

Andrea Cappozzo

Associate Professor of Statistics

Curriculum Vitae

2025-11-01

-  Department of Statistical Sciences,
Università Cattolica del Sacro Cuore
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Research Interests

Mixture models, Model-based clustering and classification, Variable selection, Penalized estimation, Robust statistics, Statistical learning, Health Analytics

Work Experience

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| 2025/1 – Pres. | Associate Professor , Department of Statistical Sciences, Università Cattolica del Sacro Cuore |
| 2024/2 – 2024/12 | Assistant Professor (Ricercatore SECS-S/01, tipo B), DEMM, Università degli Studi di Milano |
| 2021/4 – 2024/2 | Assistant Professor (Ricercatore SECS-S/01, tipo A), Department of Mathematics, Politecnico di Milano |
| 2017/9 – 2021/12 | Volunteer data scientist , Heartindata, Milan |
| 2020/4 – 2021/3 | Postdoctoral researcher , Department of Statistics & Quantitative Methods, University of Milano-Bicocca |
| 2020/1 – 2020/4 | Freelance Data Scientist , DCG, Milan |
| 2015/9 – 2016/9 | Business analyst and planner , HP Inc, Barcelona |

Teaching Experience

Lecturer

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| 2025/10 – Pres. | BSc course in Applied Statistics and Big Data , Università Cattolica del Sacro Cuore |
| 2025/4 – Pres. | MSc course in Computational Statistics , Università Cattolica del Sacro Cuore |
| 2024/9 – 2024/12 | MSc course in Advanced Multivariate Statistics , Università degli Studi di Milano |
| 2024/9 – 2024/12 | MSc course in Coding for Data Science and Data Management (R module) , Università degli Studi di Milano |
| 2024/4 – 2024/7 | BSc course in Statistics for big data , Università degli Studi di Milano |
| 2022/2 – 2024/6 | MSc course in Biostatistics , Politecnico di Milano |

Teaching Assistant

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|-----------------|---|
| 2021/9 – 2024/6 | MSc course in Nonparametric statistics , Politecnico di Milano |
| 2021/9 – 2021/9 | Lab with R Mixture models module , PhD in Economics, Statistics and Data Science, University of Milano-Bicocca |
| 2021/5 – 2021/5 | Lab with R Modelos de Mixtura con aplicaciones en R , Universidad Nacional de San Agustin de Arequipa |
| 2019/3 – 2021/9 | BSc courses in Statistics and Statistical Methods , University of Milano-Bicocca |
| 2019/3 – 2019/9 | BSc courses in Statistical Models and Computer Science , University of Milano-Bicocca |
| 2017/9 – 2018/2 | BSc courses in Statistics , Bocconi University |

Education

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|--------|--|------------------------------|
| 2020/2 | Ph.D. in Statistics and Mathematical Finance (Doctor Europaeus) | University of Milano-Bicocca |
| 2017/2 | Statistical Learning online course (completed with distinction) | Stanford University |
| 2015/4 | M.Sc. in Statistical Sciences (with honors) | University of Padua |
| 2012/7 | B.Sc. in Statistics and Management (with honors) | University of Padua |

Visiting Periods

- | | |
|-----------------|---|
| 2018/3 – 2019/2 | Visiting PhD student , Insight Centre for Data Analytics, University College Dublin, Ireland |
| 2014/1 – 2014/6 | Exchange Semester , School of Economics and Management, Tilburg University, The Netherlands |

Publications

Refereed journals

- [1] L. Caldera, C. Masci, A. Cappozzo, M. Forlani, B. Antonelli, O. Leoni, and F. Ieva. "Uncovering mortality patterns and hospital effects in COVID-19 heart failure patients: a novel multilevel logistic cluster-weighted modeling approach". In: *Biometrics* 81.2 (2025). ISSN: 0006-341X. DOI: 10.1093/biomtc/ujaf046.
- [2] A. Cappozzo and A. Casa. "Model-based clustering for covariance matrices via penalized Wishart mixture models". In: *Computational Statistics & Data Analysis* 212.August 2024 (2025), p. 108232. ISSN: 01679473. DOI: 10.1016/j.csda.2025.108232.
- [3] A. Cappozzo, A. Casa, and M. Fop. "Sparse Model-Based Clustering of Three-Way Data via Lasso-Type Penalties". In: *Journal of Computational and Graphical Statistics* (2025), pp. 1-21. ISSN: 1061-8600. DOI: 10.1080/10618600.2024.2429705.
- [4] F. Corso, P. Baili, F. Scotti, L. Mazzeo, V. Torri, G. Lo Russo, C. Proto, et al. "Cost-effectiveness of first-line osimertinib informed by electronic medical records via text-mining: a real-world Italian case study of EGFR-mutated advanced NSCLC patients". In: *ESMO Real World Data and Digital Oncology* 10.C (2025), p. 100198. ISSN: 29498201. DOI: 10.1016/j.esmowr.2025.100198.

- [5] L. Mazzeo, F. Corso, P. Baili, F. Scotti, V. Torri, M. Ganzinelli, V. Mišković, et al. "Data analytics for real-world data integration in TKI-treated NSCLC patients using electronic health records". In: *ESMO Real World Data and Digital Oncology 7.C* (2025), p. 100109. ISSN: 29498201. DOI: 10.1016/j.esmorw.2024.100109.
- [6] G. Montani and A. Cappozzo. "Stacking Model-Based Classifiers for Dealing With Multiple Sets of Noisy Labels". In: *Biometrical Journal* 67.2 (2025), pp. 1-21. ISSN: 0323-3847. DOI: 10.1002/bimj.70042.
- [7] M. L. Carlesso, A. Cappozzo, M. Manisera, and P. Zuccolotto. "Scoring probability maps in the basketball court with Indicator Kriging estimation". In: *Computational Statistics* (2024). ISSN: 0943-4062. DOI: 10.1007/s00180-024-01564-4.
- [8] L. Benedetti, E. Boniardi, L. Chiani, J. Ghirri, M. Mastropietro, A. Cappozzo, and F. Denti. "Variational inference for semiparametric Bayesian novelty detection in large datasets". In: *Advances in Data Analysis and Classification* (2023). ISSN: 1862-5347. DOI: 10.1007/s11634-023-00569-z.
- [9] A. Cappozzo, L. A. García-Escudero, F. Greselin, and A. Mayo-Iscar. "Graphical and Computational Tools to Guide Parameter Choice for the Cluster Weighted Robust Model". In: *Journal of Computational and Graphical Statistics* 32.3 (2023), pp. 1195-1214. ISSN: 1061-8600. DOI: 10.1080/10618600.2022.2154218.
- [10] A. Cappozzo, F. Ieva, and G. Fiorito. "A general framework for penalized mixed-effects multitask learning with applications on DNA methylation surrogate biomarkers creation". In: *The Annals of Applied Statistics* 17.4 (2023), pp. 3257-3282. ISSN: 1932-6157. DOI: 10.1214/23-AOAS1760.
- [11] A. Cappozzo, C. McCrory, O. Robinson, A. Freni Sterrantino, C. Sacerdote, V. Krogh, S. Panico, et al. "A blood DNA methylation biomarker for predicting short-term risk of cardiovascular events". In: *Clinical Epigenetics* 14.1 (2022), p. 121. ISSN: 1868-7075. DOI: 10.1186/s13148-022-01341-4.
- [12] A. Casa, A. Cappozzo, and M. Fop. "Group-Wise Shrinkage Estimation in Penalized Model-Based Clustering". In: *Journal of Classification* 39.3 (2022), pp. 648-674. ISSN: 0176-4268. DOI: 10.1007/s00357-022-09421-z.
- [13] A. Cappozzo, L. Duponchel, F. Greselin, and T. B. Murphy. "Robust variable selection in the framework of classification with label noise and outliers: Applications to spectroscopic data in agri-food". In: *Analytica Chimica Acta* 1153 (2021), p. 338245. ISSN: 00032670. DOI: 10.1016/j.aca.2021.338245.
- [14] A. Cappozzo, L. A. G. García Escudero, F. Greselin, and A. Mayo-Iscar. "Parameter Choice, Stability and Validity for Robust Cluster Weighted Modeling". In: *Stats* 4.3 (2021), pp. 602-615. ISSN: 2571-905X. DOI: 10.3390/stats4030036.
- [15] A. Cappozzo, F. Greselin, and T. B. Murphy. "Robust variable selection for model-based learning in presence of adulteration". In: *Computational Statistics & Data Analysis* 158 (2021), p. 107186. ISSN: 01679473. DOI: 10.1016/j.csda.2021.107186.
- [16] F. Denti, A. Cappozzo, and F. Greselin. "A two-stage Bayesian semiparametric model for novelty detection with robust prior information". In: *Statistics and Computing* 31.4 (2021), p. 42. ISSN: 0960-3174. DOI: 10.1007/s11222-021-10017-7.
- [17] A. Cappozzo, F. Greselin, and T. B. Murphy. "A robust approach to model-based classification based on trimming and constraints". In: *Advances in Data Analysis and Classification* 14.2 (2020), pp. 327-354. ISSN: 1862-5347. DOI: 10.1007/s11634-019-00371-w.
- [18] A. Cappozzo, F. Greselin, and T. B. Murphy. "Anomaly and Novelty detection for robust semi-supervised learning". In: *Statistics and Computing* 30.5 (2020), pp. 1545-1571. ISSN: 0960-3174. DOI: 10.1007/s11222-020-09959-1.

Monographs and refereed conference proceedings

- [1] L. Caldera, L. Cavinato, A. Cappozzo, I. Cama, S. Garbarino, A. Cirone, R. Lodi, et al. "DISARM: Disentangled Scanner-Free Image Generation via Unsupervised Image2Image Translation". In: *International Workshop on Machine Learning in Clinical Neuroimaging*. Springer. 2025, pp. 102-112.
- [2] L. Caldera, C. Masci, A. Cappozzo, M. Forlani, B. Antonelli, O. Leoni, and F. Ieva. "A Multilevel Logistic Cluster-Weighted Model for Assessing Hospital Impact in COVID-19 Heart Failure". In: *Statistics for Innovation II*. Ed. by E. di Bella, V. Gioia, C. Lagazio and S. Zaccarin. Cham: Springer Nature Switzerland, 2025, pp. 309-314. ISBN: 978-3-031-96303-2.
- [3] A. Cappozzo. "Learning from Multiple Annotators: An Ensemble Model-Based Classification Approach". In: *Methodological and Applied Statistics and Demography II*. Ed. by A. Pollice and P. Mariani. Cham: Springer Nature Switzerland, 2025, pp. 85-89. ISBN: 978-3-031-64350-7.
- [4] A. Casa and A. Cappozzo. "Penalized Model-Based Clustering for Covariance Matrices". In: *Statistics for Innovation I*. Ed. by E. di Bella, V. Gioia, C. Lagazio and S. Zaccarin. Cham: Springer Nature Switzerland, 2025, pp. 490-495. ISBN: 978-3-031-96736-8.
- [5] C. Masci, A. Cappozzo, F. Ieva, O. Leoni, M. Forlani, B. Antonelli, and A. M. Paganoni. "Model-Based Clustering of Nested Lifetime Data: Profiling COVID-19 Heart Failure Patients". In: *Methodological and Applied Statistics and Demography IV*. Ed. by A. Pollice and P. Mariani. Cham: Springer Nature Switzerland, 2025, pp. 240-245. ISBN: 978-3-031-64447-4.
- [6] A. Cappozzo, L. A. García-Escudero, F. Greselin, and A. Mayo-Iscar. "Monitoring Tools in Robust CWM for the Analysis of Crime Data". In: *Building Bridges between Soft and Statistical Methodologies for Data Science*. Ed. by L. A. García-Escudero, A. Gordaliza, A. Mayo, M. A. Lubiano Gomez, M. A. Gil, P. Grzegorzewski and O. Hryniewicz. Cham: Springer International Publishing, 2023, pp. 65-72. ISBN: 978-3-031-15509-3.
- [7] A. Cappozzo, C. Masci, F. Ieva, and A. M. Paganoni. "Model-based clustering of right-censored lifetime data with frailties and random covariates". In: *CLADAG 2023 BOOK OF ABSTRACTS AND SHORT PAPERS*. Ed. by C. Rampichini, M. L. Rocca, P. Coretto, G. Giordano and M. L. Parrella. Pearson Education Resources, 2023, pp. 91-94. ISBN: 9788891935632.
- [8] A. Casa, A. Cappozzo, and M. Fop. "Penalized Model-Based Clustering with Group-Dependent Shrinkage Estimation". In: *Building Bridges between Soft and Statistical Methodologies for Data Science*. Ed. by L. A. García-Escudero, A. Gordaliza,

- A. Mayo, M. A. Lubiano Gomez, M. A. Gil, P. Grzegorzewski and O. Hryniewicz. Cham: Springer International Publishing, 2023, pp. 73-78. ISBN: 978-3-031-15509-3.
- [9] A. Rossi, A. Cappozzo, and F. Ieva. "Does the Inflation Factor need tuning? Simulation-based adjustment for Outlier Detection via the Functional Boxplot". In: *Book of Short papers SIS 2023*. Milano: Pearson, 2023, pp. 1115-1159. ISBN: 9788891935618AAVV.
- [10] A. Cappozzo, F. Ieva, and G. Fiorito. "Mixed-effects high-dimensional multivariate regression via group-lasso regularization". In: *Book of Short Papers SIS 2022*. Pearson, 2022, pp. 652-657.
- [11] A. Casa, A. Cappozzo, and M. Fop. "Group-wise penalized estimation schemes in model-based clustering". In: *Book of Short Papers SIS 2022*. Pearson, 2022, pp. 534-539.
- [12] A. Cappozzo, A. Casa, and M. Fop. "Model-based clustering with sparse matrix mixture models". In: *CLADAG 2021 BOOK OF ABSTRACTS AND SHORT PAPERS*. Ed. by G. C. Porzio, C. Rampichini and C. Bocci. Firenze University Press, 2021, pp. 280-283. DOI: 10.36253/978-88-5518-340-6.
- [13] A. Cappozzo, A. Casa, and M. Fop. "Penalized model-based clustering for three-way data structures". In: *Book of Short Papers SIS 2021*. Pearson, 2021, pp. 758-763.
- [14] A. Cappozzo, L. Duponchel, F. Greselin, and T. B. Murphy. "Robust classification of spectroscopic data in agri-food: first analysis on the stability of results". In: *CLADAG 2021 BOOK OF ABSTRACTS AND SHORT PAPERS*. Ed. by G. C. Porzio, C. Rampichini and C. Bocci. Firenze University Press, 2021, pp. 49-52. DOI: 10.36253/978-88-5518-340-6.
- [15] A. Cappozzo, L. A. G. García Escudero, F. Greselin, and A. Mayo-Iscar. "Exploring solutions via monitoring for cluster weighted robust models". In: *CLADAG 2021 BOOK OF ABSTRACTS AND SHORT PAPERS*. Ed. by G. C. Porzio, C. Rampichini and C. Bocci. Firenze University Press, 2021, pp. 284-287. DOI: 10.36253/978-88-5518-340-6.
- [16] A. Cappozzo and F. Greselin. "Monitoring tools for robust estimation of Cluster Weighted Models". In: *Book of Short Papers SIS 2021*. Pearson, 2021, pp. 1245-1250.
- [17] A. Cappozzo, F. Greselin, and T. B. Murphy. "Robust Model-Based Learning to Discover New Wheat Varieties and Discriminate Adulterated Kernels in X-Ray Images". In: *Statistical Learning and Modeling in Data Analysis*. Ed. by S. Balzano, G. C. Porzio, R. Salvatore, D. Vistocco and M. Vichi. Cham: Springer International Publishing, 2021, pp. 29-36. ISBN: 978-3-030-69944-4. DOI: 10.1007/978-3-030-69944-4_4.
- [18] F. Denti, A. Cappozzo, and F. Greselin. "Outlier and novelty detection for Functional data: a semiparametric Bayesian approach". In: *Book of Short Papers of the 5th international workshop on Models and Learning for Clustering and Classification*. Ledizioni, 2021, pp. 33-38.
- [19] A. Cappozzo, F. Greselin, and T. B. Murphy. "Variable selection for robust model-based learning from contaminated data". In: *Book of Short Papers SIS 2020*. Pearson, 2020, pp. 1117-1122.
- [20] F. Denti, A. Cappozzo, and F. Greselin. "Bayesian nonparametric adaptive classification with robust prior information". In: *Book of Short Papers SIS 2020*. Pearson, 2020, pp. 655-660.
- [21] A. Cappozzo and F. Greselin. "Detecting wine adulterations employing robust mixture of factor analyzers". In: *Statistical Learning of Complex Data*. Springer Berlin Heidelberg, 2019, pp. 13-21. ISBN: 978-3-030-21139-4. DOI: 10.1007/978-3-030-21140-0_2.
- [22] A. Cappozzo, F. Greselin, and G. Manzi. "Predicting and improving smart mobility: a robust model-based approach to the BikeMi BSS". In: *Smart Statistics for Smart Applications 2019 - Book of Short papers*. Milano: Pearson, 2019, pp. 737-742. ISBN: 9788891915108.
- [23] A. Cappozzo, F. Greselin, and T. B. Murphy. "Supervised learning in presence of outliers, label noise and unobserved classes". In: *Book of short papers / Cladag2019*. Centro Editoriale di Ateneo Università di Cassino e del Lazio Meridionale, 2019, pp. 104-107. ISBN: 978-88-8317-108-6.
- [24] A. Cappozzo, F. Ferraccioli, M. Stefanucci, and P. Secchi. "An object oriented approach to multimodal imaging data in neuroscience". In: *Studies in Neural Data Science : Startup Research 2017, Siena, Italy, June 25-27*. Vol. 257. Springer New York LLC, 2018, pp. 57-73. ISBN: 9783030000387. DOI: 10.1007/978-3-030-00039-4_4.
- [25] A. Cappozzo, F. Greselin, and T. B. Murphy. "Robust Updating Classification Rule with applications in Food Authenticity Studies". In: *Book of Short Papers SIS 2018*. Pearson, 2018, pp. 493-499. ISBN: 9788891910233.
- [26] A. Cappozzo, F. Greselin, and T. B. Murphy. "The role of trimming and variable selection in robust model-based classification for food authenticity studies". In: *COMPSTAT 2018 Book of Abstracts*. COMPSTAT and CRoNoS, 2018, pp. 35-35. ISBN: 978-9963-2227-3-5.
- [27] F. Greselin and A. Cappozzo. "Wine authenticity assessed via trimming". In: *Book of short papers / Cladag2017*. Mantova: Universitas Studiorum Srl, 2017. ISBN: 9788899459710.

Presentations

Invited

- 2025/9 **Scientific meeting CLADAG 2025**, University of Naples Federico II, Italy
 2025/7 **Working Group on Model-Based Clustering**, Université Côte d'Azur, France
 2025/6 **IES 2025 - Statistics and Data Science for Evaluation and Quality**, University of Padova, Italy
 2024/6 **SIS 2024 - The 52nd Scientific Meeting of the Italian Statistical Society**, University of Bari Aldo Moro, Italy
 2024/5 **I Seminario Internacional de Estadística Aplicada**, Universidad Nacional de San Agustín de Arequipa, Peru
 2023/12 **CMStatistics 2023**, HTW Berlin, University of Applied Sciences , Germany
 2023/9 **Scientific meeting CLADAG 2023**, University of Salerno, Italy
 2022/12 **CMStatistics 2022**, Senate House University of London, United Kingdom
 2022/9 **10th International Conference on Soft Methods in Probability and Statistics**, University of Valladolid, Spain
 2022/7 **17th conference of the International Federation of Classification Societies**, University of Porto, Portugal
 2021/9 **22nd European Young Statisticians Meeting**, virtual conference
 2019/9 **Scientific meeting CLADAG 2019**, University of Cassino and Southern Lazio, Italy
 2018/8 **COMPSTAT 2018**, Unirea Hotel, Iasi, Romania

Seminars

- 2025/9 **Statistics and Information Systems (SIS) seminar series**, Trinity College Dublin, Ireland
 2025/3 **Department of Statistical Sciences seminar series**, Università Cattolica del Sacro Cuore, Italy
 2025/2 **MU Maths-Stats Colloquium**, Maynooth University, Ireland
 2024/11 **Brown Bag seminar series**, University of Milan, Italy
 2024/3 **DAIS group seminar series**, Ca' Foscari University of Venice, Italy
 2022/2 **Mox seminar series**, Politecnico di Milano, Italy
 2021/5 **Mox seminar series**, Politecnico di Milano, Italy
 2020/9 **IR-group meeting**, virtual seminar
 2019/12 **Mock talk II**, University of Milano-Bicocca, Italy
 2019/7 **Mock talk I**, University of Milano-Bicocca, Italy
 2018/10 **Working Group on Statistical Learning**, University College Dublin, Ireland

Contributed

- 2023/6 **SIS 2023 - Statistical Learning, Sustainability and Impact Evaluation**, Università Politecnica delle Marche, Italy
 2021/9 **Scientific meeting CLADAG 2021**, virtual conference
 2021/6 **SIS 2021- 50th Meeting of the Italian statistical society**, virtual conference
 2021/2 **e-CHIMIOMETRIE 2021**, virtual conference
 2020/9 **MBC² Workshop on Models and Learning for Clustering and Classification**, virtual conference
 2020/6 **e-Rum 2020**, virtual conference
 2019/12 **CMStatistics 2019**, Senate House University of London, United Kingdom
 2019/6 **Smart Statistics for Smart Applications - SIS conference**, Catholic University of the Sacred Heart, Italy
 2017/9 **Scientific meeting CLADAG 2017**, University of Milano-Bicocca, Italy

Poster/software sessions

- 2024/7 **Working Group on Model-Based Clustering**, Bertinoro, Italy
 2023/8 **ISCB2023 – International Society for Clinical Biostatistics**, University of Milano-Bicocca, Italy
 2021/10 **Working Group on Model-Based Clustering**, Athens, Greece
 2021/4 **International workshop on Spectroscopy and Chemometrics**, virtual conference
 2021/1 **DS³ Data science summer school**, virtual conference
 2020/7 **Young-ISA Twitter Poster Conference**, virtual conference
 2019/7 **Working Group on Model-Based Clustering**, Wirtschaftsuniversität Wien, Austria
 2018/9 **MBC² Workshop on Model-Based Clustering and Classification**, University of Catania, Italy

Summer Schools and Workshops

- 2018/4 **Robust Statistics: Foundations and Recent Developments**, University of Milano-Bicocca, Italy
 2017/11 **Introduction to Functional Data Analysis**, Università degli Studi di Bergamo, Italy
 2017/6 **Startup Research**, Certosa di Pontignano, Italy
 2017/5 **International Summer School on Classification and Data Analysis**, University of Bologna, Italy

Awards

- 2023/9 **Young Researcher Paper Award**, CLADAG 2023, University of Salerno, Italy
 2018/9 **Best poster presentation**, MBC² Workshop on Model-Based Clustering and Classification, Catania
 2017/9 **Member of the third winning team**, Young CLADAG - Data science competition, Politecnico di Milano
 2017/6 **Member of one of the four winning teams**, Stats Under the Stars 3 - Data science competition, University of Florence

Funding and Grants

- 2023/1 – Pres. **Research group member**, Enhance-Hearth: Provider Impact and Risk Stratification in Heart Failure. PI: Prof. F. Ieva
 2022/1 – 2024/2 **Research group member**, Health Big Data: Istituti Virtuali di Patologia della Rete Italiana degli IRCCS. PI: Prof. F. Ieva
 2021/4 – 2024/2 **Research group member**, Onco Platform: Evaluating Early Cancer Treatments with Real World Data. PI: Prof. F. Ieva
 2020/4 – 2021/3 **Research group member**, 2019-ATE-0076: Robust Semi-Supervised Classification for Big Data. PI: Prof. F. Greselin

Theses supervision

Bachelor's Theses

Advisor

| Date | Student Name | Institution | Thesis topics |
|------------|-----------------------------|----------------------------------|--|
| 2024/12/18 | Gabriele Minchillo | Università degli Studi di Milano | Supervised learning, Illegal transaction detection |
| 2024/10/20 | Julia Mavi Mikaela Hekanaho | Università degli Studi di Milano | Survey data, Linear regression |

Master's Theses

Advisor

| Date | Student Name | Institution | Thesis topics |
|------------|-------------------------------|-----------------------|--|
| 2024/07/15 | Alessandro Diamanti | Politecnico di Milano | Biclustering, Dimensionality reduction, Omics Data |
| 2024/04/10 | Elisa Borrini | Politecnico di Milano | Model-based clustering, Penalized estimation, Covariance objects |
| 2024/04/10 | Francesca Salvadore | Politecnico di Milano | Multitask learning, Mixed-effects models, Penalized estimation |
| 2023/10/4 | Mirko Luigi Carlesso | Politecnico di Milano | Basketball analytics, Tree-based methods, Geostatistics |
| 2023/10/4 | Davide Zaltieri, Luca Panzeri | Politecnico di Milano | Robust statistics, Model-based clustering |
| 2023/10/4 | Giulia Montani | Politecnico di Milano | Model-based classification, Noisy labels, Ensemble learning |
| 2023/05/10 | Annachiara Rossi | Politecnico di Milano | Robust statistics, Functional Data Analysis |
| 2022/12/20 | Anna Iob | Politecnico di Milano | Text mining, Personalized medicine |

Co-Advisor

| Date | Student Name | Institution | Thesis topics |
|------------|-------------------|-----------------------|--|
| 2024/07/16 | Alessio Frezza | Politecnico di Milano | Mixed-effects models, Multilevel logistic cluster-weighted model |
| 2024/04/10 | Greta Campese | Politecnico di Milano | Mixed-effects models, Multilevel logistic cluster-weighted model |
| 2023/12/22 | Lorenzo Angiolini | Politecnico di Milano | Survival Analysis, Frailty models, Model-based clustering |
| 2023/10/4 | Luca Caldera | Politecnico di Milano | Mixed-effects models, Multilevel logistic cluster-weighted model |

Service to profession

Referee service

Advances in Data Analysis and Classification, Analytica Chimica Acta, Australian & New Zealand Journal of Statistics, Biometrics, BMC Bioinformatics, Bioinformatics, Computational Statistics, Computational Statistics and Data Analysis, IEEE Journal of Biomedical and Health Informatics, IEEE Transactions on Knowledge and Data Engineering, Journal of Computational and Graphical Statistics, Journal of Computational Science, Knowledge and Information Systems, Machine Learning, Metron, Scientific reports, Statistical Methods & Applications, Statistical Modelling, Statistics and Computing, Statistics in Medicine, Risk Analysis.

Organization of Scientific Events

- 2026/7 Session organizer: **Advances in Learning from Complex Contaminated Data**, IFCS 2026, University of Milano-Bicocca, Italy
 2026/7 Member of the Local Organizing Committee of the **IFCS 2026 conference**, University of Milano-Bicocca, Italy
 2024/9 Session organizer: **Advances in Robust Methodologies**, ECDA 2024, University of Gdańsk, Poland

Juries and External Evaluator of Doctoral Students

- 2025/4 PhD Evaluation Committee, **Statistical Sciences**, Cycles: XXXVII, University of Bologna, Italy
 2025/1 PhD Evaluation Committee, **Analytics for Economics and Management**, Cycles: XXXVI-XXXVII, University of Brescia, Italy

Membership

Italian Statistical Society

Computer skills

R (advanced), Latex (advanced), Quarto (advanced), Bash (intermediate), C++ (intermediate), Git (intermediate), Python (intermediate), Mathematica (basic), Matlab (basic), Julia (basic), SQL (basic).

Languages

Italian (mother tongue), English (proficient), Spanish (good knowledge)