# **Andrea Cappozzo**

Curriculum Vitae September 2020 • Department of Statistics & Quantitative Methods, University of Milano-Bicocca, Italy.

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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	Ph.D. in Statistics and Mathematical Finance (Doctor Europaeus)	University of Milano-Bicocca
2018/8	Deep Learning A-Z: Hands-on Artificial Neural Networks	udemy.com
2018/4	Python for Data Science and Machine Learning Bootcamp	udemy.com
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, 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). Anomaly and Novelty detection for robust semi-supervised learning. STATISTICS AND COMPUTING **30**, 1545–1571.
- 2. 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.

### 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* | *Cladag 2019*. Centro Editoriale di Ateneo Università di Cassino e del Lazio Meridionale, pp. 104–107. 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 Heidelbergp, 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).