Niccolo Anceschi Ph.D.

Postdoctoral Associate in Statistics - Duke University

WORK EXPERIENCE

10/2022 - Present: Postdoc in Statistics, Duke University (NC)

- Development of Statistical and Machine Learning Methods for Inferring Latent Structure in High-Dimensional, Complex, and Structured Data
- Collaborative Research with Merck Sharp & Dohme and Academic Applied Scientists (Environmental Health, Neuroscience, Ecology)
- Mentors: Amy Herring & David Dunson

06/2017 - 07/2018: Pricing Analyst, brumbrum S.p.A. (Italy)

 Development of Efficient and Robust Algorithms for Competitive Datadriven Asset Pricing, Based on Highly Noisy Data (e-commerce)

EDUCATION

09/2018 - 01/2023: Ph.D. in Statistics, Bocconi University (Italy)

- Methodological & Computational Innovations in High-dimensional Inference for Binary and Mixed-type Data (Frequentist & Bayesian)
- Optimization, Variational Inference, Markov Chain Monte Carlo

10/2014 - 04/2017: M.Sc. in Physics, University of Milan (Italy)

- Advanced Simulation Methods, Molecular Dynamics, Genetic Algorithms
- Modeling Biodiversity in Ecological Communities (Agent-based Models)

08/2014 - 09/2014: Visiting Student, CU Boulder (CO)

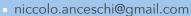
10/2010 - 04/2014: **B.Sc. in Physics, University of Milan (Italy)**

PUBLICATIONS & PREPRINTS

- Mauri, Anceschi & Dunson (2025+) Spectral decomposition-assisted multistudy factor analysis, arXiv
- Anceschi, Ferrari, Mallick & Dunson (2025+) Bayesian joint additive factor models for multiview learning, arXiv [JAFAR]
- Anceschi, Rigon, Zanella & Durante (2025+) Optimal lower bounds for logistic log-likelihoods, arXiv
- Poworoznek, Anceschi, Ferrari & Dunson (2025+) Efficiently resolving rotational ambiguity in Bayesian matrix sampling with matching, arXiv
- Anceschi, Fasano, Durante & Zanella (2023) Bayesian conjugacy in probit, tobit, multinomial probit and extensions: a review and new results, Journal of the American Statistical Association
- Anceschi, Hidalgo, Plata, Bellini, Maritan & Suweis (2019) Neutral and niche forces as drivers of species selection, Journal of Theoretical Biology

CONTACT

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- linkedin.com/in/nicoanceschi
- Google Scholar 'Niccolo Anceschi'

SKILLS

Technical Skills:

- Interpretable Machine Learning
- Uncertainty Quantification
- Scalable Bayesian Inference
- Scientific Computing & Simulation
- Probabilistic Programming
- Latent Structure Discovery
- Multimodal Data Fusion
- Interdisciplinary Problem Solving

Tools and Software:

- R, Python, C/C++
- Mathematica, MATLAB
- Stan, NumPyro
- GitHub, RMarkdown

Public Software:

- R package jafar
- GitHub repos EPglm, TobitSUN

OTHER

Communication & Leadership:

- 10+ Conference Talks [6 Invited](JSM, ISBA, ENAR, CMStats, ISEC)
- Reviewer for Scientific Journals (CSDA, JCGS, Biometrics, SPP)
- Course Instructor for B.Sc. Math Stats class STA211 @ Duke (2024)
- TA for 3 B.Sc. classes in Computer Science @ Bocconi (2019-2022)

Awards:

- First Runner up BioPharm Junior
 Researcher Paper 2024 [JAFAR]
- Biometrics 2024 Excellent Referee

