

LAURA D'ANGELO

Department of Statistical Science
University of Padova
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Current position Since October 2018; (expected completion: December 2021)

PhD student in Statistics

University of Padova

Supervisor: Prof. Antonio Canale

Co-supervisor: Prof. Michele Guindani.

Education

Master's Degree in Statistics (10/2015 – 11/2017)

University of Padova

Title of dissertation: Modelli Bayesiani nonparametrici: applicazioni al settore assicurativo (Bayesian nonparametric models: applications in insurance)

Supervisor: Prof. Antonio Canale

Final mark: 110/110 *cum laude*.

Bachelor's Degree in Statistics, Economics and Finance (10/2012 – 09/2015)

University of Padova

Title of dissertation: L'area sotto la curva ROC specifica per caratteristiche (Covariate-specific area under the ROC curve)

Supervisor: Prof. Gianfranco Adimari

Final mark: 110/110 *cum laude*.

Visiting periods (01/2020 – 11/2020) University of California, Irvine

Irvine, CA; USA

Supervisor: Prof. Michele Guindani.

Work experience (01/2018 – 09/2018) Data analyst at BIP, Milan.

Research interests

- Statistical modeling
- Bayesian nonparametrics
- Computational methods

Computer skills

- R (advanced)
- C++, GitHub, Python (working level)

Language skills

Italian (native); English (good)

Publications

- D'Angelo L. and Canale A. (2021) Efficient posterior sampling for Bayesian Poisson regression. *arXiv preprint arXiv:2109.09520*
- D'Angelo L., Canale A., Yu Z. and Guindani M. (2021) Bayesian nonparametric analysis for the detection of spikes in noisy calcium imaging data. *arXiv preprint arXiv:2102.09403*
- D'Angelo L. and Canale A. (2021) Contributed Discussion on: “Centered Partition Processes: Informative Priors for Clustering”, in *Bayesian Analysis*, 16(1)

	<ul style="list-style-type: none"> • D’Angelo L., Canale A., Yu Z. and Guindani M. (2021) Detection of neural activity in calcium imaging data via Bayesian mixture models, in <i>Book of Short Papers SIS 2021</i> (Editors: Perna C., Salvati N., Schirripa Spagnolo F.), ISBN: 9788891927361 • D’Angelo L. (2019) Model based clustering in group life insurance via Bayesian nonparametric mixtures, in <i>Book of Short Papers SIS 2019</i> (Editors: Arbia, G., Peluso, S., Pini, A. and Rivellini, G.), ISBN: 9788891915108
Awards	<ul style="list-style-type: none"> • Winner of “Best Student/Postdoc Contributed Paper Award”, ISBA 2021 World Meeting, sponsored by the National Science Foundation.
Conference presentations	<ul style="list-style-type: none"> • Bayesian nonparametric analysis for the detection of spikes in noisy calcium imaging data. <i>JSM 2021</i>, August 8 – 12, 2021. • Bayesian nonparametric analysis for the detection of spikes in noisy calcium imaging data. <i>ISBA 2021 World Meeting</i>, June 23 – July 2, 2021. Pre-recorded video available at https://youtu.be/SLLSJVuFnMs . • Detection of neural activity in calcium imaging data via Bayesian mixture models. <i>SIS 2021 Intermediate meeting</i>, Pisa, Italy, June 21 – 25, 2021. • Model based clustering in group life insurance via Bayesian nonparametric mixtures. <i>SIS 2019 Intermediate meeting</i>, Milan, Italy, June 12 – 14, 2019.
Software	<ul style="list-style-type: none"> • D’Angelo L. (2021) “bpr: Fitting Bayesian Poisson Regression”, <i>R package</i>, https://CRAN.R-project.org/package=bpr
Teaching experience	<ul style="list-style-type: none"> • (04/2021) Classes on the use of Latex for scientific writing and bibliography management. University of Padova. • (10/2016 – 06/2017) Tutor: lectures and exercises for the courses of Statistics (Advanced) and Mathematical Analysis 1. University of Padova.
Workshops	<ul style="list-style-type: none"> • January 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.
Data Hackathons	<ul style="list-style-type: none"> • June 27 – 28, 2017: First prize winner at Stats Under the Stars³, Florence.