Laura D'Angelo

Department of Statistics University of Padova Via Cesare Battisti 241, 35121 Padova laura.dangelo.1@phd.unipd.it

Current position Since October 2018; (expected completion: December 2021)

PhD student in Statistical Sciences

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 assi-

curativo (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., 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) 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* (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 *Book of Short Papers SIS 2019* (Editors: Arbia, G., Peluso, S., Pini, A. and Rivellini, G.), ISBN: 9788891915108

Conference presentations

- \bullet Bayesian nonparametric analysis for the detection of spikes in noisy calcium imaging data. ISBA 2021 World Meeting, Jun 23 Jul 2, 2021. Pre-recorded video available at https://youtu.be/SLLSJVuFnMs .
- Detection of neural activity in calcium imaging data via Bayesian mixture models. SIS 2021 Intermediate meeting, Pisa, Italy, June 21-25, 2021.
- Model based clustering in group life insurance via Bayesian nonparametric mixtures. SIS 2019 Intermediate meeting, Milan, Italy, June 12-14, 2019.

Teaching experience

- (04/2021) Classes on the use of Latex for scientific writing and bibliography management. University of Padova.
- (10/2016 06/201) Tutor: lectures and exercises for the courses of Statistics (Advanced) and Mathematical Analysis 1. University of Padova.

Workshops

- 24 January 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

• June 27-28, 2017: First prize winner at Stats Under the Stars³, Florence.