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 degree (*laurea specialistica/magistrale***) 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

Preprints

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

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

Zago D. (202+). StatisticalProcessMonitoring.jl: a General Framework for Statistical Process Monitoring in Julia.

Zago D., Capizzi G., Qiu P. (202+). A general framework for monitoring mixed data.

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

Zago D., Capizzi G., Qiu P. (202+). Effective monitoring of processes with mixed data by a self-starting CUSUM chart. *Submitted*.

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

SOFTWARE

Zago D., StatisticalProcessMonitoring.jl, *Julia package version 0.1.0*.

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 27–July 1, 2022.

TEACHING EXPERIENCE

October 2022 – December 2022
University of Padova, Department of Department of Developmental Psychology and Socialisation
Course: Testing Psicologico
Teaching task: laboratory, 20 hours
Instructor: Prof. Antonio Calcagnì

September 2019 – February 2020
University of Padova, Department of Statistical Sciences
Course: Istituzioni di Analisi matematica
Teaching task: exercises (tutor), 32 hours
Instructor: Prof. Paola Mannucci, Prof. Annalisa Cesaroni

September 2018 – February 2019
University of Padova, Department of Statistical Sciences
Course: Istituzioni di Analisi matematica
Teaching task: exercises (tutor), 32 hours
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