

# Curriculum Vitae

## Personal information

- Alessandro Colombi, born in Milan, Italy, 27/12/96.
- Living in Milan, Italy.
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## Education

- November 2021 - present: **PhD candidate in Statistics**  
Department of Economics, Statistics and Management (DEMS)  
University of Milano-Bicocca, Milan (Italy)
- Sept. 2018 - April 2021: **M.Sc in Mathematical Engineering**  
Politecnico di Milano, Milan (Italy)  
Final Mark: 110/110 cum Laude  
Thesis: *Learning Block Structured Graphs in Gaussian Graphical Models*  
Supervisor: Alessandra Guglielmi  
Co-Supervisors: Lucia Paci, Alessia Pini
- Sept. 2015 - Sept. 2018: **B.Sc in Mathematical Engineering**  
Politecnico di Milano, Milan (Italy)  
Final mark: 110/110 cum Laude  
Thesis: *Una soluzione esatta di un sistema preda-predatore diffusivo*  
Supervisor: Maurizio Verri

## Publications in refereed Journals

- **Colombi A.**, Argiento R., Paci L., Pini A., Learning Block Structured Graphs in Gaussian Graphical Models, Journal of Graphical and Computational Statistics, 2023, <https://doi.org/10.1080/10618600.2023.2210184>.
- Codazzi L., **Colombi A.**, Gianella M., Argiento R., Paci L., Pini A., Gaussian graphical modeling for spectrometric data analysis, Computational Statistics & Data Analysis, 2022, 107416, ISSN 0167-9473, <https://doi.org/10.1016/j.csda.2021.107416>.

## Conference proceedings

- **Colombi A.** (2022). Block Structured Graph Priors in Gaussian Graphical Models. In: Argiento, R., Camerlenghi, F., Paganin, S. (eds) New Frontiers in Bayesian Statistics. BAYSM 2021. Springer Proceedings in Mathematics & Statistics, vol 405. Springer, Cham. [https://doi.org/10.1007/978-3-031-16427-9\\_6](https://doi.org/10.1007/978-3-031-16427-9_6)
- Codazzi L., **Colombi A.**, Gianella M., Argiento R., Paci L., Pini A., (2020) Functional Graphical Model for Spectrometric Data Analysis. In Pollice A, Salvati N., Schirripa S (Eds), Book of short papers SIS 2020, Pearson, pp 852 - 856, ISBN 9788891910776.

## Conferences and Workshops

### Invited Talks

- ISBA, June 27 - July 01, 2022. Talk: Block structured Gaussian graphical models for spectrometric functional data.

### Contributed Talks/Posters

- SIS, June 21 - June 23, 2023. Talk and Poster: finite mixture model for multiple sample data.
- ISBA, June 28 - July 02, 2021. Talk and Poster: Learning Block Graphs Structures in Gaussian Graphical Models.
- 5th International Workshop on Functional and Operatorial Statistics, June 23 – 25, 2021. Talk: Functional graphical model for spectrometric data analysis.
- BAYSM, September 1 - 3, 2021. Talk: Learning Block Graphs Structures in Gaussian Graphical Models.
- 1st Bergamo Workshop in Econometrics and Statistics, September 15 - 16, 2022. Talk: Finite Mixture Model for Dependent Data.
- Workshop Statistical methods for precise medicine, February 24, 2023. Talk: Block structured Gaussian graphical models for spectrometric functional data.
- SIS, June 21 - 23, 2023. Talk and Poster: Finite mixture model for multiple sample data.
- Workshop sparse inference on complex networks, June 27 - 28, 2023. Talk: Learning block structured graphs.

### Awards

- Best talk in Applications and Computation, BAYSM, 2021.
- Travel grant to attend the ISBA 2022 World Meeting in Montreal, Canada.
- Winner for *Best objective prediction* at Stats Under the Stars (SUS) hackathon, June 20 - 21, Ancona.

### Software

- Author and Maintainer of R package "BGSL - Bayesian Structural Learning of Block Graphs", <https://github.com/alessandrocolombi/BGSL>.
- Co-Author and Maintainer of R package "FGM - Functional Graphical Models", <https://github.com/TeoGiane/FGM>.

### Teaching

#### Università Cattolica del Sacro Cuore, Milan, Italy :

Master's degree in Data analytics for business

- *Applied Linear Models* (teaching assistant, AY 2021-2022, 15 hrs; AY 2022-2023, 15 hrs)

#### Politecnico di Milano, Milan, Italy :

Master's degree in Mathematical Engineering

- *Bayesian Statistics* (tutor, AY 2021-2022, 13 hrs; AY 2022-2023 10 hrs)

### Experiences

- Lake Como school in advanced studies,  
*Robust Statistics: Foundations and Recent Developments*, May 2-6, 2022.