

NICCOLO' ANCESCHI, Ph.D.

Postdoctoral Associate

Duke University
Department of Statistical Sciences
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Research Interests

Bayesian Methods and Computation, Dimensionality Reduction, High-dimensional Regression, Mixed-measurement Data, Variational Inference & Scalable Computations

Current Position

Oct 2022 - Present

Postdoctoral Associate in Statistics, Duke University (*Durham, US*)

Mentors: Amy Herring & David Dunson

Research Area: Development of novel statistical methods for inferring latent structure in high-dimensional, complex, and structured data

Education

Sep 2018 - Jan 2023

Ph.D. in Statistics, Bocconi University (*Milan, IT*)

Advisors: Daniele Durante & Giacomo Zanella

Topic: High-dimensional Bayesian inference for binary data

Final Mark: with honours (*cum laude*)

Oct 2014 - Apr 2017

M.Sc. in Physics, University of Milan (*Milan, IT*)

Advisors: Samir Suweis & Jorge Hidalgo

Thesis Project at: Padua University (*Padua, IT*)

Topic: Emergence of biodiversity and the definition of species in ecological communities

Final Mark: with honours (*110/110 cum laude*)

Aug 2014 - Sep 2014

Internship (*visiting student*), Colorado University (*Boulder, US*)

Research Project at: Soft Materials Research Center

Oct 2010 - Apr 2014

B.Sc. in Physics, University of Milan (*Milan, IT*)

Advisors: Alberto Vailati & Tommaso Bellini

Topic: Liquid-Crystal phases in racemic mixtures of DNA oligomers

Work Experience

Jun 2017 - Jul 2018

Pricing Analyst, brumbrum S.p.A. (*Milan, IT*)

Industry: Used Car e-commerce

Job Description: Development of efficient and robust algorithms for competitive data-driven asset pricing, based on highly-noisy data

Publications & Working Papers

- ▶ Anceschi N., Ferrari F., Mallick H. & Dunson D. (2023+) *Joint Additive Factor Regression for Multi-Omics Data Integration* (in preparation)
- ▶ Anceschi N., Rigon T., Durante D. & Zanella G. (2023+) *Optimal lower bounds for logistics likelihoods* (in preparation)
- ▶ Anceschi N., Fasano A., Durante D. & Zanella G. (2023) *Unified skew-normal conjugacy in probit, tobit, multinomial probit and extensions: A review and new results* *Journal of the American Statistical Association* (in press)
- ▶ Fasano A., Rebaudo G. & Anceschi N. (2022), *Bayesian inference for the multinomial probit model under Gaussian prior distribution*, *Book of short papers - SIS 2022*, 871-876
- ▶ Anceschi N., Hidalgo J., Plata. C., Bellini T., Maritan A. & Suweis S. (2019) *Neutral and niche forces as drivers of species selection*, *Journal of Theoretical Biology* 483, 109969

Conferences & Schools

- Aug 2023 JSM Joint Statistical Meetings (*Toronto, CA*) [Contributed Talk]
- Jun 2023 IISA International Indian Statistical Association Conference (*Golden, US*) [Invited Talk]
- Apr 2023 LiPH Laboratory of Interdisciplinary Physics, *University of Padua (Padua, IT)* [Invited Seminar]
- Jun 2022 ISBA World Meeting of the International Society of Bayesian Analysis (*Montréal, CA*) [Poster]
- Apr 2022 BNP Networking Event of the Bayesian Nonparametric Section of ISBA (*Nicosia, CY*) [Contributed Talk]
- Jun 2021 ISBA 15th World Meeting of the International Society of Bayesian Analysis (*virtual*) [Contributed Talk - Workshop ISBA@CIRM (*Marseille, FR*)]
- Jul 2019 Random Graphs: Bocconi Summer School in Advanced Statistics and Probability (*Como, IT*)
- Jul 2016 Summer School on Atomistic Simulation Techniques, SISSA (*Trieste, IT*)

Teaching

- ▶ Teaching Assistant, *B.Sc. course Statistica*, Università degli studi di Bergamo (*AY 2021/2022*)
- ▶ Teaching Assistant, *B.Sc. course Computer Science II*, Bocconi University (*AY 2020/2021, 2021/2022*)
- ▶ Teaching Assistant, *B.Sc. course Theoretical Computer Science*, Bocconi University (*AY 2019/2020*)

Awards

- Sep 2018 - Aug 2022 | Ph.D. Scholarship, Bocconi University (*Milan, IT*)
- Jun 2022 | Travel Award, ISBA 2022 World Meeting (*Montréal, CA*)
- Apr 2022 | Travel Award, BNP 2022 Networking Event (*Nicosia, CY*)

Memberships & Affiliations

- ▶ International Society for Bayesian Analysis (*ISBA*)
- ▶ Italian Statistical Society (*SIS*)
- ▶ Complex Data Modeling Research Network (*MiDas*)
- ▶ Bayesian Learning Laboratory (*BayesLab*) at Bocconi Institute for Data Science and Analytics (*BIDSA*)

Other Skills

- ▶ Programming: R, Python, C, C++, Mathematica
- ▶ Languages: English (*fluent*), Italian (*native speaker*)