

DANIELE ZAGO  
CURRICULUM VITAE

PERSONAL DETAILS

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

CONTACT INFORMATION

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University of Padova, Department of Statistics, via Cesare Battisti 241-243, 35121 Padova, Italy.  
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personal page: [dedzago.github.io](https://dedzago.github.io)

CURRENT POSITION

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*Since October 2021; (expected completion: December 2024)*  
**PhD Student in Statistical Sciences, University of Padova.**

RESEARCH INTERESTS

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

EDUCATION

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*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

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*October 3-8, 2022*

Thirteenth INFN International School on Efficient Scientific Computing – Bertinoro.

Organizer: Bologna University and INFN

## WORK EXPERIENCE

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*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

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*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

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- Julia, R, Python, C, C++, bash, SQL
- git, L<sup>A</sup>T<sub>E</sub>X, Jekyll, Office suite

## LANGUAGE SKILLS

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

## PUBLICATIONS

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### 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., Qiu, P. (2024). Optimal constrained design of control charts using stochastic approximations. *Journal of Quality Technology*. <https://doi.org/10.1080/00224065.2024.2323585>

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. *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

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Zago D., [StatisticalProcessMonitoring.jl](#), Julia package version 0.1.3.

## CONFERENCE PRESENTATIONS

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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

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*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 Calcagni

*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

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### **Prof. Giovanna Capizzi**

Università degli Studi di Padova, Padova, Italy

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### **Prof. Peihua Qiu**

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