Beatrice Franzolini

Contact information

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Current position

Jan 2022–present	*Postdoctoral research fellow*, Agency for Science, Technology and Research (Singapore)

Education

Feb - 2022 ***PhD in Statistics*, Bocconi University** (Milan, Italy)

- *Thesis*: On Dependent Processes in Bayesian Nonparametrics: Theory, Methods, and Applications
- *Advisors*: Antonio Lijoi, Igor Prünster
- *Final Mark*: with honours (cum laude)

Apr - 2017 ***Master of Science in Finance*, Bocconi University** (Milan, Italy)

- *Thesis*: Can a Consumption-Based Stochastic Discount Factor Jointly Price the Cross-section of Commodity Futures Returns?
- *Advisor*: Massimo Guidolin
- *Final Mark*: with honours (110/110 cum laude)

Jul - 2014 ***Bachelor in Statistics*, University of Bologna** (Bologna, Italy)

- *Thesis*: Utility Functions for C-CAPM: an Empirical Analysis to Compare CRRA Functions with Epstein and Zin Function.
- *Advisor*: Luca De Angelis
- *Final Mark*: with honours (110/110 cum laude)

Past Academic positions

Nov 2021–Jan 2022	*Research assistant*, Bocconi Institute for Data Science and Analytics (Milan, Italy)
Sep 2017–Jan 2022	*PhD student in Statistics* (with merit-based fellowship), Bocconi University (Milan, Italy)
Sep 2019–Aug 2021	*Adjunct professor*, Bocconi University (Milan, Italy)
Sep 2018–Aug 2021	*Teaching assistant*, Bocconi University (Milan, Italy)
Sep 2019–Aug 2020	*Teaching assistant*, Catholic University of the Sacred Heart (Milan, Italy)
Apr 2017–Jul 2017	*Research assistant*, Bocconi University (Milan, Italy)
Jul 2016–Jul 2017	*Tutor*, Bocconi University (Milan, Italy)
Jul 2016–Sep 2016	*Research assistant*, Bocconi University (Milan, Italy)

Research interests

Bayesian nonparametrics, Bayesian modelling of complex data, and biostatistics.

Papers and scientific publications

- **Franzolini, B.**, Lijoi, A., and Prünster, I. (2022) *Model selection for maternal hypertensive disorders with symmetric hierarchical Dirichlet processes*, The Annals of Applied Statistics, forthcoming.
- Ascolani, F., **Franzolini, B.**, Lijoi, A., and Prünster, I. (2021). *On the dependence structure in Bayesian nonparametric priors.* In Book of Short Papers SIS 2021, (Editors: Perna, C., Salvati, N. and Schirripa Spagnolo, F.) ISBN 9788891927361

Submitted and working papers

- Ascolani, F., **Franzolini, B.**, Lijoi, A., and Prünster, I. (2022+). *Nonparametric priors with full-range borrowing of information* (submitted)
- **Franzolini, B.**, Lijoi, A., Prünster, I. and Rebaudo, G. (2022+). *Multivariate species sampling models* (in preparation)
- **Franzolini, B.**, Lijoi, A. and Prünster, I. (2022+). *Dependent processes for panel count data* (in preparation)
- **Franzolini, B.**, De Iorio, M. and Beskos, A. (2022+). *Dynamic Gaussian Graphical Models* (in preparation)
- **Franzolini, B.** and De Iorio, M. (2022+). *Multilayer clustering via dependent nonparametric priors: an application to zero-excess data* (in preparation)

Conferences, talks and seminars

Invited talks

- Foundations of Objective Bayesian Methodology workshop, Oaxaca, Mexico (November 2021).
- 4th International Conference on Econometrics and Statistics (ECOSTA 2021), virtual conference - Hong Kong (June 2021).
- 13th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMSTATISTICS 2020), virtual conference (December 2020).
- 45th Arkansas Spring Lectures Series - Mathematical Sciences, virtual lectures - Fayetteville, USA (November 2020).

Contributed talks

- Workshop ISBA@CIRM, Marseille, France (June 2021).
- 2021 World Meeting of the International Society for Bayesian Analysis (ISBA 2021),virtual conference (June 2021).
- 50th Meeting of the Italian Statistical Society (SIS 2021), virtual conference - Pisa, Italy (June 2021).

Referee Activities

Referee for *Bayesian Analysis*, *Biostatistics*, *Journal of the American Statistical Association*, and *Stat*.

Society memberships

Institute of Mathematical Statistics (IMS) ; International Society for Bayesian Analysis (ISBA); Italian Statistical Society (SIS); Complex Data Modeling Research Network (MiDaS).

Teaching activities

Course title	Level	Univeristy	Type of activity*	Period	Duration
Statistica	BSc	Bocconi University	T	a.y. 2020-2021	20h
Financial Economentric and Empirical Finance	MSc	Bocconi University	T	a.y. 2020-2021	12h
Statistica	BSc	Bocconi University	TA	a.y. 2020-2021	90h
Financial Economentric and Empirical Finance	MSc	Bocconi University	TA	a.y. 2020-2021	18h
Statistica	BSc	Bocconi University	T	a.y. 2019-2020	40h
Statistica	BSc	Bocconi University	TA	a.y. 2019-2020	90h
Financial Economentric and Empirical Finance	MSc	Bocconi University	TA	a.y. 2019-2020	18h
Statistics	BSc	Catholic University of the Sacred Heart	TA	a.y. 2019-2020	24h
Statistica	BSc	Bocconi University	TA	a.y. 2018-2019	90h
Financial Economentric and Empirical Finance	MSc	Bocconi University	TA	a.y. 2018-2019	18h
Metodi quantitativi per la finanza	BSc	Bocconi University	TA	a.y. 2018-2019	57h

* T = as lecturer; TA = as teaching assistant

Other education

2018 **Graphical Models**, Bocconi Summer School in Advanced Statistics and Probability (Como, Italy)
Instructors: S. Lauritzen (University of Copenhagen) and R. Evans (University of Oxford)

2018 **Bocconi Excellence in Advanced Teaching** (BEAT) by BUILT (Milan, Italy)

Non-academic work experience

2016–2019 *Contributing editor*, Zanichelli editore S.p.A (Bologna, Italy)

Volunteer work

2019 Volunteer for the European Researchers' Night (Milan, Italy)

2018 Volunteer for Fondazione Rodolfo Debenedetti, project: racCONTAMI 2018 (Milan, Italy)

2016 Volunteer for Pane Quotidiano (Milan, Italy)

Language skills

Italian (native speaker), English (good), Spanish (basic).

Computer skills

R, Python, MATLAB, LaTeX (good) and Stata, SAS (basic).