

Noemi Corsini

Ph.D. candidate in Statistical Sciences

Italian, August 19, 1997
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<https://noecors.github.io>

Education

- 2021–Now **University of Padova**, *Ph.D.*, Statistical Sciences
Thesis: “Density-based clustering for complex data”
Research themes: Density-based clustering; Mixed data; Network data; Bayesian Inference
Supervisor: Prof. Giovanna Menardi, Co-supervisor: Prof. Michael Fop
- 2019–2021 **University of Bologna**, *M.Sc.*, Statistical Sciences, *Specialisation in Data Science*
Thesis: “Dealing with overdispersion in multivariate count data”.
Supervisor: Prof. Cinzia Viroli
Final Grade: **110/110 cum laude**
- 2016–2019 **University of Bologna**, *B.Sc.*, Statistical Sciences, *Specialization in Finance and Insurance*
Thesis: “Modelling the efficiency of the insurance industry: a meta-frontier approach”.
Supervisor: Prof. Cristina Bernini, Co-supervisor: Prof. Pierpaolo Pattitoni
Final Grade: **110/110 cum laude**
- 2011–2016 **ITET D.Bramante, Pesaro**, *Accounting Diploma*, *Specialization in International Relation*
Final Grade: **100/100 cum laude**

Visiting period

- 09/2023–06/2024 **University College Dublin, Dublin, Ireland**
Project: “A Bayesian overlapping stochastic block model for clustering biographical networks”
Supervisor: Prof. Michael Fop

Work Experience

- 2019–2021 **Academic Tutor for B.Sc in Statistics**, *University of Bologna*
- 2020 **Market Intelligence and Consumer Insight Internship**, *Nomisma, Bologna*
- 2015 **Intership**, *Chartered Accounting Firm Dr.Zavagnini*

Teaching Experience

Teaching tutor

- 2024 **Statistical models and applications**, *University of Bologna*, held by Professor G. Galimberti
- 2024 **Supervised statistical learning**, *University of Bologna*, held by Professor L. Anderlucci
- 2023 **Latent variable models**, *University of Bologna*, held by Professor S. Cagnone
- 2023 **Statistics II**, *University of Bologna*, held by Professor C. Hennig
- 2022 **Modern statistic and big data analysis**, *University of Bologna*, held by Professor C. Hennig

Didactic conferences

- 09/2023 **Introduction to LaTeX**, *University of Padova*
- 03/2023 **Introduction to LaTeX**, *University of Padova*

Research Interests

At the moment I am working on clustering complex data structures, specifically high-dimensional network data. My research revolves around density-based clustering methods, latent variable models, and computational statistics. I am keen on applying these techniques to diverse, challenging real-world datasets with network structures, as well as categorical and mixed variables. Regarding statistical inference, my expertise mainly lies in Bayesian inference and estimation methods.

Publications and Working papers

- 2024+ **Corsini, N., Fop, M.**, *A Bayesian overlapping stochastic block model for clustering networks*, Working Paper
- 2024+ **Corsini, N., Menardi, G.**, *Modal clustering for categorical and mixed data*, Working Paper
- 2024+ **Corsini, N., Bernini, C., Pattitoni, P.**, *Modelling the global efficiency of the insurance industry: a meta-frontier approach*, Working Paper
- 2024 **Corsini, N., Fop, M.**, *A Bayesian overlapping stochastic block model for clustering biographical networks*, Book of short papers - SIS 2024
- 2023 **Corsini, N., Menardi, G.**, *Modal clustering for categorical data*, In Proceedings of the CLADAG 2023 Conference of the CLAssification and Data Analysis Group (CLADAG), Salerno, [PDF here]
- 2023 **Casoli, D., Corsini, N., Presutti, M., Magnini, V.**, *Why (not) participate in an adventure motorcycle tourism event?*, *Tourism Analysis*, <https://doi.org/10.3727/108354223X16833130470150>
- 2022 **Corsini, N., and Viroli, C.**, *Dealing with overdispersion in multivariate count data*, *Computational Statistics & Data Analysis*, <https://doi.org/10.1016/j.csda.2022.107447>

Conferences and Talks

Invited Speaker

- 2023 **CMSTAT2023 - 16th International Conference on Computational and Methodological Statistics**, Berlin, Germany, “Clustering of categorical data via mutual information”.
- 2023 **UCD Statistics and Actuarial Science**, Dublin, Ireland, “Modal clustering for categorical data”.

Contributed Sessions

- 2024 **SIS 2024 - Scientific Meeting of the Italian Statistical Society**, Bari, Italy, Contributed session, “A Bayesian overlapping stochastic block model for clustering biographical networks”.
- 2024 **CASI 2024 - Conference on Applied Statistics in Ireland**, Athlone, Ireland, Speaker, “A Bayesian overlapping stochastic block model for clustering biographical networks”.
- 2023 **CLADAG 2023 - Classification and Data Analysis Group**, Salerno, Italy, Contributed session, “Modal clustering for categorical data”.

Poster presentation

- 2022 **Statistical methods and models for complex data**, Padua, Italy, Poster presentation, “Dealing with overdispersion in multivariate count data”.

Attended conferences

- 2021 **Mimo2021 - Workshop on Mixture Models**, Online

Awards and Scholarship

- 2024 **Grant**, Irish Statistical Association grant scheme for attendance at CASI 2024
- 2023 **Best poster**, Young-ISA Twitter poster competition, Galway, Ireland
- 2022 **Best poster**, *Statistical methods and models for complex data*, Padua, Italy
- 2021–2024 **XXXVII Cycle Ph.D. Scholarship**, University of Padova, Italy
- 2021–2023 **Borse di studio Universitarie**, INPS
- 2020 **Sales Forecasting & Media Impact Analysis Challenge**, FATER, 1st Place achieved
- 2019 **Premio Cultura d’Impresa**, Uni.Rimini
- 2016 **Merit Scholarship**, Riviera Banca
- 2016 **Merit Scholarship**, ITET D.Bramante, Pesaro

Service

- Founder **MonteCarloCircle**, Funded the first international reading group on MonteCarlo methods. [Link]
- Organizer **FunSTATStic**, Series of weekly seminars for PhD students and post-docs in statistics at UCD

Membership **SIS** (Società Italiana di Statistica), **ySIS** (young Società Italiana di Statistica), **ISA** (Irish Statistical Association), **yISA** (young Irish Statistical Association)

Certificates

2020 **SAS Certified Specialist: Base Programming Using SAS 9.4**

Certificate Verification Number: X19QZSB12BFE1TK5

2018 **IELTS Academic**, *Overall band score: 7.0 - C1*

Computer Skills

Advanced R, Stata, LateX, Microsoft Office
Intermediate Python, SAS
Base SQL, SPSS

Language Skills

Advanced Italian, English
Intermediate French
Base Spanish, Portuguese

Hobbies and Interests

Traveling, reading and attend social events.

Cooking in general and, in particular, preparing from scratch homemade fresh pasta.

Knitting, crocheting, sewing and creating new clothes.

Sports that I am currently practising are: running, climbing and aerial silk.

References

Prof. Giovanna Menardi (menardi@stat.unipd.it) - Associate Professor at Department of Statistical Sciences, University of Padova, Italy.

Prof. Michael Fop (michael.fop@ucd.ie) - Lecturer/Assistant Professor in Statistics at School of Mathematics and Statistics University College Dublin, Ireland.