

# Andrea Cappozzo

Curriculum Vitae  
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## Research Interests

Mixture models, Robust statistics, Model-based clustering and classification, Variable selection, Statistical learning

## Work Experience

2020/2 – Pres. **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

2019/3 – Pres. **Teaching Assistant**, BSc courses in Statistics and Statistical Methods, University of Milano-Bicocca  
2019/3 – 2019/9 **Academic Tutor**, BSc courses in Statistical Models and Computer Science, University of Milano-Bicocca  
2017/9 – 2018/2 **Teaching Assistant**, BSc courses in Statistics, Bocconi University

## Education

2020/2	<b>Ph.D. in Statistics and Mathematical Finance</b> (Doctor Europaeus)	University of Milano-Bicocca
2018/8	<b>Deep Learning A-Z: Hands-on Artificial Neural Networks</b>	udemy.com
2018/4	<b>Python for Data Science and Machine Learning Bootcamp</b>	udemy.com
2017/2	<b>Statistical Learning online course</b> (completed with distinction)	Stanford University
2015/4	<b>M.Sc. in Statistical Sciences</b> (with honors)	University of Padua
2012/7	<b>B.Sc. in Statistics and Management</b> (with honors)	University of Padua

## Visiting Periods

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

## Publications

### Refereed journals

1. Cappozzo, A, F Greselin, and T Murphy (2020). A robust approach to model-based classification based on trimming and constraints. *ADVANCES IN DATA ANALYSIS AND CLASSIFICATION* **14**, 327–354.
2. Cappozzo, A, F Greselin, and T Murphy (2020). Anomaly and Novelty detection for robust semi-supervised learning. *STATISTICS AND COMPUTING*.

### Accepted for publication and preprints

1. Cappozzo, A, F Greselin, and T Murphy (2020+). Robust variable selection for model-based learning in presence of adulteration. (Submitted) <https://arxiv.org/abs/2007.14810>
2. Denti, F, A Cappozzo, and F Greselin (2020+). Bayesian nonparametric adaptive classification with robust prior information (Submitted) <https://arxiv.org/abs/2006.09012>
3. Cappozzo, A, F Greselin, and T Murphy (2020). Variable selection for robust model-based learning from contaminated data. Accepted for publication in: Book of short Papers SIS 2020
4. Denti, F, A Cappozzo, and F Greselin (2020). Bayesian nonparametric adaptive classification with robust prior information. Accepted for publication in: Book of short Papers SIS 2020

### Monographs and refereed conference proceedings

1. Cappozzo, A and F Greselin (2019). "Detecting wine adulterations employing robust mixture of factor analyzers". In: *Statistical Learning of Complex Data*. Springer Berlin Heidelberg, pp. 13–21.
2. Cappozzo, A, F Greselin, and G Manzi (2019). "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, pp. 737–742. <https://it.pearson.com/docenti/universita/partnership/sis.html>.
3. Cappozzo, A, F Greselin, and T Murphy (2019). "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, pp. 104–107. [http://cea.unicas.it/e\\_book/Porzio.pdf](http://cea.unicas.it/e_book/Porzio.pdf).
4. Cappozzo, A, F Ferraccioli, M Stefanucci, and P Secchi (2018). "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 Berlin Heidelberg, pp. 57–73.

5. Cappozzo, A, F Greselin, and B Murphy (2018). "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, pp. 35–35.
6. Cappozzo, A, F Greselin, and T Murphy (2018). "Robust Updating Classification Rule with applications in Food Authenticity Studies". In: *Book of short Papers SIS 2018*. Pearson, pp. 1–6.
7. Greselin, F and A Cappozzo (2017). "Wine authenticity assessed via trimming". In: *Cladag 2017 Book of Short Papers*. Mantova: Universitas Studiorum S.r.l.

## Presentations

### Invited

- 2019/9 **Scientific meeting CLADAG 2019**, University of Cassino and Southern Lazio, Italy  
 2018/8 **COMPSTAT 2018**, Unirea Hotel, Iasi, Romania

### Seminars

- 2018/10 **Working Group on Statistical Learning**, University College Dublin, Ireland

### Contributed

- 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 sessions

- 2020/7 **Young-ISA Twitter Poster Conference**, virtual conference  
 2019/7 **Working Group on Model-Based Clustering**, Wirtschaftsuniversität Wien, Austria  
 2018/9 **MBC<sup>2</sup> 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

- 2018/9 **Best poster presentation**, MBC<sup>2</sup> 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  
 2015/7 **HP Business Academy Assessment Week**, Hewlett Packard Española and Fundación Universidad-Empresa, Barcelona

## Service to profession

### Referee service

Advances in Data Analysis and Classification, Statistics and Computing, Statistical Methods & Applications.

### Membership

Institute of Mathematical Statistics, Italian Statistical Society.

## Computer skills

R (advanced), latex (advanced), markdown (advanced), bash (intermediate), C++ (intermediate), git (intermediate), python (intermediate), mathematica (basic), matlab (basic), SQL (basic).

## Languages

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