Lorenzo Masoero

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Born July 20, 1992—Turin, Italy
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Education

2019-current PhD student in Electrical Engineering and Computer Science, Massachusetts Institute of Technology (GPA 5.0/5.0)

2017 - 2019 MSc in Electrical Engineering and Computer Science, Massachusetts Institute of Technology [1]

2015 - 2016 MA in Statistics and Applied Mathematics, with distinction, Collegio Carlo Alberto (Senior Allievi Honors Program)

2015 - 2016 MA in Quantitative Finance and Insurance, 110/110 magna cum laude, Università degli Studi di Torino

2012 - 2014 BA in Economics, 110/110 cum laude, Università degli Studi di Torino

Scholarships and Awards

2020 SBSS Best Student Paper Award (ASA)

2020 Bayes Comp Travel Award

2018 BNP@NeurIPS Award

2017 Andrew (1956) and Erma Viterbi Fellowship

2016 Best Graduate Student of the Year (ATLEC)

2015 - 2016 Graduate Allievi Honors Program Scholarship, Collegio Carlo Alberto, Moncalieri

2012 - 2014 Undergraduate Allievi Honors Program Scholarship, Collegio Carlo Alberto, Moncalieri

Research and Theses

2019 "**More for Less: Predicting and maximizing genetic variant discovery via Bayesian nonparametrics**" AABI 2019 [poster]; Journal version in preparation; *https://arxiv.org/pdf/1912.05516.pdf*; (M., Camerlenghi, Favaro and Broderick)"

2018 "**Posterior representations of hierarchical completely random measures in trait allocation models**" (M., Camerlenghi, Favaro and Broderick), **Spotlight**, *BNP@NeurIPS2018* [poster]
"**Sensitivity of Bayesian inference to data perturbations**" (M., Stephenson and Broderick), *AABI 2018* [poster]

2017 "**Generic finite approximations for practical Bayesian nonparametrics**" (Huggins, M., Mackey and Broderick), **Spotlight**, *NIPS 2017 Workshop on Advances in Approximate Bayesian Inference* [poster]

2016 "**An asymptotic analysis of Gibbs-type priors**" - Master's thesis in Bayesian nonparametrics, Supervisors: prof. Pierpaolo de Blasi and prof. Igor Prünster

2014 **"Econometrics of the Big Data"** - Undergraduate thesis in Econometrics. Supervisor: prof. Alessandro Sembenelli

[1] **Completed coursework**: Dynamic Programming and Stochastic Control (6.231) [final project], Fundamentals of Probability (6.436), Inference and Information (6.437), Algorithms for Inference (6.438), Algorithmic aspects of Machine Learning (18.408) [final project], Bayesian modeling and inference (6.882), Advanced stochastic processes (6.265), Mathematical Statistics: A Non-Asymptotic Approach (9.S914), Learning-Augmented Algorithms (6.890)

Skills

- Proficient in Python (numpy, scipy, pandas, matplotlib, scikit-learn), LaTeX
- Past experience in C++, Matlab, R, RStudio

Talks, Poster sessions and Conference Presentations

2020

- Learning under complex structure, MIFODS workshop, *Cambridge (MA)*, "More for less: predicting and maximizing genomic diversity via Bayesian nonparametrics" [Poster session]
- Bayes Comp 2020, *Gainesville (FL)*, "More for less: predicting and maximizing genomic diversity via Bayesian nonparametrics" [Poster session]

2019

- Advances in Bayesian Nonparametric Methods and Its Applications, *Denver (CO), JSM 2019*, "Genomic variety prediction via Bayesian nonparametrics" [Topic-contributed session]
- Advances in Approximate Bayesian Inference, *Vancouver, Canada*, "More for less: Predicting and maximizing genetic variant discovery via bayesian nonparametrics"
- Statistics and Data Science Conference 2019, *Cambridge (MA)*. "Genomic variety prediction via Bayesian nonparametrics"
- MLxMIT, *Cambridge (MA)*, "Genomic variety prediction via Bayesian nonparametrics"
- LIDS & Stats seminar, *Cambridge (MA)*, "Genomic variety prediction via Bayesian nonparametrics"
- CSAIL-MSR Trustworthy and Robust AI (TRAC) Workshop, *Cambridge (MA)*, "Getting the most bang for your buck: Predicting and maximizing the number of new genetic variants in a future experiment"

2018

- BNP@NeurIPS 2018, Montreal (Canada) "Posterior representations of hierarchical completely random measures in trait allocation models" [**Spotlight**]

Professional Service

2020 Reviewer for AAAI 2020, AISTATS 2020
2019 Reviewer for AISTATS 2019, NeurIPS 2019, AABI 2019
2018 Reviewer for BNP@NeurIPS2018