CARLO CAVICCHIA

PERSONAL DATA

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Personal Page ◇ Institutional Page ◇ Google Scholar ◇ ORCiD ◇ Research Gate

CURRENT POSITION

Assistant Professor of Statistics *May 2020 - Present*
Econometric Institute, Erasmus School of Economics, Erasmus Rotterdam University, Rotterdam

EDUCATION

Dutch University Teaching Qualification UTQ-BKO *January 2022 - June 2022*
Risbo, Erasmus University Rotterdam, Rotterdam

Ph.D. in Statistics *November 2016 - February 2020*
Department of Statistical Sciences, University of Rome La Sapienza, Rome
Thesis title: *Hierarchical latent variable models for dimensionality reduction: an application on composite indicators*; Supervisor: Prof. M. Vichi

MSc Degree in Statistics and Decision Science *November 2013 - January 2016*
University of Rome La Sapienza, Rome 110/110 with honors

BSc Degree in Statistics *November 2009 - July 2013*
University of Rome La Sapienza, Rome 105/110

RESEARCH AND TEACHING INTERESTS

Hierarchical Models	Non-parametric Statistics	Data Science
Latent Variable Models	Composite Indicators	Unsupervised Classification

RESEARCH EXPERIENCES

Research visit *November 2019 – December 2019*
Econometric Institute, Erasmus School of Economics, Erasmus Rotterdam University, Rotterdam
Supervisor: Prof. P.J.F. Groenen

Research fellowship *May 2019 – April 2020*
Department of Law and Economics, University of Rome UnitelmaSapienza, Rome
Supervisor: Prof. P. Sarnacchiaro

Researcher on a project *March 2016 – November 2018*
Department of Statistical Sciences, University of Rome La Sapienza, Rome
Title: *Development of a procedure to detect and manage outliers for big data*
Supervisor: Prof. M. Vichi and ENEA

Researcher on a project *March 2016 – January 2017*
Department of Statistical Sciences, University of Rome La Sapienza, Rome
Title: *Construction of a hierarchical non-negative and disjoint composite indicator for a set of quantitative variables*
Supervisor: Prof. M. Vichi

AWARDS AND GRANTS

Research Grant for Junior Researchers *August 2017*
University of Rome La Sapienza, Rome

Best report of Stats under the stars[3] *June 2017*
Italian Statistical Society (SIS)

Ph.D. scholarship (3 years) *August 2016*
University of Rome La Sapienza, Rome

FEATURED PUBLICATIONS

Cavicchia, C., M. Vichi, and G. Zaccaria: *Hierarchical Disjoint Principal Component Analysis*. In: *Advances in Statistical Analysis* (2022). DOI: 10.1007/s10182-022-00458-4.

Cavicchia, C., M. Vichi, and G. Zaccaria: *Gaussian Mixture Model with an extended ultrametric covariance structure*. In: *Advances in Data Analysis and Classification* 16.2 (2022), pp. 399–427. DOI: 10.1007/s11634-021-00488-x.

Cavicchia, C. and M. Vichi: *Second-order disjoint factor analysis*. In: *Psychometrika* 87.1 (2022), pp. 289–309. DOI: 10.1007/s11336-021-09799-6.

Cavicchia, C. and P. Sarnacchiaro: *A multi-group higher-order factor analysis for studying the gender-effect in teacher job satisfaction*. In: *METRON* 80.1 (2022), pp. 23–38. DOI: 10.1007/s40300-021-00204-x.

Cavicchia, C. and P. Sarnacchiaro: *The effect of a new e-tivity on students' performance and satisfaction in an online course*. In: *Statistica Applicata - Italian Journal of Applied Statistics* 33.2 (2021), pp. 163–175. DOI: 10.26398/IJAS.0033-009.

Cavicchia, C., P. Sarnacchiaro, and M. Vichi: *A composite indicator for the waste management in the EU via hierarchical disjoint non-negative factor analysis*. In: *Socio-Economic Planning Sciences* 73 (2021), p. 100832. DOI: 10.1016/j.seps.2020.100832.

Cavicchia, C. and M. Vichi: *Statistical model-based composite indicators for tracking coherent policy conclusions*. In: *Social Indicators Research* 156.2 (2021), pp. 449–479. DOI: 10.1007/s11205-020-02318-7.

Cavicchia, C., M. Vichi, and G. Zaccaria: *The ultrametric correlation matrix for modelling hierarchical latent concepts*. In: *Advances in Data Analysis and Classification* 14.4 (2020), pp. 837–853. DOI: 10.1007/s11634-020-00400-z.

INVITED TALKS AND SEMINARS

ISI 2023 - 64th International Statistical Institute World Statistics Congress *July 2023*
Ottawa, Canada
CMStatistics 2022 - 15th International Conference of the ERCIM WG on Computational and Methodological Statistics *December 2022*
London, UK (Virtual)
IFCS 2022 - 17th Conference of the IFCS *July 2022*
Porto, Portugal
EcoSta 2022 - 5th International Conference on Econometrics and Statistics *June 2022*
Kyoto, Japan (Virtual)
Seminar series "Introduction to Statistics" *February 2022*
Hospitality Management - Federico II University of Naples (Virtual)
ISI 2021 - 63rd International Statistical Institute World Statistics Congress "Statistics and Data Science for a Better World" *July 2021*
Virtual conference
EconJobMarket *December 2019*
Rotterdam, Netherlands
ASA 2019 Scientific Conference on Statistics for Healt and Well-Being *September 2019*
Brescia, Italy

12th Scientific Meeting of Classification and Data Analysis Group *September 2019*
Cassino, Italy
49th Scientific meeting of the Italian Statistical Society *June 2018*
Palermo, Italy
Workshop: Selection and Synthesis of Indicators for Sustainable Development Goals: Methodologies and Applications *October 2017*
Rome, Italy

SUPERVISION

MSc theses (8) *2020 - Present*
Erasmus School of Economics, Erasmus University Rotterdam, Rotterdam
MSc Econometrics and Management Science, Business Analytics and Quantitative Marketing
MSc theses (6) *2020 - Present*
Erasmus School of Economics, Erasmus University Rotterdam, Rotterdam
MSc Economics and Business, Data Science and Marketing Analytics
BSc theses (19) *2020 - Present*
Erasmus School of Economics, Erasmus University Rotterdam, Rotterdam
BSc Econometrics and Operational Research

TEACHING AS COORDINATOR OR LECTURER

Applied Statistics 2 *2022 - Present*
Erasmus School of Economics, Erasmus University Rotterdam, Rotterdam
BSc Economics and Business Economics
Toegepaste Statistiek 2 *2022 - Present*
Erasmus School of Economics, Erasmus University Rotterdam, Rotterdam
BSc Economics and Business Economics
Seminar Case Studies in Business Analytics and Quantitative Marketing *2022*
Erasmus School of Economics, Erasmus University Rotterdam, Rotterdam
MSc Econometrics and Management Science, Business Analytics and Quantitative Marketing
Multivariate Statistics *2022*
Department of Law and Economics, University of Rome UnitelmaSapienza, Rome
I level master: "Analysis and modelling of data and processes: methods and models"
Seminar in Business Analytics and Quantitative Marketing *2021*
Erasmus School of Economics, Erasmus University Rotterdam, Rotterdam
BSc Econometrics and Operational Research
Seminar Data Science for Marketing Analytics *2020 - 2022*
Erasmus School of Economics, Erasmus University Rotterdam, Rotterdam
MSc Economics and Business, Data Science and Marketing Analytics
Statistical Methods for Composite Indicators Construction *2020 - 2021*
Department of Law and Economics, University of Rome UnitelmaSapienza, Rome
II level master: "Quantitative methods and models for decision support"
R Lab - Statistics *2020 - 2021*
Department of Law and Economics, University of Rome UnitelmaSapienza, Rome
II level master: "Quantitative methods and models for decision support"
Statistics *2019*
School of Economics, Tor Vergata University of Rome, Rome
Master of Science in European Economy and Business Law

ACADEMIC AND EDITORIAL SERVICES

Member of the scientific programme committee of CLADAG 2023 *2023*
Organizer of an invited session of CMStatistics 2022 *2022*
Organizer of an invited session of ECDA 2022 *2022*
Member of the scientific programme committee of HackTheGene 2022 *2022*
Co-guest-editor of a special issue of METRON *2022*
Co-editor of "Book of Short Papers of SIS 2022" *2022*
National coordinator of y-SIS *2022*
Member of the scientific programme committee of SIS 2022 *2022*
Member of the scientific programme committee of IES 2022 *2022*
Member of the national board of y-SIS *2021 - 2022*
Member of the organizing committee of DSSV-ECDA 2021 *2021*
Member of the organizing committee of DSSV 2020 *2020*
Member of the admission committee of II level master: "Quantitative methods and models for decision support", University of Rome UnitelmaSapienza *2020*
Organizer of an invited session of SIS 2020 *2020*
Reviewer for a number of scientific journals in Statistics *2018 - Present*
– in alphabetic order – Advances in Data Analysis and Classification; Annals of Operations Research; BMC Psychology; Computational Statistics; Journal of Data Science, Statistics and Visualisation; Journal of Statistical Computation and Simulation; METRON; PLOS ONE; SAGE Open; SN Business & Economics

WORK EXPERIENCES

Consultant as Lead Statistician *October - December 2019*
Project: *Survey in Zanzibar on community socio-economic conditions*, ARS Progetti S.P.A., Rome
Consultant as Supervisor *July - October 2019*
Project: *Survey in Zanzibar on environmental cleanliness, public service perception and tourism competitiveness*, NGO Fondazione ACRA, Rome
Consultant as Lead Statistician *June - August 2018*
Project: *Survey within the framework of the "Consultancy Services to support community engagement and awareness within the Urban Municipal Council"*, NGO Fondazione ACRA, Zanzibar, Tanzania

LANGUAGES

Italian Native language
English Speaking: C1 Writing: C2

EXTRA-CURRICULAR

- President and Co-Founder "ASD Valcanneto Futsal" (Cerveteri, 2018 - 2021)
- Attended the 1st International Summer School on Classification and Data Analysis (Rimini, 2017)
- Attended a Erasmus semester at University College of Dublin (Dublin, 2012)