

SILVIA DALLARI

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CURRENT POSITION

11/2024 –PRESENT **Research Fellow**
Department of Statistical Sciences "Paolo Fortunati"
ALMA MATER STUDIORUM - Università di Bologna
Supervisor: Prof. Angela Montanari

EDUCATION

11/2021–04/2025 **PhD in Statistical Sciences, 37th cycle**
ALMA MATER STUDIORUM - Università di Bologna
Supervisor: Prof. Angela Montanari.
Co-Supervisors: Prof. Laura Anderlucci, Prof. Marco Candela

2019 – 2021 **Two-year Master degree in Statistical Sciences,
Curriculum Data Science**
ALMA MATER STUDIORUM - Università di Bologna
Final grade: 110/110 cum Laude
Thesis: Analysis of missing data in latent vector autoregressive models.
Supervisor: Prof. Silvia Cagnone, Co-Supervisor: Prof. Silvia Bianconcini.

2016 – 2019 **Bachelor degree in Scienze Statistiche,
Curriculum Stats & Maths**
ALMA MATER STUDIORUM - Università di Bologna
Final grade: 110/110 cum Laude
Thesis: Customer satisfaction of Amazon Alexa®: text mining and sentiment analysis.
Supervisor: Prof. Marco Novelli.

2011 – 2016 **Scientific high school diploma**
Manfredo Fanti Scientific High School
Final grade: 100/100

VISITING PERIODS

09/2023–01/2024 Visiting PhD student at the Oslo Centre for Biostatistics and Epidemiology (OCBE), University of Oslo (Contact Person: Prof. Arnaldo Frigessi).

TEACHING

A.Y. 2025 – 2026 **Adjunct professor** for the following course:
Course: *Statistics and Probability (I.C.) - Statistics I*
ALMA MATER STUDIORUM - Università di Bologna

A.Y. 2025 – 2026 **Teaching Tutor** for the following courses:
Course: *Algebra e Modelli Lineari (C.I.) - Modelli Lineari (Prof. Angela Montanari)*
ALMA MATER STUDIORUM - Università di Bologna

Course: *Inference (Prof. Silvia Cagnone)*
ALMA MATER STUDIORUM - Università di Bologna

Course: *Multivariate Analysis (Prof. Angela Montanari)*
ALMA MATER STUDIORUM - Università di Bologna

Course: *Statistical Inference and Modelling*
(Prof. Saverio Ranciati)
ALMA MATER STUDIORUM - Università di Bologna

A.Y. 2024 – 2025 **Adjunct professor** for the following course:
Course: *Laboratorio di Analisi dei Dati (M-Z)*
ALMA MATER STUDIORUM - Università di Bologna

A.Y. 2024 – 2025 **Teaching Tutor** for the following courses:
Course: *Algebra e Modelli Lineari (C.I.) - Modelli Lineari* (Prof. Angela Montanari)
ALMA MATER STUDIORUM - Università di Bologna

Course: *Statistics and Probability (I.C.) - Statistics I*
(Prof. Angela Montanari)
ALMA MATER STUDIORUM - Università di Bologna

Course: *Multivariate Analysis* (Prof. Angela Montanari)
ALMA MATER STUDIORUM - Università di Bologna

Course: *Inference* (Prof. Silvia Cagnone)
ALMA MATER STUDIORUM - Università di Bologna

Course: *Statistical Inference and Modelling*
(Prof. Saverio Ranciati)
ALMA MATER STUDIORUM - Università di Bologna

A.Y. 2023 – 2024 **Teaching Tutor** for the following courses:
Course: *Multivariate Analysis* (Prof. Angela Montanari)
ALMA MATER STUDIORUM - Università di Bologna

Course: *Inference* (Prof. Silvia Cagnone)
ALMA MATER STUDIORUM - Università di Bologna

Course: *Statistical Inference and Modelling*
(Prof. Saverio Ranciati)
ALMA MATER STUDIORUM - Università di Bologna

A.Y. 2022 – 2023 **Teaching Tutor** for the following courses:
Course: *Inference* (Prof. Silvia Cagnone)
ALMA MATER STUDIORUM - Università di Bologna

Course: *Statistical Inference and Modelling*
(Prof. Angela Montanari, Prof. Saverio Ranciati)
ALMA MATER STUDIORUM - Università di Bologna

Course: *Statistica e Calcolo delle Probabilità (C.I.) - Statistica*
(Prof. Cinzia Viroli)
ALMA MATER STUDIORUM - Università di Bologna

A.Y. 2021 – 2022 **Teaching Tutor** for the following courses:
Course: *Statistical Inference and Modelling*
(Prof. Angela Montanari, Prof. Saverio Ranciati)
ALMA MATER STUDIORUM - Università di Bologna

Course: *Statistica e Calcolo delle Probabilità (C.I.) - Statistica*
(Prof. Cinzia Viroli)
ALMA MATER STUDIORUM - Università di Bologna

CO-SUPERVISED THESES

2025 **Master degree in Statistical Sciences:**
Identification of biomarkers of Hairy Cell Leukemia: A study on Extracellular Vesicles and clinical features.

OTHER EXPERIENCES

- 05/2025 **"Allacciate le cinture" project:**
Conduction of a STEM, digital and innovation skills improvement program for high school students.
- 09/2021 – 11/2021 **Project for the Department of Statistical Sciences "Paolo Fortunati":**
Analysis of open answers of students' questionnaires using text-mining tools.
ALMA MATER STUDIORUM - Università di Bologna
Referent of the activity: Prof. Laura Anderlucci
- 01/2021 – 03/2021 **Research Assistant Internship (RAship) in Machine learning methods for the signal classification.**
Creation of an algorithm capable of classifying the portions of signals acquired by tractors in different tasks.
ALMA MATER STUDIORUM - Università di Bologna
Referent of the activity: Prof. Cinzia Viroli
- 11/2018 – 04/2019 **Internship**
MediNeos S.U.R.L., Modena
Support on:
 - database validation
 - data quality control
 - quality control of statistical reports
 - SAS validation support

PUBLICATIONS

- Silvia Dallari, Laura Anderlucci, Angela Montanari. *High-Dimensional Gaussian Mixtures with Random Projection Based Covariance Estimates*. In: di Bella, E., Gioia, V., Lagazio, C., Zaccarin, S. (eds) *Statistics for Innovation III*. SIS 2025. Italian Statistical Society Series on Advances in Statistics. Springer, Cham, 2025, pp. 42-46.
- Silvia Dallari, Nicola Grandi, Angela Montanari, *What are the main features of the Italian written by Italian University students?*, in: *Methodological and Applied Statistics and Demography II*, SIS 2024, Short Papers, Solicited Sessions, Springer Cham, 2025, pp. 129 - 133.
- Francesco Barile, Silvia Dallari, Carlotta Pacifici, Bettina Grün, *Assessing neuron response to external stimuli with a data-driven procedure for spike train extraction and GAMLSS regressions*, in: *Advances in Neural Data Science*, «SPRINGER PROCEEDINGS IN MATHEMATICS & STATISTICS», 2025, pp. 35 - 55 (atti di: Data Research Camp 2022, Venice, Italy, July 12-15, 2022).
- Silvia Dallari, Laura Anderlucci, Angela Montanari, *Model-based clustering of high dimensional data via Random Projections*, in: *MBC2 2024 Book of Abstracts*, 2024, pp. 2 - 2 (atti di: Models and Learning in Clustering and Classification (MBC2), Catania, 28-30/08/2024).
- Laura Anderlucci, Silvia Dallari, Angela Montanari, *View it differently: finding groups in microbiome data*, in: *CLADAG 2023 BOOK OF ABSTRACTS AND SHORT PAPERS*, Pearson Education Resources, Italia, 2023, pp. 34 - 37 (atti di: CLADAG 2023, Salerno, 11-13 Settembre 2023)

CONFERENCES

- 08-10/09/2025 S. Dallari, L. Anderlucci and A. Montanari. "Clustering Microbiome Data Via Diversity-Based Mixture Models". CLADAG 2025. Napoli, Italy.
[Invited session]
- 16-18/06/2025 S. Dallari, L. Anderlucci and A. Montanari. "High-Dimensional Gaussian Mixtures with Random Projection Based Covariance Estimates". SIS 2025. Genova, Italy.

- 28-30/08/2024 S. Dallari, L. Anderlucci and A. Montanari. "Model-based clustering of high dimensional data via Random Projections". MBC2 2024. Catania, Italy.
- 17-20/06/2024 S. Dallari, N. Grandi and A. Montanari. "What are the main features of the Italian written by Italian University students?". SIS 2024. Bari, Italy. [Invited session]
- 22-25/08/2023 S. Dallari, L. Anderlucci and A. Montanari. "Finding groups in microbiome data according to multiple data-views". COMPSTAT 2023. London, UK.

POSTER

PRESENTATIONS:

- 21-25/07/2025 S. Dallari, L. Anderlucci and A. Montanari. "Random Projection based Mixtures of Poisson Log-Normal Distributions". Working Group on Model-Based Clustering. Antibes, France.
- 22-26/07/2024 S. Dallari, L. Anderlucci and A. Montanari. "Clustering Microbiome data via diversity-based mixtures". Working Group on Model-Based Clustering. Bertinoro, Italy.
- 13-15/06/2024 S. Dallari, L. Anderlucci and A. Montanari. "Clustering Microbiome data via Mixtures of Generalized Linear Latent Variable Models". National Forum on Medicine Precision. Palermo, Italy.
- 17-21/07/2023 S. Dallari, L. Anderlucci and A. Montanari. "Mixtures of generalized linear latent variable models for multivariate count data". Working Group on Model-Based Clustering. Pittsburgh, USA.

WORKSHOPS

- 17/09/2022 **Participation in the hackathon *HackTheGene***
Department of Statistical Sciences of the University of Padova
Padova
- 12-15/07/2022 **Participation in the *Data Research Camp 2022***
Department of Statistical Sciences of the University of Padova
San Servolo Island, Venice

TECHNICAL SKILLS

Programming Languages	R, Python, MATLAB
Statistical Softwares	STATA, SAS
Others	MySQL, LaTeX, Microsoft Office (ECDL certificate)

LANGUAGE SKILLS

Italian	mother tongue
English	B2 (Academic English Skills (AcES), 2024; IELTS Academic, 2020)

AWARDS AND GRANTS

- 2025 - Top Ten award given by the *Accademia delle Scienze di Bologna*.
- 2024 - Award for young female students in STEM given by FIDAPA.
- 2023 - Marco Polo programme mobility scholarship.
- Nov. 2021-Oct. 2024 - Ph.D. scholarship funded by the *Fondazione Carisbo*.
- 2021 - Study Award of the *Fondazione Cassa di Risparmio di Carpi* for the Master degree.
- a.y. 2020/2021 - Study Award in favor of deserving students of the University of Bologna.
- 2019 - Study Award of the *Fondazione Cassa di Risparmio di Carpi* for the Bachelor degree.
- a.y. 2016/2017 - Winner of the call for incentives for deserving students enrolled in degree programmes of particular national and community interest of the University of Bologna.
- 2016 - Study Award of the *Fondazione Cassa di Risparmio di Carpi* for the high school diploma.

AFFILIATIONS

- Italian Statistical Society (SIS)
- Federazione Italiana Donne Arti Professioni Affari (FIDAPA) - Bologna section

I consent to the processing of my personal data pursuant to the GDPR and the Italian Legislative Decree of 30 June 2003, n. 196.