

# 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, <i>University of Padua (Padua, IT)</i> [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)