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

Articles in journals

Zago, D., Capizzi, G., Qiu, P. (2024). Optimal constrained design of control charts using stochastic approximations. *Journal of Quality Technology*. https://doi.org/10.1080/00224065.2024.2323 585

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., Capizzi, G., Colosimo, B. M. (202+). Statistical process monitoring of isolated and persistent defects in complex geometrical shapes. *Manuscript in preparation*.

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

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

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*.

SOFTWARE

Zago D., StatisticalProcessMonitoring.jl, Julia package version 0.1.3.

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