latent variables. p. 1-6, Brescia, 19-21 June 2013

2013 Boari, Giuseppe, Nai Ruscone, Marta (2013). Use of relevant principal components to define a simplified multivarate test procedure of optimal clustering. In: Minerva, Tommaso; Morlini, Isabella; Palumbo, Francesco, Cladag 2013: 9th meeting of the classification and data analysis group. p. 1-4, ISBN: 978-88-6787-117-9, Modena, 18-20 September 2013

2012 Boari, Giuseppe, Cantaluppi, Gabriele, Nai Ruscone, Marta (2012). Scale Reliability Evaluation for a-priori Clustered Data. In: Okada A; Vicari D; Ragozini G, Analysis and Modeling of Complex Data in Behavioural and Social Sciences. Book of Short Paper. p. 1-4, Padova: CLEUP, ISBN: 978-88-6129-916-0, Anacapri, 3-4 September 2012

2012 Boari, Giuseppe, Nai Ruscone, Marta (2012). Use of ICC for defining the optimal clustering solution under normality assumption. In: Akinori, Okada, Analysis and modeling of complex data in behavioural and social sciences: book of short paper. p. 1-4, ISBN: 978-88-6129-916-0, Anacapri, Italy, 3-4 September 2012

2010 Boari, Giuseppe, Nai Ruscone, Marta, Osmetti, Silvia Angela (2010). Effetti sul PIL dell'andamento degli investimenti in costruzioni: relazione tra occupazione totale e nel settore costruzioni. In: Convegno di presentazione della ricerca Ripresa del settore immobiliare-costruttivo: crescita dell'occupazione e integrazione sociale: il caso italiano. p. 1-18, Milan, 9 June 2010

2009 Boari, Giuseppe, Nai Ruscone, Marta, Osmetti, Silvia Angela (2009). Causal relationship between PIL and construction flows: evidence from Italy. In: Convegno di presentazione della ricerca Dinamica del settore immobiliare-costruttivo e ripresa del PIL: il caso italiano. p. 1-8, Milan, 10 June 2009

2009 Boari, Giuseppe, Nai Ruscone, Marta, Osmetti, Silvia Angela (2009). The effects of money supply on construction flows: evidence from Italy. In: Convegno di presentazione della ricerca Dinamica del settore immobiliare-costruttivo e ripresa del PIL: il caso italiano. p. 1-8, Milan, 10 June 2009

Papers (submitted to scientific journals), working papers

Karlis, Dimitris, Nai Ruscone, Marta, Robustness methods for modelling count data

Nai Ruscone, Marta, Murphy, Thomas Brendan, Flexible model-based clustering with R-vine copulas

Nai Ruscone, Marta, D'Ambrosio, Antonio, Copula-based non-metric unfolding on augmented data matrix

Nai Ruscone, Marta, Fernández Martinez, Daniel, McMillan, Louise, Model-based clustering categorical data

Bissiri, Pier Giovanni, Nai Ruscone, Marta, Concordance measures for discrete random variables and rankings

Software

2015 **OBsMD** R package - Objective Bayesian Model Discrimination in Follow-Up Designs. Creator and Maintainer since 2015.
Available on CRAN: https://CRAN.R-project.org/package=OBsMD.

Talks (invited sessions)

2025 15th Scientific Meeting Classification and Data Analysis Group CLADAG - International Scientific Joint Meeting of the Italian and Dutch/ Flemish Classification Societies - Naples, Italy, September 8 - 10 2025. - Mixture-based clustering for ordinal responses. (Nai Ruscone, M.) [Organizer/Chair: Volodymyr Melnikov]

2025 Conference on Computational statistics and machine learning: finite mixture modeling and model-based cluster analysis - Urgench State University - Urgench (Uzbekistan), May 12-16 2025 - Mixture-based clustering for ordinal responses. (Nai Ruscone, M., Fernández, D., McMillan, L.) [Organizer/Chair: Volodymyr Melnikov]

2025 Research Seminars - Sapienza University of Rome - Rome (Italy), 4 April 2025 - Mixture-based clustering for ordinal responses. (Nai Ruscone, M.) [Organizer/Chair: Roberto Rocci]

2025 7th Joint Statistical Meeting of the Deutsche Arbeitsgemeinschaft Statistik (DAGStat 2025) - Berlin (Germany), 24-28 March 2025 - Mixture-based clustering for ordinal responses. (Nai Ruscone, M., Fernández, D., McMillan, L.) [Organizer: Gero Szepannek; Chair: Gero Szepannek]

2025 Research Seminars - Trinity College Dublin - Dublin (Ireland), 7 February 2025 - Row mixture-based clustering with covariates for ordinal responses. (Nai Ruscone, M.) [Organizer/Chair: James Ng]

2025 Research Seminars - Maynooth University, Department of Mathematics and Statistics - Dublin (Ireland), 5 February 2025 - Mixture-based clustering with covariates for ordinal responses. (Nai Ruscone, M.) [Organizer/Chair: Keefe Murphy]

2024 18th International Joint Conference of CFE-CMStatistics. Computational and Methodological Statistics (CMStatistics 2024) - London (UK), 14-16 December 2024 - Mixture-based clustering with covariates for ordinal responses. (Nai Ruscone, M., Fernández, D., Preedalikit, K., McMillan, L., Liu, I., Costilla, R.) [Organizer: Monia Ranalli; Chair: Maria Brigida Ferraro]

2024 Working group of the German classification society GfKl (AG DANK 2024) - Ostbayerische Technische Hochschule, OTH Regensburg Fakultät Informatik und Mathematik - Regensburg (Germany), November 8-9 2024 - Robustness methods for modelling paired count data. (Nai Ruscone, M.) [Organizer/Chair: Gero Szepannek]

2024 SIS 2024, The 52nd Scientific Meeting of the Italian Statistical Society - Bari (Italy), 17 - 20 June 2024 - Non-metric unfolding via copula. (Nai Ruscone, M., A. D'Ambrosio) [Organizer/Chair: Alessandro Albano]

2024 Workshop on data analysis and Statistical Modeling - University of Sannio - Benevento (Italy), 5 - 7 February 2024 - One-dimensional mixture-based clustering for ordinal responses. (Nai Ruscone, M.) [Organizer/Chair: Marco Riani]

2023 16th International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) on Computational and Methodological Statistics (CMStatistics 2023) - Berlin (Germany), 16-18 December 2023 - Clustering categorical and mixed-type data. (Nai Ruscone, M., Fernández, D., Preedalikit, K., McMillan, L., Liu, I., Costilla, R.) [Organizer: Cristina Tortora; Chair: Cristina Tortora]

2023 Research Seminars - Hochschule Stralsund, University of Applied Sciences - Stralsund (Germany), 24 November 2023 - Model-based clustering with the packages mclust - teigen - mixsmsn. (Nai Ruscone, M.) [Organizer/Chair: Gero Szepannek]

2023 Working group of the German classification society GfKl (AG DANK 2023)- FOM Hochschule, Studienzentrum Frankfurt - Frankfurt (Germany), November 3-4 2023 - One-dimensional mixture-based clustering for ordinal responses. (Nai Ruscone, M., Fernández, D., Preedalikit, K., McMillan, L., Liu, I., Costilla, R.) [Organizer/Chair: Gero Szepannek]

2023 The ASA (Association for Applied Statistics), Statistics, Technology and Data Science for Economic and Social Development - Bologna (Italy), September 6-8 2023 - A different perspective of the judges of Paris through rank aggregation. (Nai Ruscone, M., D'Ambrosio, A.) [Organizer: A. Piscitelli; Chair: A. Piscitelli]

2023 IES 2023, Statistical Methods. for evaluation and Quality: Techniques, Technologies and Trends - Pescara (Italy), August 30 -September 1 2023 - Concordance measure for rankings. (Nai Ruscone, M., Bissiri, P.) [Organizer: D. Vistocco, P. Coretto; Chair: M. Niglio; Discussant: C. Davino]

2022 COMPSTAT 2022 (24th International Conference on Computational Statistics) - Bologna (Italy), 23 - 22 August 2021 - Copula-based non-metric unfolding. (Nai Ruscone, M., D'Ambrosio, A., Fernández Martinez, D.)[Organizer: Francesca Marta Lilia Di Lascio; Chair: Francesca Marta Lilia Di Lascio]

2022 IES 2022, Conference Program Innovation & Society 5.0: Statistical and Economic methodologies for Quality assessment - Capua (Italy), 27-28 January 2022 - Conditional copula: a financial application. (Nai Ruscone, M., De Luca, G.) [Organizer: A. D'Ambrosio; Chair: A. D'Ambrosio]

2020 13th International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) on Computational and Methodological Statistics (CMStatistics 2020) - London (UK), 19-21 December 2020 - Non-metric unfolding on augmented data matrix: a copula approach. (Nai Ruscone, M., D'Ambrosio, A.) [Organizer: Monia Ranalli; Chair: Monia Ranalli]

2020 13th International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) on Computational and Methodological Statistics (CMStatistics 2020) - London (UK), 19-21 December 2020 - Clustering via copula-based dissimilarity measures. (Bissiri, P. G., Nai Ruscone, M.) [Organizer: Francesca Marta Lilia Di Lascio, Marta Nai Ruscone; Chair: Marta Nai Ruscone]

2019 12th International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) on Computational and Methodological Statistics (CMStatistics 2019) - London (UK), 14-16 December 2019 - Studying the influence of economic sectors on stocks through a partial dependence analysis. (De Luca, G., Nai Ruscone, M., Riveccio, G.) [Organizer: Carmela Capelli, Marcella Miglio; Chair: Carmela Capelli]

2019 12th International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) on Computational and Methodological Statistics (CMStatistics 2019) - London (UK), 14-16 December 2019 - Dissimilarity measure for ranking data via copula. (Osmetti, S. A., Bonanomi, A., Nai Ruscone, M.) [Organizer/Chair: Rosaria Simone]

2020 ISM Mathematical Statistics - University of Genova, Mathematical Statistics and Data Management - Sestri Levante (Italy), 27 - 28 January 2020 - Model-based clustering through copulas. (Nai Ruscone, M.) [Organizer/Chair: Eva Riccomagno]

2019 Research Seminars - University of Cagliari, Department of Economic and Business Sciences - Cagliari (Italy), 29 November 2019 - Model-based clustering through copulas. (Nai Ruscone, M.) [Organizer/Chair: Massimo Cannas]

2019 Statistics5@Aegina - Athens (Greece), 6-8 September 2019 - Copula-based non-metric unfolding on augmented data matrix. (Nai Ruscone, M., D'Ambrosio, A.) [Organizer/Chair: Dimitris Karlis]

2019 SimStat2019 (10th International Workshop on Simulation and Statistics) - Salzburg (Austria), 1-7 September 2019 - Clustering ranking data via copulas. (Nai Ruscone, M.) [Organizer/Chair: Wolfgang Trutschnig]

2019 IFCS (16th Conference of the International Federation of Classification Societies) - Thessaloniki (Greece), 26-29 August 2019 - Clustering ranked data using copulas. (Nai Ruscone, M.) [Organizer/Chair: Cristina Tortora]

2019 CRoNoS & MDA 2019 - Limassol (Cyprus), 14-16 April 2019 - Clustering ranking data via copulas. (Nai Ruscone, M.) [Organizer: Marta Nai Ruscone, Daniel Fernandez Martinez; Chair: Marta Nai Ruscone]

2019 Research Seminars - AUEB Athens University of Economics and Business, Department of Statistics - Athens (Greece), 28 March 2019 - Clustering ranking data via copulas. (Nai Ruscone, M.) [Organizer/Chair: Ioannis Ntzoufras]

2019 DAGStat 2019 (the fifth conference of the Deutsche Arbeitsgemeinschaft Statistik) - Munich (Germany), 18-22 March 2019 - Model-based clustering with R-vine copulas. (Nai Ruscone, M.) [Organizer: Adalbert Wilhelm; Chair: Christian Hennig]

2018 11th International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) on Computational and Methodological Statistics (CMStatistics 2018) - Pisa (Italy), 14-16 December 2018 - Model-based clustering of high dimensional data using copulas. (Nai Ruscone, M.) [Organizer/Chair: Francesca Marta Lilia Di Lascio]

2018 CMA2018 Clustering methods and their applications - Free University of Bozen, Faculty of Economics and Management - Bozen (Italy), 26 October 2018 - Model-based clustering with R-vine copulas. (Nai Ruscone, M.) [Organizer/Chair: Francesca Marta Lilia Di Lascio]

2018 ASMOD 2018 Advanced in Statistical Modelling of Ordinal Data - University of Naples Federico II, Department of Political Sciences - Naples (Italy), 24-26 October 2018 - Dissimilarity measure for ranking data via mixture of copulae. (Bonanomi A., Nai Ruscone M., Osmetti S.A.) [Organizer/Chair: Domenico Piccolo]

2018 Research Seminars - Sapienza University of Rome, Department of Methods and Models for Economics Territory and Finance MEMOTEF - Rome (Italy), 7 May 2018 - Model-based clustering with R-vine. (Nai Ruscone, M.) [Organizer/Chair: Brunero Liseo]

2018 Working Group of Statistical Learning - University College of Dublin, Department of Economics and Business - Dublin (Ireland), 5 April 2018 - Model-based clustering with R-vine. (Nai Ruscone, M.) [Organizer/Chair: Thomas Brendan Murphy]

2018 Research Seminars - University of Catania, Department of Economics and Business - Catania (Italy), 5 April 2018 - Model-based clustering with R-vine. (Nai Ruscone, M.) [Organizer/Chair: Salvatore Ingrassia]

2017 10th International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) Working Group on Computational and Methodological Statistics (CMStatistics 2017) - London (UK), 16-18 December 2017 - Model based clustering via pair copula and applications. (Nai Ruscone, M.) [Organizer: Salvatore Ingrassia; Chair: Francesca Greselin]

2013 SIS 2013 Scientific Meeting of the Italian Statistical Society - Brescia (Italy), 20-21 June 2013 - The Polychoric Ordinal Alpha, measuring the reliability of a set of polytomous ordinal items. (Bonanomi A., Nai Ruscone M., Osmetti S.A.)

Talks (contributed sessions)

2025 SIS 2025- Statistics for innovation - Genoa, Italy, 16-18 June 2025. Robustness in modelling paired count data. (Nai Ruscone, M.)

2024 SMPS 2024 - 11th International Conference on Soft Methods in Probability and Statistics - Salzburg, Austria, 03-06 September 2024. Robustness of statistical methods for modelling paired count data. (Nai Ruscone, M.)

2024 MBC2 2024 - 7th Workshop on Models and Learning in Clustering and Classification - Catania, Italy, 28-30 August 2024. Mixture-based clustering with covariates for ordinal responses. (Nai Ruscone, M., Fernández, D., Preedalikit, K., McMillan, L., Liu, I., Costilla, R.)

2023 CLADAG 2023 - Salerno, Italy, 11-13 September 2023 - One dimensional mixture-based clustering for ordinal responses. (Nai Ruscone, M., Fernández, D., Preedalikit, K., McMillan, L., Liu, I., Costilla, R.)

2023 SIS 2023- Statistical Learning, Sustainability and Impact Evaluation - Ancona, Italy, 21-23 June 2023 - Mixture-based clustering with covariates for ordinal responses. (Nai Ruscone, M., Fernández, D., Preedalikit, K., McMillan, L., Liu, I., Costilla, R.)

2023 ECDA 2023 (European conference on data analysis) - Antwerp, Belgium, 5-7 July 2023 - Mixture-based clustering with covariates for ordinal responses. (Nai Ruscone, M., Fernández, D., Preedalikit, K., McMillan, L., Liu, I., Costilla, R.)

2023 40th Linz Seminar on Fuzzy Set Theory Copulas Theory and Applications - Linz, Austria, 6-9 June, 2023 - Non-metric unfolding via copula. (Nai Ruscone, M., D'Ambrosio, A.)

2022 ECDA 2022 (European conference on data analysis) - Naples, Italy, 14-16 September 2022 - Non-metric unfolding: copula-based approach. (Nai Ruscone, M., D'Ambrosio, A., Fernández Martinez, D.)

2022 IFCS (17th Conference of the International Federation of Classification Societies) - Porto, Portugal, 19-23 July 2022 - Copula-based Non-metric Unfolding on Augmented Data Matrix. (Nai Ruscone, M., D'Ambrosio, A.)

2021 13th International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) on Computational and Methodological Statistics (CMStatistics 2021) - London, UK, 18-20 December 2021 - Robustness methods for modeling count data with general dependence structures. (Nai Ruscone, M., Karlis, D.)

2021 CLADAG 2021 - Florence, Italy, 9-11 September 2021 - Robustness methods for modeling count data with general dependence structures. (Nai Ruscone, M., Karlis, D.)

2019 12th International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) on Computational and Methodological Statistics (CMStatistics 2019) - London, UK, 14-16 December 2019 - Copula-based non-metric unfolding on augmented data matrix. (Nai Ruscone, M., D'Ambrosio, A.)

2019 CLADAG 2019 - Cassino, Italy, 13-15 September 2019 - Copula-based non-metric unfolding on augmented data matrix. (Nai Ruscone, M., D'Ambrosio, A.)

2019 SIS 2019 - Smart Statistics for Smart Applications - Milan, Italy, 18-21 June 2019 - Partial dependence with copula and financial applications. (De Luca G., Nai Ruscone, M., Rivieccio, G.)

2019 ECDA 2019 (European conference on data analysis) - Bayreuth, Germany, 18-20 March 2019 - Clustering ranking data via copulas. (Nai Ruscone, M.)

2018 JSM 2018 (Joint Statistical Meeting) - Vancouver, Canada, 28 July - 2 August 2018 - Model based clustering via copula and applications. (Nai Ruscone, M.)

2018 ECDA 2018 (European conference on data analysis) - Paderborn, Germany, 4-6 July 2018 - R-vine mixture model for modeling multivariate count data. (Nai Ruscone, M.)

2017 ECDA 2017 (European conference on data analysis) - Wroclaw, Poland, 27-29 September 2017 - Model based clustering of three-way data via pair-copula mixture models. (Nai Ruscone, M.)

2017 CLADAG 2017 - Milan, Italy, 13-15 September 2017 - Comparing clusterings by copula information based distance. (Nai Ruscone, M.)

2017 CLADAG 2017 - Milan, Italy, 13-15 September 2017 - Mixture of copulae based approach for defining the subjects distance in cluster analysis. (Bonanomi, A., Nai Ruscone, M., Osmetti, S. A.)

2017 Copulas and Their Applications - Almeria, Spain, 3-5 June 2017 - Model based clustering for three-way data structures through a mixture of vine copulas. (Nai Ruscone, M.)

2016 9th International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) Working Group on Computational and Methodological Statistics (CMStatistics 2016) - Seville, Spain, 9-11 December 2016 - Mixture D-vine model based approach to clustering three-way data. (Nai Ruscone, M.)

2016 Salzburg Workshop on Dependence Models & Copulas - Salzburg, Austria, 19-22 September 2016 - Using mixture of vine copulas for clustering. (Nai Ruscone, M.)

2016 SMPS Soft methods in Probability and Statistics - Rome, Italy, 12-14 September 2016 - Modeling the dependence in multivariate longitudinal data by pair copula decomposition. (Nai Ruscone, M., Osmetti, S. A.)

2016 Dependence Modeling in Finance, Insurance and Environmental Science - Munich, Germany, 17-19 May 2016 - Modeling the structure of multivariate non-normal longitudinal data by pair copula decomposition. (Nai Ruscone, M.)

2015 CLADAG 2015 - Santa Margherita di Pula - Cagliari, Italy, 8-10 October 2015 - Defining the subjects distance in hierarchical cluster analysis by copula approach. (Bonanomi, A., Nai Ruscone, M., Osmetti, S. A.)

2015 IES 2015: Statistical methods for service assessment - Bari, Italy, 8-9 July 2015 - Making feasible the comparison via simulation of the most popular scaling techniques.(Boari, G., Nai Ruscone, M.)

2015 IES 2015: Statistical methods for service assessment - Bari, Italy, 8-9 July 2015 - Modeling the dependence in multivariate longitudinal data: an application in health and social services. (Nai Ruscone, M., Osmetti, S. A.)

2014 8th International Conference on Computational and Financial Econometrics (CFE 2014) and 7th International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) Working Group on Computational and Methodological Statistics (ERCIM 2014) - Pisa, Italy, 6-8 December 2014 - Modeling the dependence in multivariate longitudinal data by pair copula decomposition. (Nai Ruscone, M., Osmetti, S. A.)

2014 SUNOVA & SHAPE Statistics with UNObservable VAriables Statistical models for HumAn Perception and Evaluation - Brescia, Italy, 21 October 2014 - Simulating the discretization process resulting from the likert scale adoption. (Boari, G., Nai Ruscone, M.)

2013 9th EBES Conference - Roma, Italy, 11-13 January 2013 - Credit Risk Measurement and Ethical Issues: some Evidences from the Italian Banks. (Bramante, R., Nai Ruscone, M., Spani, P.)

2012 CLADAG 2012 - Anacapri, Italy, 3-4 September 2012 - Scale reliability evaluation for a-priori clustered data. (Boari, G., Cantaluppi, G., Nai Ruscone, M.)

2012 CLADAG 2012 - Anacapri, Italy, 3-4 September 2012 - Use of ICC for defining the optimal clustering solution under normality assumption. (Boari, G., Nai Ruscone, M.)

2012 Methods and Models for Latent Variables - Naples, Italy, 17-19 May 2012 - Reliability measurement for polytomous ordinal items: the empirical polychoric ordinal Alpha. (Bonanomi, A., Nai Ruscone, M., Osmetti, S. A.)

Poster presentations

2024 WGMBC 2024 Working Group on Model-Based Clustering Summer Session - Organizing committee: Luca Scrucca, Charles Bouveyron, Gilles Celeux, Bettina Grün, Brendan Murphy, Rebecca Nugent, Adrian Raftery, Angela Montanari, Cinzia Viroli, and Laura Anderlucci - Bertinoro, Italy, 22-26 July, 2024 - Mixture-based clustering with covariates for ordinal responses. (Nai Ruscone M., Preedalikit, K., Fernández, D., McMillan, L., Liu, I., Costilla, R.)

2021 SIS 2021 - 50th Scientific meeting of the Italian Statistical Society - Pisa, Italy, 21-25 June 2021 - Robustness of statistical methods for modeling paired count data using bivariate discrete distributions with general dependence structures. (Nai Ruscone M., Karlis D.)

2019 WGMBC 2019 Working Group on Model-Based Clustering Summer Session - Organizing committee: Charles Bouveyron, Gilles Celeux, Bettina Grun, Gertraud Malsiner, Brendan Murphy, Rebecca Nugent, Adrian Raftery and Luca Scrucca - Vienna, Austria, 14-20 July, 2017 - Model-based Clustering with R-vine copulas. (Nai Ruscone M., Murphy T. B.)

2018 MBC^2: Model-Based Clustering and Classification - Catania, Italy, 5-7 September 2018 - Model-based clustering with R-vine copulas. (Nai Ruscone M., Murphy T. B.)

2017 WGMBC 2017 Working Group on Model-Based Clustering Summer Session - Organizing committee: Charles Bouveyron, Gilles Celeux, Thomas Brendan Murphy, Adrian Raftery and Luca Scrucca - Perugia, Italy, 16-22 July, 2017 - R-vine mixture models of correlated count data. (Nai Ruscone M., Murphy T. B.)

2017 SIS 2017 Conference of the Italian Statistical Society - Statistics and Data Science: new challenges, new generations - Florence, Italy, 28-30 June 2017 - Exploratory factor analysis of ordinal variables: a copula approach. (Nai Ruscone M.)

2016 MBC^2: Model-Based Clustering and Classification - Catania, Italy, 5-7 September 2016 - Mixture of vine copulas for clustering. (Nai Ruscone M.)

2013 Sco 2013 - 8th complex data modeling and computationally intensive statistical methods for estimation and prediction - Milano, Italy, 9-11 September 2013 - OBsMD: an R package for objective Bayesian model discrimination in follow-up design. (Deldossi, L., Nai Ruscone, M.)

Academic training

- Tutorial on Mixture modeling - Catania (IT), September 9-11, 2009 Organizers Prof. Salvatore Ingrassia, Prof. Roberto Rocci. Lecturers:
  - Christian Hennig, Department of Statistical Science, University College of London, London
  - Wilfried Seidel, School of Economic and Organizational Sciences, University of the Federal Armed Forces, Hamburg.
- ABS09 - Applied Bayesian Statistics School - Bayesian Methodology for Clustering, Classification and Categorical Data Analysis - Bressanone/Brixen (IT), June 15-18, 2009 Directors of the School Prof. Guido Consonni, Fabrizio Ruggeri. Lecturers:
  - Dipak K. Dey, Department of Statistics, University of Connecticut, Storrs, CT, USA
  - Luca La Rocca, Department of Computer Mathematical and Physical Sciences, Università di Modena e Reggio Emilia, Italy.

- SIS School - Theory and practice of sample surveys: probabilistic approach and non-sampling errors, Università Milano Bicocca (IT), July 04-06, 2007. Directors of the School Prof. Giovanna Nicolini, Prof. Monica Pratesi.

Current organizational responsibilities

a.y. 22/23-Pres **Member of Departmental Orientation Committee**, *Università di Genova*, Genova (GE).

May/23-Pres **Member of the Graduate School Committee of the Phd Program in Economics and Quantitative Methods - DOT1311577**, *Università di Genova*, Genova (GE).

Apr/22-Jun/22 **Reviewer of 8 Doctoral Thesis, Phd program in Economics, Statistics and Suistainability XXXIV CICLO, Department of Economics and Legal Studies**, *University of Naples Parthenope*, Naples (NA).

Sep/23-Pres **Member of the Committee of the Erasmus+. In charge of the agreement with UVa (Universidad de Valladolid) Valladolid, Spain**, *University of Genoa*, Genova (GE).

Sep/23-Pres **Member of the Committee of the Erasmus+. In charge of the agreement with Universite de Lille Lille, France**, *University of Genoa*, Genova (GE).

Sep/21-Pres **Member of the Committee of the Erasmus+. In charge of the agreement with AUEB (Athens University of Economics and Business) Athens, Greece**, *University of Genoa*, Genova (GE).

Jun/21-Dic/22 **Member of the experts team constituted by CINECA for the preparation and control of queries for scheduled access or other needs of the consortium members**, Casalecchio di Reno (BO).

Jan/18-Nov/19 **Member of the Teaching and Research Quality Committee (Presidio della Qualità di Ateneo)**, *LIUC - University Carlo Cattaneo*, Castellanza (VA).

Oct/16-Sett/25 **Member of the Graduate School Committee of the Phd Program in Management, Finance and Accounting - DOT1350529**, *LIUC - University Carlo Cattaneo*, Castellanza (VA).

Oct/16-Sett/25 **Active member of the Selection Committee for the Phd program in Management, Finance and Accounting - DOT1350529**, *LIUC - University Carlo Cattaneo*, Castellanza (VA).

Memberships

SIS Italian Statistical Society, since 2007

CLADAG CLAssification and Data Analysis Group, since 2009

ASA American Statistical Association, since 2018

Teaching abroad

a.y. 24/25 **Lecturer of Phd course**, *Model-based clustering (in English)*, Phd in Mathematics, Universidad de Valladolid, Statistics & O.R., Valladolid (Spain).
(**mini-course of 8 hours, under the auspicious of the Erasmus+ program**)

a.y. 24/25 **Lecturer of Master course**, *Statistics (in English)*, Master in Data Science, Hochschule Stralsund, University of Applied Sciences, Stralsund (Germany).
(**mini-course of 8 hours, under the auspicious of the Erasmus+ program**)

a.y. 22/23 **Lecturer of Summer School**, *Model-based clustering with R (in English)*, PhD in Statistics and Operations Research - XVI Summer School 2022, Facultat de Matemátiques i Estadística - Universitat Politècnica de Catalunya Barcelonatech, Barcelona (Spain).
(**mini-course of 15 hours**)

a.y. 21/22 **Lecturer of Summer School**, *Introduction to Cluster Analysis with R (in English)*, PhD in Statistics and Operations Research - XV Summer School 2022, Facultat de Matemátiques i Estadística - Universitat Politècnica de Catalunya Barcelonatech, Barcelona (Spain).
(**mini-course of 15 hours**)

a.y. 18/19 **Lecturer of phd course**, *Model-based Clustering (in English)*, Phd in Statistics, AUEB - Athens University of Economics and Business, Athens (Greece).
(**mini-course of 18 hours, under the auspicious of the Erasmus+ program**)

Teaching

a.y. 21/22-25/26 **Lecturer**, *Statistics*, Undergraduate in Business Administration, University of Genoa, Genoa.

a.y. 21/22-25/26 **Lecturer**, *Statistics*, Undergraduate in Law and Business Administration, University of Genoa, La Spezia.

a.y. 16/17-25/26 **Lecturer**, *Statistics (in English)*, Undergraduate in Business Economics, LIUC - University Carlo Cattaneo, Castellanza (VA).

a.y. 16/17-25/26 **Lecturer of phd course**, *Information Technology (in English)*, Phd in Management, Finance and Accounting, LIUC - University Carlo Cattaneo, Castellanza (VA).

a.y. 16/17-24/25 **Lecturer of phd course**, *Applied Statistics (in English)*, Phd in Management, Finance and Accounting, LIUC - University Carlo Cattaneo, Castellanza (VA).

a.y. 22/23-25/26 **Adjunct professor**, *Preparatory course in Statistics (in English)*, Master in Public Policies and Administration, Free University of Bozen, Bozen.

a.y. 23/24-25/26 **Adjunct professor**, *Statistics for EPE*, Undergraduate in Economics, Politics and Ethics, Free University of Bozen, Bozen.

a.y. 23/24-24/25 **Lecturer**, *Statistical Forecasting (in English)*, Master in Management for Energy and Environmental Transition (MEET), University of Genoa, Genoa.

a.y. 22/23-23/24 **Adjunct professor**, *Introduction to Statistical Methods (in English)*, Master in Public Policies and Administration, Free University of Bozen, Bozen.

a.y. 23/24 **Adjunct professor**, *Applied Statistics for Accounting and Finance (in English)*, Master in Accounting and Finance, Free University of Bozen, Bozen.

a.y. 23/24 **Adjunct professor**, *Statistical Methods for Business Analysis (in English)*, Master in Entrepreneurship and Innovation, Free University of Bozen, Bozen.

a.y. 19/20-20/21 **Lecturer**, *Multivariate Exploratory Data Analysis*, Undergraduate in Mathematical Statistics and Data Management, University of Genoa, Genoa.

a.y. 19/20-20/21 **Lecturer**, *Statistics*, Undergraduate in Management Engineering, University of Genoa, Genoa.

a.y. 21/22 **Teaching assistant**, *Computational Laboratory for Statistics*, Undergraduate in Business Economics, LIUC - University Carlo Cattaneo, Castellanza (VA).
(Prof. Eugenio Melilli)

a.y. 19/20 **Adjunct professor**, *Statistics for the Public Sector - Economic Statistics (in English)*, Master in Public Policies and Administration, Free University of Bozen, Bozen.

a.y. 18/19 **Lecturer**, *Statistics for economics*, Undergraduate in Economics - CLEM, University of Insubria, Varese.

a.y. 15/16-19/20 **Teaching assistant**, *Computational Laboratory for Statistics*, Undergraduate in Business Economics, LIUC - University Carlo Cattaneo, Castellanza (VA).
(Prof. Eugenio Melilli)

a.y. 17/18 **Tutorship**, *Data Analysis (in English)*, Undergraduate in Economics, Bocconi University.
(Prof. Sergio Venturini)

a.y. 16/17-17/18 **Teaching assistant**, *Statistics (in English)*, Undergraduate in Economics - BIEM, Bocconi University.
(Prof. Federico Andreis)

a.y. 16/17-17/18 **Adjunct professor**, *Statistics (in English)*, Undergraduate in Economics - BIEM, Bocconi University, Milan.

a.y. 16/17 **Lecturer**, *Fundamentals of financial data*, Undergraduate in Law, LIUC - University Carlo Cattaneo, Castellanza (VA).

a.y. 16/17 **Lecturer of phd courses**, *Cross Section Data Analysis (in English)*, Phd in Management, Finance and Accounting, LIUC - University Carlo Cattaneo, Castellanza (VA).

a.y. 14/15-16/17 **Tutorship**, *Data Analysis*, Undergraduate in Economics, Bocconi University.
(Prof. Eugenio Melilli)

a.y. 16/17 **Adjunct professor**, *Data mining*, Undergraduate in Economics and Statistical Sciences, University of Milano Bicocca.

a.y. 15/16 **Adjunct professor**, *Laboratory for Social Research II*, Undergraduate in Political and social sciences, Università Cattolica del Sacro Cuore, Milan.

a.y. 10/11-15/16 **Adjunct professor**, *Statistics*, Undergraduate in Economics - CLEF, Bocconi University.

a.y. 10/11-15/16 **Teaching assistant**, *Statistics*, Undergraduate in Economics - CLEF, Bocconi University.
(Prof. Elena Poli)

a.y. 10/11-14/15 **Teaching assistant**, *Computational Laboratory for Economics (in English)*, Master in Economics, Università Cattolica del Sacro Cuore, Milan.
(Prof. Gabriele Cantaluppi)

a.y. 12/13-14/15 **Teaching assistant**, *Statistics 2*, Master in Economics, Università Cattolica del Sacro Cuore, Milan.
(Prof. Guido Consonni)

a.y. 09/10-12/13 **Teaching assistant**, *Statistics*, Undergraduate in Economics, Università Cattolica del Sacro Cuore, Milan.
(Prof Roberta Paroli)

a.y. 10/11-12/13 **Teaching assistant**, *Quantitative Methods for Management*, Master in Economics, Università Cattolica del Sacro Cuore, Milan.
(Prof Riccardo Bramante)

a.y. 05/06-12/13 **Teaching assistant**, *Computation Laboratory for Business Decision*, Master in Economics, Università Cattolica del Sacro Cuore, Milan.
(Prof Giuseppe Boari, Prof. Gabriele Cantaluppi)

a.y. 11/12-12/13 **Teaching assistant**, *Psychometric*, Undergraduate in Psychology, Università Cattolica del Sacro Cuore, Brescia.
(Prof Marica Vezzoli, Silvia Angela Osmetti)

a.y. 12/13 **Adjunct professor**, *Statistics Methods for Finance and Assurance*, Undergraduate in Economics , Università Cattolica del Sacro Cuore, Milan.

a.y. 10/11-12/13 **Teaching assistant**, *Economic Statistics*, Undergraduate in Economics, Università Cattolica del Sacro Cuore, Milan.
(Prof Riccardo Bramante)

a.y. 11/12 **Lecturer**, *Seminars in Statistics*, Undergraduate in Marketing and communications, IULM - Libera Università di Lingue e Comunicazione, Milan.

a.y. 11/12 **Adjunct professor**, *Laboratory for Social Research II*, Undergraduate in Political and social sciences, Università Cattolica del Sacro Cuore, Milan.

a.y. 10/11 **Teaching assistant**, *Statistics Methods for Finance and Assurance*, Master in Economics and statistical sciences, Università Cattolica del Sacro Cuore, Milan.
(Prof. Diego Zappa)

a.y. 10/11 **Teaching assistant**, *Statistics Methods for Quality Control*, Master in Economics and statistical sciences, Università Cattolica del Sacro Cuore, Milan.

a.y. 09/10-10/11 **Teaching assistant**, *Statistics*, Undergraduate in Political, economical and social sciences, Università Statale, Milan.
(Prof. Silvia Salini)

a.y. 10/11 **Lecturer**, *Seminars in Statistics*, Master in Public relations and corporate communication, IULM - Libera Università di Lingue e Comunicazione, Milan.

a.y. 09/10-10/11 **Tutorship Statistics**, *Undergraduate in Economics and statistical sciences*, University of Milano Bicocca, (Prof Paola M. Chiodini).

a.y. 08/09-09/10 **Teaching assistant**, *Economic Statistics*, Master in Economics, Università Cattolica del Sacro Cuore, Milan.
(Prof Luigi Santamaria)

a.y. 09/10 **Teaching assistant**, *Analysis of statistical and survey data*, Undergraduate in Political sciences - CES, Università Statale, Milan.
(Prof Giovanna Nicolini)

a.y. 05/06-06/07 **Teaching assistant**, *Statistics*, Undergraduate in Economics, Università Cattolica del Sacro Cuore, Milan.
(Prof Luigi Santamaria)

Thesis Supervisor

2025 Vranicich Andrea, Hierarchical and non hierarchical clustering: application and computational methods (B.Sc. Business Administration, Università degli Studi di Genova)

2023 Sergiampietri Camilla, Analyzing a wine tasting: the "Judgment of Paris" (B.Sc. Business Administration, Università degli Studi di Genova)

2023 Rossi Federica, Clustering techniques for nominal data (B.Sc. Business Administration, Università degli Studi di Genova)

2022 Parravicini Chiara, Hierarchical clustering: theory and application (B.Sc. Business Economics, LIUC - Università Carlo Cattaneo)

2021 Azimonti Marco, Metodi statistici per le decisioni aziendali: aspetti teorici e applicativi (B.Sc. Business Economics, LIUC - Università Carlo Cattaneo)

2021 Gaglioti Erika, Modelli statistici per l'analisi dei dati di conteggio (B.Sc. SMID - Mathematical Statistics and Data Management, Università degli Studi di Genova)

2020 Scaglia Elisa, Modelli di input-output: teoria e applicazioni (B.Sc. SMID - Mathematical Statistics and Data Management, Università degli Studi di Genova)

2020 Maitilasso Laura, Indici di concentrazione: teoria e aspetti applicativi (B.Sc. SMID - Mathematical Statistics and Data Management, Università degli Studi di Genova)

2018 Di Bitetto Valentina, Copula based measure of dependence with application in cluster analysis (B.Sc. Economics, LIUC - Università Carlo Cattaneo)

2018 De Stefano Matteo, Text mining per la comunicazione tra aziende e clienti (B.Sc. Economics and Statistical Sciences, Università Milano Bicocca)

2017 La Porta Giada, Tecniche di text mining: processo di estrazione dell'informazione da dati testuali (B.Sc. Economics and Statistical Sciences, Università Milano Bicocca)

2017 Panizza Susanna, Misure di similarità nel text mining: un esempio applicativo (B.Sc. Economics and Statistical Sciences, Università Milano Bicocca)

2017 Pellegata Alessandra, Imputazione dei dati mancanti: confronto tra diversi approcci (B.Sc. Economics and Statistical Sciences, Università Milano Bicocca)

2017 Spataro Anna, Estrazione dell'informazione da dati testuali mediante text mining (B.Sc. Economics and Statistical Sciences, Università Milano Bicocca)

2017 Stucchi Gianmarco, Algoritmi di classificazione per dati longitudinali (B.Sc. Economics and Statistical Sciences, Università Milano Bicocca)

Experience

a.y. 23/24 **Course PNRR**, *Statistical Learning*, Liceo Ginnasio Statale B. Cairoli, Vigevano - Pavia.

a.y. 22/23 - 23/24 **Course ITS**, *Higher-Level Specialist in Communication and Marketing for Tourism and Cultural Sector*, ITS Foundation for Tourism Liguria, Santa Margherita Ligure - Genoa.

01/2024- 03/2024 **Consulting**, *Study on Inflation in the Media*, supervisor Prof. Alessandro Rosina, Funded by EBIQUITY Italy SRL.

03/2022 **Consulting**, *Study on demographic dynamics and population projection of the Valle d'Aosta*, supervisor Prof. Alessandro Rosina, Funded by Valle d'Aosta region.

02/05/2012-11/05/2012 **Consulting**, *The rating methodologies*, supervisor Prof. Riccardo Bramante.

14-15/07/2011 **Course**, *Introduction to Stata software*, Università Cattolica del Sacro Cuore, Milan.

01-15/04/2011 **Consulting**, *Questionnaire data analysis for private banking customer* , UniManagement srl.

01/07/2009-31/08/2009 **Consulting**, *Survey on Bullying*, Transcrime, Università Cattolica del Sacro Cuore. Milan

21/02/2005-20/07/2005 **Stage in Area Business Development**, *SAS Software and service*, SAS Software and Service, Milan.

Consulting activities

2012 – 2013 Tutor for students of Università Cattolica del Sacro Cuore, Milan

2012 – 2013 Tutor for students of Economics, Università Cattolica del Sacro Cuore, Milan

2005 – 2006 Stage tutor for students of Economics, Università del Sacro Cuore, Milan

2005 – 2009 Group tutor - university tutor for the students which are attending my same faculty or want to come and do that, Università Cattolica del Sacro Cuore, Milan

Computer skills

Basic JAVA

Intermediate SQL, HTML, Office, Linux

Advanced R, MATLAB, PYTHON, C, Eviews, SPSS, SAS, Stata, MlwiN, LaTeX

Languages

Italian **Mothertongue**

English **Advanced** *Conversationally fluent*

German **Intermediate**

References

References are available upon request.

The information contained in this CV has been provided under art. 46 -47 and 76 D.P.R. 445/2000