# Daniele Zago

### CURRICULUM VITAE

#### Personal Details

Date of Birth: May 9, 1996 Place of Birth: Padova, Italy

Nationality: Italian

# **Contact Information**

University of Padova, Department of Statistics, via Cesare Battisti 241-243, 35121 Padova, Italy.

e-mail address: daniele.zago.1@phd.unipd.it

personal page: dedzago.github.io

### **Current Position**

Since October 2021; (expected completion: December 2024)

PhD Student in Statistical Sciences, University of Padova.

# Research interests

- Statistical process control
- Numerical analysis
- Functional data analysis
- Computational statistics

# Education

October 2019 - September 2021

Master (laurea specialistica/magistrale) degree in Statistical Sciences.

University of Padova, Faculty of Statistical Sciences

Title of dissertation: "'Bayesian multiscale mixture models via Hilbert curve partitioning'

Supervisor: Prof. Antonio Canale Final mark: 110/110 cum Laude

October 2016 - September 2019

Bachelor degree (laurea triennale) in Statistics for Technology and Sciences.

University of Padova, Faculty of Statistical Sciences Title of dissertation: "The addition of objective

data to opinion: a comparison of Bayesian models"

Supervisor: Prof. Bruno Scarpa Final mark: 110/110 cum Laude

#### Further education

October 3-8, 2022

Thirteenth INFN International School on Efficient Scientific Computing – Bertinoro.

Organizer: Bologna University and INFN

### Work experience

September 2019 - September 2021

# Department of Statistical Sciences, University of Padua.

Motivational Tutor.

- Attendance to seminars focused on the development of soft skills.
- Organization of workshops on optimal study habits and practices for first-year students.
- Attendance to outreach events and conferences.

September 2018 - February 2020

# Department of Statistical Sciences, University of Padua.

Academic Tutor.

• Weekly workshops on Calculus (Analisi Matematica) to first-year students.

# Awards and Scholarships

March 2022

Young Travel Award, ISBA 2022.

December 2018

Mille e una Lode Award 2018/19, scholarship awarded to the top 3% students at the University of Padova.

December 2017

Mille e una Lode Award 2017/18, scholarship awarded to the top 3% students at the University of Padova.

# Computer skills

- Julia, R, Python, C, C++, bash, SQL
- git, LATEX, Jekyll, Office suite

### Language skills

Italian: native - English: fluent (IELTS band 8.5) - German: moderate - Spanish: moderate.

#### **Publications**

#### Articles in journals

Zago, D., Capizzi, G. (2023). Alternative parameter learning schemes for monitoring process stability. Quality Engineering. https://doi.org/10.1080/08982112.2023.2253891

Zago, D., Canale, A., & Stefanucci, M. (2022). Bayesian multiscale mixtures of multivariate gaussian kernels for density estimation. *Proceedings of the 36th International Workshop on Statistical Modelling*. ISBN: 9788855113090

# Working papers

Bonacina, S., Zago, D., Capizzi, G., Colosimo, B. M. (2023). Statistical process monitoring of isolated and persistent defects in complex geometrical shapes. https://arxiv.org/abs/2310.12876 v1

Zago D., Capizzi G., Qiu P. (202+). An improved bisection-type algorithm for control chart calibration.

Zago D., Capizzi G., Qiu P. (202+). Robust monitoring of multivariate mixed-type processes with serial correlation.

Zago D., Capizzi G., Qiu P. (202+). A novel CUSUM control chart for monitoring mixed-type data.

Zago D., Capizzi G., Qiu P. (202+). Optimal constrained design of control charts using stochastic approximations. Submitted.

### Conference presentations

Zago, D., Capizzi, G., Qiu, P. (2023). Optimal constrained design of control charts using stochastic approximations. (invited talk) 2023 INFORMS Annual Meeting, Phoenix, USA, October 15–18, 2023.

Zago, D., Capizzi, G. (2022). Profile monitoring based on adaptive parameter learning. (poster) Statistical methods and models for complex data, Padova, Italy, September 21–23, 2022.

Zago, D., Canale, A., Stefanucci, M. (2022). Bayesian multiscale mixtures of multivariate Gaussian kernels for density estimation. (poster) *International Workshop on Statistical Modelling 2022.*, Trieste, Italy, July 18–22, 2022.

Zago, D., Canale, A., Stefanucci, M. (2022). Bayesian nonparametric multiscale mixture models via Hilbert-curve partitioning. (poster) 2022 ISBA World meeting., Montréal, Canada, June 27th - July 1st, 2022.

### Teaching experience

October 2022 - December 2022

Testing Psicologico

Developmental, Personality and Interpersonal Relationships Psychology

Teaching task: laboratory, 20 hours

University of Padova

Instructor: Prof. Antonio Calcagnì

September 2019 – February 2020 Istituzioni di Analisi matematica Statistics for Technology and Sciences Teaching task: exercises (tutor), 32 hours

University of Padova

Instructor: Prof. Paola Mannucci, Prof. Annalisa Cesaroni

September 2018 – February 2019 Istituzioni di Analisi matematica Statistics for Technology and Sciences Teaching task: exercises (tutor), 32 hours

University of Padova

Instructor: Prof. Paola Mannucci, Prof. Annalisa Cesaroni

### References

# Prof. Giovanna Capizzi

Università degli Studi di Padova, Padova, Italy Via Cesare Battisti 241-243 e-mail: capizzi@stat.unipd.it

# Prof. Peihua Qiu

University of Florida, Gainesville, USA 2004 Mowry Rd e-mail: pqiu@ufl.edu