GIORGIA ZACCARIA

PERSONAL DATA

 \bowtie giorgia.zaccaria@unitelmasapienza.it

Personal Page \diamond Institutional Page \Diamond Google Scholar \diamond Research Gate \diamond ORCID

Sapienza University of Rome (PhD page) \diamond LinkedIn

EMPLOYMENT

Postdoctoral Research Fellow

October 2022 - Present

University of Milano-Bicocca, Milan, Italy

Department of Statistics and Quantitative Methods Scientific Project Head: Prof. Francesca Greselin

Research Fellow July 2021 - June 2022

University of Rome Unitelma Sapienza, Rome, Italy

Department of Law and Economics

Scientific Project Head: Prof. Pasquale Sarnacchiaro

EDUCATION

Ph.D. in Methodological Statistics

November 2018 - February 2022 University of Rome "La Sapienza", Rome, Italy Final evaluation: Excellent

Department of Statistical Sciences

Thesis title: Ultrametric models for hierarchical dimensionality reduction

Supervisor: Prof. Maurizio Vichi

M.Sc. in Statistical and Decision Sciences November 2016 - October 2018

Curriculum: European Master in Official Statistics (EMOS) Final score: 110/110 cum laude

University of Rome "La Sapienza", Rome, Italy

Department of Statistical Sciences

Thesis title: Un modello gerarchico e parsimonioso per la costruzione di un indicatore composito di

sviluppo sostenibile

Supervisor: Prof. Maurizio Vichi

Internship July 2018

63 hours (a.y. 2017/2018), Alleanza per lo Sviluppo Sostenibile (ASviS), Rome, Italy

B.Sc. in Statistics, Economics and Society November 2013 - October 2016 University of Rome "La Sapienza", Rome, Italy Final score: 110/110 cum laude

Department of Statistical Sciences

Thesis title: Tecniche di ricampionamento per l'inferenza non parametrica: il metodo bootstrap

Supervisor: Prof. Marco Perone Pacifico

RESEARCH VISITS

University of Catania, Catania, Italy 17 - 22 October 2024

Department of Economics and Business

University of Valladolid, Valladolid, Spain February 2024

Department of Statistics and Operational Research

University of Valladolid, Valladolid, Spain 21-23 November 2023

Department of Statistics and Operational Research

Tilburg University, Tilburg, The Netherlands November 2021 - January 2022

Department of Methodology and Statistics

RESEARCH INTERESTS

Ultrametric Models Model-Based Clustering Robust statistics

Dimensionality Reduction Hierarchical Models Latent Variable Models

AWARDS, GRANTS & SCHOLARSHIP

Erasmus+ for Professors and Research Fellows, a.y. 2023/2024

November 2023

University of Milano-Bicocca, Milan, Italy

Funding recipient

Research Grant for Junior Researcher, "Avvio alla ricerca"

October 2020

University of Rome "La Sapienza", Rome, Italy

Principal Investigator

Project title: Hierarchical latent variable models for studying multidimensional phenomena in heterogeneous populations

Funding: €1,700

Research Grant for Medium Projects

October 2019

University of Rome "La Sapienza", Rome, Italy

Investigator (Principal Investigator: Prof. Donatella Vicari)

Project title: Models, methods and classification of transition data: analysis of the students mobility among degree courses of Italian universities

Funding: €11,100

Excellent Graduate Award

May 2019

Fondazione Roma Sapienza, Rome, Italy

Excellent Graduate of the Faculty of Information Engineering, Computer Science and Statistics, a.y. 2017/2018

Scholarship November 2018

University of Rome "La Sapienza", Rome, Italy

Ph.D. School of Statistical Sciences

Three years of Ph.D. scholarship

PUBLICATIONS

REFERRED JOURNAL ARTICLES

- 9. **Zaccaria**, **G.**, Di Nuzzo, C. (2025). Social sustainability in Italy: a model-based hierarchical composite indicator. *Annals of Operations Research* (accepted for publication; forthcoming).
- 8. **Zaccaria, G.**, García Escudero, L.A., Greselin, F., Mayo-Íscar, A. (2025) Cellwise outlier detection in heterogeneous populations. *Technometrics*, 1–12, doi: 10.1080/00401706.2025.2497822 (<u>link</u>).
- 7. Bottazzi Schenone, M., Cavicchia, C., Vichi, M., **Zaccaria, G.*** (2025) Ultrametric Factor Analysis for building hierarchies of reliable and unidimensional latent concepts. *Psychometrika*, doi: 10.1017/psy.2025.6 (<u>link</u>).
- 6. Greselin, F., **Zaccaria, G.*** (2025) Studying hierarchical latent structures in heterogeneous populations with missing information. *Journal of Classification*, 42, 284–310, doi: 10.1007/s00357-024-09492-0 (<u>link</u>).
- 5. Cavicchia, C., Vichi, M., **Zaccaria, G.*** (2024) Parsimonious Ultrametric Gaussian Mixture Models. *Statistics and Computing*, 34, 108, doi: 10.1007/s11222-024-10405-9 (<u>link</u>).
- 4. Cavicchia, C., Sarnacchiaro, P., Vichi, M., **Zaccaria, G.*** (2024) A model-based ultrametric composite indicator for studying waste management in Italian municipalities. *Computational Statistics*, 39, 21-50, doi: 10.1007/s00180-023-01333-9 (link).

- 3. Cavicchia, C., Vichi, M., **Zaccaria**, **G.*** (2023) Hierarchical Disjoint Principal Component Analysis. *AStA Advances in Statistical Analysis*, 107(3), 537–574, doi: 10.1007/s10182-022-00458-4 (link).
- 2. Cavicchia, C., Vichi, M., **Zaccaria, G.*** (2022) Gaussian mixture model with an extended ultrametric covariance structure. *Advances in Data Analysis and Classification*, 16(2), 399-427, doi: 10.1007/s11634-021-00488-x (<u>link</u>).
- 1. Cavicchia, C., Vichi, M., **Zaccaria, G.*** (2020) The ultrametric correlation matrix for modelling hierarchical latent concepts. *Advances in Data Analysis and Classification*, 14(4), 837-853, doi: 10.1007/s11634-020-00400-z (<u>link</u>).

MANUSCRIPT UNDER REVIEW OR IN PREPARATION

- 3. Robust fuzzy clustering with cellwise outliers (w. Benzakour, L., Garcìa-Escudero, L.A., Greselin, F. and Mayo-Iscar, A.). Submitted (ArXiV).
- 2. Mixtures of Disjoint Factor Analyzers Manuscript in preparation.
- 1. Fuzzy Spectral Data Embedding (w. Di Nuzzo, C.). Manuscript in preparation.

ARTICLES EDITED IN VOLUMES AND PH.D. THESIS

- 3. Mingione, M., Vichi, M., **Zaccaria**, **G.** (2022) Complex Dimensionality Reduction: Ultrametric Models for Mixed-Type Data. In: L.A. Garcia-Escudero, A. Gordaliza, A. Mayo, M. Asunción Lubiano Gomez, M. Angeles Gil, P. Grzegorzewski, O. Hryniewicz (Eds.) *Building Bridges between Soft and Statistical Methodologies for Data Science*. *SMPS* 2022. *Advances in Intelligent Systems and Computing*, vol 1433. Springer, Cham. ISBN: 978-3-031-15508-6 (link).
- 2. **Zaccaria**, **G.** (2022) Ultrametric models for hierarchical dimensionality reduction. *Ph.D. thesis*, *XXXIV cycle* (<u>link</u>).
- 1. Cavicchia, C., Vichi, M., **Zaccaria, G.** (2020) Exploring hierarchical concepts: theoretical and application comparisons. In: T. Imaizumi, A. Nakayama, S. Yokoyama, S. (Eds.). *Advanced Studies in Behaviormetrics and Data Science. Behaviormetrics: Quantitative Approaches to Human Behavior*, vol. 5 (pp. 315-328). Springer, Singapore. ISBN: 978-981-15-2699-2 (<u>link</u>).

REFERRED CONFERENCE PROCEEDINGS

- 13. Di Nuzzo, C., **Zaccaria, G.** (2025) Fuzzy Spectral Clustering. In: E. di Bella, V. Gioia, C. Lagazio, S. Zaccarin (Eds.). *Statistics for Innovation III SIS 2025, Short Papers, Contributed Sessions 2.* (pp. 165-170). Pearson. ISBN: 978-3-031-95994-3.
- 12. Greselin, F., García Escudero, L.A., Mayo-Íscar, A., **Zaccaria, G.** (2025) Cellwise Robust Fuzzy Gaussian Mixtures. In: E. di Bella, V. Gioia, C. Lagazio, S. Zaccarin (Eds.). *Statistics for Innovation IV SIS 2025, Short Papers, Contributed Sessions 3.* (pp. 542-547). Pearson. ISBN: 978-3-031-96032-1.
- 11. **Zaccaria, G.** (2023) Ultrametric Gaussian Mixture Models With Parsimonious Structures. In P. Coretto, G. Giordano, M. La Rocca, M.L. Parrella, C. Rampichini (Eds.). *Book of Abstract and Short Papers CLADAG 2023* (pp. 314-317). Pearson. ISBN: 978-88-9193-563-2.
- 10. Greselin, F., **Zaccaria, G.** (2023) Handling missing data in complex phenomena: an ultrametric model-based approach for clustering. In: F. M. Chelli, M. Ciommi, S. Ingrassia, F. Mariani, M. C. Recchioni (Eds.). *Book of the Short Papers SIS 2023* (pp. 961-966). Pearson. ISBN: 978-88-9193-561-8AAVV.
- 9. **Zaccaria**, **G.**, Sarnacchiaro, P. (2022) An ultrametric model for building a composite indicator system to study climate change in European countries. In: A. Balzanella, M. Bini, C. Cavicchia, R. Verde. (Eds.). *Book of Short Papers SIS 2022* (pp. 970-974). Pearson. ISBN: 978-88-9193-231-0.

- 8. Cavicchia, C., Sarnacchiaro, P., Vichi, M., **Zaccaria, G.** (2022) An ultrametric model to build a Composite Indicators system. In: R. Lombardo, I. Camminatiello, V. Simonacci (Eds.). Book of Short Papers, 10th International Conference IES 2022 Innovation & Society 5.0: Statistical and Economic Methodologies for Quality Assessment, Department of Economics, University of Campania L. Vanvitelli, January 27th 28th 2022 (pp. 208-211). Sesto San Giovanni: PKE Professional Knowledge Empowerment s.r.l. ISBN: 978-88-94593-35-8.
- 7. Cavicchia, C., Vichi, M., **Zaccaria, G.** (2021) A parsimonious parameterization of a nonnegative correlation matrix. In: S. Ingrassia, A. Punzo, R. Rocci (Eds.). *MBC2 2020 Book of Short Papers of the 5th International Workshop on Models and Learning for Clustering and Classification, Catania* (pp. 21-26). Milano: Ledizioni. ISBN: 978-88-5526-539-3.
- 6. Cavicchia, C., Vichi, M., **Zaccaria, G.** (2021) Model-based clustering with parsimonious covariance structure. In: G. C. Porzio, C. Rampichini, C. Bocci (Eds.). *CLADAG 2021 Book of Abstracts and Short Papers. 13th Scientific Meeting of the Classification and Data Analysis Group, Firenze, September 9-11, 2021 (pp. 296-299). Firenze: Firenze University Press. ISBN: 978-88-5518-340-6.*
- 5. Cavicchia, C., Vichi, M., **Zaccaria, G.** (2021) The ultrametric covariance model for modelling teachers' job satisfaction. In: C. Perna, N. Salvati, F. Schirripa Spagnolo (Eds.). *Book of Short Papers SIS 2021* (pp. 1319-1324). Pearson. ISBN: 978-88-9192-736-1.
- 4. **Zaccaria, G.**, Vichi, M. (2020) Exploring drug consumption via an ultrametric correlation matrix. In: A. Pollice, N. Salvati, F. Schirripa Spagnolo (Eds.). *Book of Short Papers SIS 2020* (pp. 372-377). Pearson. ISBN: 978-88-9191-077-6.
- 3. Cavicchia, C., Vichi, M., **Zaccaria, G.** (2019) Dimensionality reduction via hierarchical factorial structure. In: G. C. Porzio, F. Greselin, S. Balzano (Eds.). *Book of Short Papers, CLADAG 2019, 11-13 September 2019, Cassino* (pp. 116-119). Cassino: Centro Editoriale di Ateneo Università di Cassino e del Lazio Meridionale. ISBN: 978-88-8317-108-6.
- 2. Cavicchia, C., Vichi, M., **Zaccaria, G.** (2019) A new hierarchical model-based composite indicator on climate change. In: M. Bini, P. Amenta, A. D'Ambra, I. Camminatiello (Eds.). *Statistical Methods for Service Quality Evaluation, Book of Short Papers of IES 2019 in Roma, Italia, 4-5 July* (pp. 346-349). Cuzzolin. ISBN: 978-88-86638-65-4.
- 1. Cavicchia, C., Vichi, M., **Zaccaria, G.** (2019) Hierarchical Clustering and Dimensionality Reduction for Big Data. In: G. Arbia, S. Peluso, A. Pini, G. Rivellini (Eds.). *Smart Statistics for Smart Applications, Book of Short Papers SIS 2019* (pp. 173-180). Pearson. ISBN: 978-88-9191-510-8.

PRESENTATIONS AND SEMINARS

INVITED PRESENTATIONS

CLADAG 2025 September 2025

15th Scientific Meeting Classification and Data Analysis Group

University of Naples Federico II, Naples, Italy

EYSM 2025 July 2025

24th European Young Statisticians Meeting

Collegio Carlo Alberto, Turin, Italy

ICORS 2025 May 2025

International Conference on Robust Statistics

Stresa, Italy

Seminar in the Robust Statistics and Data Science series

April 2025

KU Leuven, Leuven, Belgium

BYMAT 2024 November 2024 Plenary session (link) 6th BYMAT Conference: Bringing Young Mathematicians Together University of Valladolid, Valladolid, Spain Seminar (x2) at the Department of Economics and Business October 2024 University of Catania, Catania, Italy MBC2 2024 August 2024 7th Workshop on Models and Learning in Clustering and Classification University of Catania, Catania, Italy CMStatistics 2023 December 2023 16th International Conference of the ERCIM WG on Computational and Methodological Statistics HTW Berlin, University of Applied Sciences, Berlin, Germany Seminar at the Department of Statistics and Operational Research November 2023 CLADAG 2023 September 2023 14th Scientific Meeting of the CLAssification and Data Analysis Group of SIS University of Salerno, Salerno, Italy CMStatistics 2022 December 2022 15th International Conference of the ERCIM WG on Computational and Methodological Statistics King's College London, London, United Kingdom **ECDA 2022** September 2022 European Conference on Data Analysis University of Naples Federico II, Naples, Italy Colloquia Department Methodology and Statistics December 2021 Tilburg University, Tilburg, The Netherlands October 2017 Statistics Beyond 2020: challenges and risks European Statistics Day 2017, ESAC Lisbon, Portugal Panel Member as European Master in Official Statistics (EMOS) Student CONTRIBUTED PRESENTATIONS SIS 2025 June 2025 Conference of the Italian Statistical Society University of Genova, Genova, Italy SIS 2023 June 2023 Conference of the Italian Statistical Society Marche Politecnica University, Ancona, Italy **CESS 2022** October 2022 Conference of the European Statistics Stakeholders Sapienza University of Rome, Rome, Italy IFCS 2022 July 2022 17th Conference of the International Federation of Classification Societies University of Porto, Porto, Portugal **SIS 2022** June 2022 51st Scientific Meeting of the Italian Statistical Society University of Campania Luigi Vanvitelli, Caserta, Italy **IES 2022** January 2022 Innovation & Society 5.0: Statistical and Economic Methodologies for Quality Assessment

University of Rome "La Sapienza", Rome, Italy

University of Campania Luigi Vanvitelli, Capua, Italy

8th Annual Workshop of the Ph.D. School in Statistical Sciences

July 2021

DSSV-ECDA 2021 July 2021

Data Science, Statistics & Visualisation and the European Conference on Data Analysis

Erasmus University Rotterdam, Rotterdam, The Netherlands (Virtual)

SIS 2021 June 2021

50th Scientific Meeting of the Italian Statistical Society

University of Pisa, Pisa, Italy (Virtual)

7th Annual Workshop of the Ph.D. School in Statistical Sciences February 2020

University of Rome "La Sapienza", Rome, Italy

IFCS 2019 August 2019

16th Conference of the International Federation of Classification Societies

Thessaloniki, Greece

IES 2019 July 2019

Statistical evaluation systems at 360°: techniques, technologies and new frontiers

European University of Rome, Rome, Italy

6th Annual Workshop of the Ph.D. School in Statistical Sciences June 2019

University of Rome "La Sapienza", Rome, Italy

ECDA 2019 March 2019

European Conference on Data Analysis

University of Bayreuth, Bayreuth, Germany

TEACHING

TEACHING AS LECTURER

September 2024 - September 2024 Lecturer

Department of Economics, Management and Statistics, University of Milano-Bicocca, Milan, Italy Statistical Modelling II - Part II (PhD course, English, a.v. 2023/2024)

Adjunct Lecturer September 2023 – September 2023

Department of Economics, Management and Statistics, University of Milano-Bicocca, Milan, Italy Statistical Modelling II - Part II (PhD course, English, a.y. 2022/2023)

Adjunct Lecturer October 2022 - Present

Department of Physics, University of Milano-Bicocca, Milan, Italy

Advanced Foundations of Statistics for AI (Master, English, a.y. 2022/2023, 2023/2024, 2024/2025)

March 2022 - March 2022

Istituto Nazionale per l'Analisi delle Politiche Pubbliche (INAPP), Rome, Italy

Principal Component Analysis with R (Public Administration Training Course, Italian)

Lecturer June 2022 - December 2024

Department of Law and Economics, University of Rome Unitelma Sapienza, Rome Italy

Regression Models (II Level Master Course, Italian, a.y. 2021/2022, 2022/2023, 2023/2024)

Course, exams and thesis supervision

Adjunct Lecturer

Adjunct Lecturer

February 2022 - October 2022

November 2021 - September 2022

Department of Law and Economics, University of Rome Unitelma Sapienza, Rome Italy

Statistical Models for Social and Economic Analyses (II Level Master Course, Italian, a.y. 2021/2022)

Department of Law and Economics, University of Rome Unitelma Sapienza, Rome Italy

Basic Statistics and Mathematics (Master, English, a.y. 2021/2022)

TEACHING AS TEACHING ASSISTANT OR STUDENT TUTOR

Student Tutor October 2022 - Present

Department of Physics, University of Milano-Bicocca, Milan, Italy

Advanced Foundations of Statistics for AI (Master, English, a.y. 2022/2023, 2023/2024, 2024/2025)

Teaching Assistant

February 2022 - September 2022

Department of Economics and Finance, LUISS Guido Carli, Rome Italy

Statistics, Prof. Marco Perone Pacifico (Bachelor, English, a.y. 2021/2022)

Teaching Assistant

March 2021 - July 2022

Department of Medicine and Pharmacy, University of Rome "La Sapienza", Rome Italy

Medical Statistics, Prof. Maurizio Vichi (Master, Italian, a.y. 2020/2021 and 2021/2022)

Student Tutor

January 2021 - Present

Department of Law and Economics, University of Rome Unitelma Sapienza, Rome Italy

Statistics and Mathematics (Bachelor and Master, Italian and English, a.y. 2020/2021, 2021/2022, 2022/2023 and 2023/2024)

Subject Expert

October 2020 - October 2022

Department of Law and Economics, University of Rome Unitelma Sapienza, Rome Italy Statistics and Mathematics (a.y. 2020/2021 and 2021/2022)

Teaching Assistant

March 2020 - September 2020

Department of Political Sciences, University of Roma Tre, Rome Italy

Statistics, Prof. Domenico Cucina (Bachelor, Italian, a.y. 2019/2020)

Teaching Assistant

September 2019 – June 2022

Department of Statistical Sciences, University of Rome "La Sapienza", Rome Italy

Advances in Data Analysis and Statistical Modelling, Prof. Maurizio Vichi (Master, English, a.y. 2019/2020, 2020/2021 and 2021/2022)

Teaching Assistant

September 2019 – June 2022

Department of Statistical Sciences, University of Rome "La Sapienza", Rome Italy

Multivariate Statistics, Prof. Maurizio Vichi (Bachelor, Italian, a.y. 2019/2020, 2020/2021 and 2021/2022)

Teaching Assistant

September 2019 - December 2019

Department of Statistical Sciences, University of Rome "La Sapienza", Rome Italy

Statistics, Prof. Maria Brigida Ferraro, Prof. Stefania Gubbiotti, Prof. Valeria Sambucini (Bachelor, Italian, a.y. 2019/2020)

Teaching Assistant

March 2019 - July 2022

Department of Medicine and Pharmacy, University of Rome "La Sapienza", Rome Italy

Statistics for Research and Technology, Prof. Maurizio Vichi (Master, Italian, a.y. 2018/2019, 2019/2020, 2020/2021 and 2021/2022)

Teaching Assistant

February 2019 - September 2019

Department of Statistical Sciences, University of Rome "La Sapienza", Rome Italy

Statistical Inference, Prof. Fulvio De Santis (Bachelor, Italian, a.y. 2018/2019)

SERVICE TO PROFESSION

EDITORIAL ACTIVITY

Editor of the Springer volume "High-quality and Timely Statistics - New Methods and Applications"

Springer book series of the CESS 2022 conference. ISBN: 978-3-031-63629-5 (link)

POSITIONS IN ACADEMIC SOCIETIES

Elected member of the board of y-SIS (2023-2024)

January 2023 - December 2024

Young group of the Italian Statistical Society (link)

Member of SIS, y-SIS and CLADAG-SIS Member

July 2019 - Present

Member of the Italian Statistical Society (Società Italiana di Statistica, SIS), Young SIS and CLAssification and Data Analysis Group (CLADAG)

Member of IAOS

January 2018 - December 2018

Member of the International Association for Official Statistics

ORGANIZATION OF SCIENTIFIC EVENTS

Member of the Local Organizing Committee of IFCS 2026

Conference of the International Federation of Classification Societies July 14-16, 2026, Milano, Italy

Member of the Scientific Program Committee of SIS 2024

52nd Scientific Meeting of the Italian Statistical Society June 17-20, 2024, Bari, Italy

Organizer and member of the Scientific Program Committee of StaTalk2024@UniFi as member of the y-SIS board

Workshop organized by the young group of the Italian Statistical Society (<u>link</u>) May 30-31, 2024, Florence, Italy

Organizer and member of the Scientific Program Committee of StaTalk2023@DSS Sapienza as member of the y-SIS board

Workshop organized by the young group of the Italian Statistical Society (<u>link</u>) September 15, 2023, Rome, Italy

Member of the Local Organizing Committee of CESS 2022

Conference of European Statistics Stakeholders 2022 (<u>link</u>) October 20-21, 2022, Rome, Italy

Organizer of the 8th Annual Workshop of the Ph.D. School in Statistical Sciences June 15-16, 2021, University of Rome "La Sapienza", Rome, Italy

Organizer of the Invited Session "Cellwise outlier detection" of CLADAG 2025

15th Scientific Meeting Classification and Data Analysis Group (<u>link</u>) September 8-10, 2025, Naples, Italy

Organizer of the Invited Session "Advanced Methods for Assessing Environmental Impact and Green Innovation" of IES 2025

Innovation & Society: Statistics and Data Science for Evaluation and Quality (<u>link</u>) June 25-27, 2025, Bressanone-Brixen, Italy

Co-organizer of the Invited Session "y-SIS: Advances in statistical learning and clustering" of CMStatistics 2024

18th International Conference of the ERCIM Working Group on Computational and Methodological Statistics ($\underline{\text{link}}$)

December 14-16, 2024, London, United Kingdom

Organizer and chair of the Invited Session "y-SIS - Advances in Robust Statistical Methods for Complex Data" of CMStatistics 2023

16th International Conference of the ERCIM WG on Computational and Methodological Statistics (<u>link</u>)

December 16-18, 2023, Berlin, Germany

Organizer and chair of the Solicited Session "Advances in Clustering" of SIS 2022

51st Scientific Meeting of the Italian Statistical Society $(\underline{\rm link})$

June 22-24, 2022, Caserta, Italy

THESIS SUPERVISION

Supervision of 9 theses of the II Level Master "Analisi e Modellazione dei Dati e dei Processi" Department of Law and Economics, University of Rome Unitelma Sapienza, Rome, Italy

REFEREE SERVICE (alphabetical order)

Advances in Data Analysis and Classification, Annals of Operations Research, Australian & New Zealand Journal of Statistics, Computational Statistics, Journal of Classification, Metron, Proceedings of the Royal Society A, Soft Computing, SN Business & Economics (SNBE), Statistica Applicata, Statistical Methods & Applications, Statistics and Probability Letters, TEST, Book of Short Papers SIS 2022.

LANGUAGES

Italian Mother tongue

English FluentFrench Good

COMPUTER SKILLS

Languages R, R Studio, MATLAB, SAS, SAS Enterprise Miner 14, SPSS, LaTeX

Software Microsoft Office

Certifications SAS Predictive Modeler Using SAS Enterprise Miner 14 (October 8, 2018)

PUBLIC SOFTWARE

PUGMM: Parsimonious Ultrametric Gaussian Mixture Models

Author and Maintainer of the R package (<u>CRAN</u> - <u>Github</u>)

OTHER EXPERIENCES

IELTS Invigilator

December 2015 - March 2019

British Council Rome, Italy

INCREASE Delegate

June 2012

XII International Human Right Council, OLMUN

Oldenburg, Germany

Le dichiarazioni rese nel presente curriculum sono da ritenersi rilasciate ai sensi degli artt. 46 e 47 del D.P.R. 445/2000.

Milan, August 5th, 2025