Laura D'Angelo

Department of Economics, Management and Statistics (DEMS)
University of Milano Bicocca
Piazza dell'Ateneo Nuovo 1, 20126 Milano

✉ *laura.dangelo@unimib.it*
⌂ *laura-dangelo.github.io*

CURRENT POSITION

Postdoctoral researcher in Statistics (Dec 2021 –)
Department of Economics, Management and Statistics (DEMS)
University of Milano Bicocca
Supervisor: Prof. Bernardo Nipoti.

EDUCATION

PhD in Statistics
Oct 2018 – Nov 2021; defense on May 4, 2022
Department of Statistical Science, University of Padova
- Thesis: "Bayesian modeling of calcium imaging data"
- Supervisor: Prof. Antonio Canale
- Co-supervisor: Prof. Michele Guindani.

Master's Degree in Statistics
Oct 2015 – Nov 2017
Department of Statistical Science, University of Padova
- Thesis: "Bayesian nonparametric models: applications in insurance"
- Supervisor: Prof. Antonio Canale
- Final mark: 110/110 *cum laude*.

Bachelor's Degree in Statistics, Economics and Finance
Oct 2012 – Sep 2015
Department of Statistical Science, University of Padova
- Thesis: "Covariate-specific area under the ROC curve"
- Supervisor: Prof. Gianfranco Adimari
- Final mark: 110/110 *cum laude*.

VISITING PERIODS

Department of Statistics, University of California, Irvine.
Irvine, CA; USA.
Jan 2020 – Nov 2020
Supervisor: Prof. Michele Guindani.

AWARDS

- Junior travel award, ISBA 2022.
- Winner of "Best Student/Postdoc Contributed Paper Award", ISBA 2021.

WORK EXPERIENCE

Data analyst at BIP, Milan (Jan 2018 – Sep 2018).

RESEARCH INTERESTS	• Bayesian modeling • Model-based clustering • Computational statistics
PUBLICATIONS	• D'Angelo L., Canale A., Yu Z. and Guindani M. (2022) Bayesian nonparametric analysis for the detection of spikes in noisy calcium imaging data. *Biometrics*, 1-13, `doi.org/10.1111/biom.13626`.
	• D'Angelo L. and Canale A. (2021) Efficient posterior sampling for Bayesian Poisson regression. *arXiv preprint arXiv:2109.09520*.
	• D'Angelo L. and Canale A. (2021) Contributed Discussion on: "Centered Partition Processes: Informative Priors for Clustering", in Bayesian Analysis, 16(1).
	• D'Angelo L., Canale A., Yu Z. and Guindani M. (2021) Detection of neural activity in calcium imaging data via Bayesian mixture models, in *Book of Short Papers SIS 2021*, ISBN: 9788891927361.
	• D'Angelo L. (2019) Model based clustering in group life insurance via Bayesian nonparametric mixtures, in *Book of Short Papers SIS 2019*, ISBN: 9788891915108.
CONFERENCE PRESENTATIONS	• "Bayesian nonparametric analysis for the detection of spikes in noisy calcium imaging data"; *JSM 2021*; August 8 – 12, 2021.
	• "Bayesian nonparametric analysis for the detection of spikes in noisy calcium imaging data"; *ISBA 2021*, June 23 – July 2; 2021. Pre-recorded video available at `youtu.be/SLLSJVuFnMs`.
	• "Detection of neural activity in calcium imaging data via Bayesian mixture models"; *SIS 2021*, Pisa, Italy; June 21 – 25, 2021.
	• "Model based clustering in group life insurance via Bayesian nonparametric mixtures"; *SIS 2019*, Milan, Italy; June 12 – 14, 2019.
	Forthcoming
	• Invited talk: "Bayesian nonparametric clustering of spatially-referenced spike train data"; *SIS 2022*, Caserta, Italy; June 22 – 24, 2022.
	• Discussant at the solicited session "Bayesian inference for complex random structures"; *SIS 2022*, Caserta, Italy; June 22 – 24, 2022.
	• Poster presentation "Clustering activation patterns of spatially-referenced neurons"; *ISBA 2022*, Montreal, Canada; June 27 – July 1, 2022.
SOFTWARE	• D'Angelo L. (2021) "bpr: Fitting Bayesian Poisson Regression", *R package*, `CRAN.R-project.org/package=bpr`
TEACHING EXPERIENCE	• (Apr 2021) Classes on the use of Latex for scientific writing and bibliography management (1 CFU). University of Padova.
	• (Oct 2016 – June 2017) Tutor: lectures and exercises for the courses of Statistics (Advanced) and Mathematical Analysis 1. University of Padova.

WORKSHOPS
- Jan 24, 2020: Bayesian Nonparametrics for Complex Data, Concluding workshop. Department of Statistical Sciences, University of Padova.
- July 2 – 5, 2019: Data research camp, San Servolo island, Venice, Italy. 3-day meeting where groups of young scholars, advised by a senior researcher, were asked to develop innovative methods and models to analyze a common dataset.

SERVICE

Memberships
- International Society for Bayesian Analysis
- Società Italiana di Statistica

Referee for:
Computational Statistics and Data Analysis; Statistical Science; Statistics in Medicine.

COMPUTER SKILLS
- Languages: R, Rcpp (good); C/C++, Python (basic).
- Other: Latex (good); GitHub (basic); HTML, CSS (basic).

LANGUAGES

Italian (native); English (good).

DATA HACKATHONS
- June 27 – 28, 2017: First prize winner at Stats Under the Stars[3], Florence.