

Alessandro Zito

Italy: +39 349-461-3584 | US: +1 984-528-0287 | azito@hsph.harvard.edu | [Linkedin](#) | [GitHub](#) | [Website](#)

EDUCATION

Harvard T.H. Chan School of Public Health

Boston, MA, USA

Postdoctoral research fellow at the Department of Biostatistics

Sep 2023 – current

- Principal investigator: [Jeff Miller](#)
- Areas of research: non-negative matrix factorization, early cancer detection, mutational signature analysis

Duke University

Durham, NC, USA

Ph.D. in Statistical Science

Aug 2019 – Sep 2023

- Supervisor: Prof. [David Dunson](#)
- Research interests: Bayesian Methods, Bayesian Nonparametrics, Species Sampling Models, Ecology
- Dissertation: *Ecological modeling via Bayesian nonparametric species sampling priors* [Link](#) [Slides](#)

Bocconi University

Milan, Italy

Master's of Science in Economics and Social Sciences

Sep 2016 – Mar 2019

- Graduation grade: 110 cum laude / 110
- Thesis: *Conjugate Fractional Factorial Thompson Sampling via unified skew-normal*, with [Daniele Durante](#)

Bocconi University

Milan, Italy

Bachelor's of Science in Economics and Social Sciences

Sep 2013 – Oct 2016

- Graduation grade: 110 cum laude / 110
- Exchange program at The University of Chicago, Department of Economics, Fall 2015

EXPERIENCE

Intern Data Scientist

San Bruno, CA, USA

Google LLC, Youtube Data Science team

May 2022 – Aug 2022

- Implemented Bayesian hypothesis testing methods to evaluate platform experiments
- Designed a methodology to construct proxy metrics for long-term experiment outcome prediction based on Multivariate Bayesian Optimization algorithms and Gaussian processes. Follow up paper: [ArXiv:2307.01000](#)
- Coded up the two methodologies into two R packages for future internal usage

Intern Data Scientist

Milan, Italy

Generali Italia S.p.A., Advanced Analytics Solutions team.

Jun 2018 – Jul 2019

- Developed and implemented a Bayesian bandit algorithm recommendation system via a Google Cloud Platform API to optimize a life insurance policy marketing campaign
- Implemented a drivers profiling model, migrated from the partner society MyDrive Solutions

PUBLICATIONS

Zito, A., Rigon., T. and Dunson, D. B. (2022), Inferring taxonomic placement from DNA barcoding aiding in discovery of new taxa. *Methods in Ecology and Evolution*. 14, 529–542. DOI: [10.1111/2041-210X.14009](#)

Zito, A., Rigon., T., Ovaskainen, O. and Dunson, D. B. (2022), Bayesian modelling of sequential discoveries, *Journal of the American Statistical Association (T&M)*, 1-12, DOI: [10.1080/01621459.2022.2060835](#)

PREPRINTS

Zito, A., Rigon., T. and Dunson, D. B. (2023+), Bayesian nonparametric modelling of latent partitions via Stirling-gamma processes, [ArXiv:2306.02360](#), *under review*.

Richardson, L., **Zito, A.**, Greaves, D. and Soriano, J. (2023), Pareto Optimal Proxy Metrics, [ArXiv:2307.01000](#), *under review*.

SOFTWARES

Zito, A. (2023) **ConjugatedDP**: Random number generator for the Stirling-gamma distribution. [GitHub](#)

Zito, A. (2022) **BayesANT**: Bayesian nonparametric taxonomic classifier for DNA barcode sequences. [GitHub](#)

Zito, A., Rigon, T. (2021) **BNPvegan**: Bayesian nonparametric methods for ecology. [GitHub](#)

SKILLS

Languages: Italian (Native), English (Fluent), Spanish (Proficient)

IT: R, Rcpp (Advanced), Python, Git, Cluster computing via SLURM, SQL, Microsoft Office (Proficient)

AWARDS

BEST Award for PhD student research for the 2021/2022 academic year

Ph.D. Teaching Assistant of the Year Award for the 2020/2021 academic year

Best Student/Postdoc Contributed Paper Award at ISBA 2021 World meeting

Bocconi Merit Award scholarship for the 2016/2017 and 2017/2018 academic years

EXTRACURRICULAR ACTIVITIES

Painter. Winner of the 2018 “Looking for Art” contest in Milan. Personal exhibitions at “Triennale di Milano” museum of arts and “Spazio Arte Tirabassi” art gallery.

Former **semi-professional actor** at “Proxima Res”, Milan