

Work experience

- Oct 2024 – Present **Data Scientist**, *Optit S.r.l.*, Bologna, Italy
- Oct 2022 - Dec 2022 **Teaching assistant**, *Department of Developmental Psychology and Socialisation, University of Padua*, Padua, Italy
- Teaching activities: lectures on introduction to R programming and data analysis

Education

- 2021 – 2024 **Ph.D. in Statistical Sciences**, *University of Padua*, Padua, Italy
- Advisor: prof. Giovanna Capizzi; Co-advisor: prof. Peihua Qiu
 - Research topic(s): **online outlier detection** and **stochastic optimization**
- Visiting research scholar**, *University of Florida*, Gainesville, FL, USA
Visiting period: Jan 2023 – Dec 2023
- Oct 2022 **Thirteenth INFN International School on Efficient Scientific Computing**, *Istituto Nazionale di Fisica Nucleare and University of Perugia*, Bertinoro, Italy
- Efficient C++ programming
 - GPU programming with CUDA
- 2019 – 2021 **M.Sc. in Statistical Sciences**, *University of Padua*, Padua, Italy
Final grade: **110/110 cum Laude**, GPA: **29.5/30**
- Topics: Data science, statistics for industry, outlier detection, time series analysis
- Jul 2020 **Summer school in Mathematics**, *University of Perugia*, Perugia, Italy
- 2016 – 2019 **B.Sc. in Statistics for Technology and Sciences**, *University of Padua*, Padua, Italy
Final grade: **110/110 cum Laude**, GPA: **29.2/30**
- Topics: Big data analytics, computational statistics, programming, design of experiments

Conference presentations

- Oct 2023 Optimal constrained design of control charts using stochastic approximations.
Invited talk. *2023 INFORMS Annual Meeting*, Phoenix, AZ, USA
- Sep 2022 Profile monitoring based on adaptive parameter learning.
Poster presentation. *Statistical methods and models for complex data*, Padova, Italy
- Jun 2022 Bayesian nonparametric multiscale mixture models via Hilbert-curve partitioning.
Poster presentation. *2022 ISBA World meeting.*, Montréal, Canada.

Awards

- 2025 ENBIS Knowledge Fund, ENBIS 2025 conference, *Piraeus, Greece*
- 2022 Young Travel Award, ISBA 2022 conference, *Montréal, Canada*
- 2018 Mille e una Lode Award 2018, (top 3% of students at the University of Padua)
- 2017 Mille e una Lode Award 2017, (top 3% of students at the University of Padua)

Publications

Zago, D. (202+). “StatisticalProcessMonitoring.Jl: A General Framework for Statistical Process Monitoring in Julia”. *Journal of Statistical Software* (forthcoming).

Zago, D., Capizzi, G., and Qiu, P. (2025). “An Improved Bisection-type Algorithm for Control Chart Calibration”. *Statistics and Computing* 35.81.

Zago, D., Tian, Z., et al. (2025). “A General Framework for Monitoring Mixed Data”. *Journal of Quality Technology* 0.0, 1–15. eprint: <https://doi.org/10.1080/00224065.2025.2512164>.

Zago, D., Capizzi, G., and Qiu, P. (2024). “Optimal Constrained Design of Control Charts Using Stochastic Approximations”. *Journal of Quality Technology*.

Zago, D. and Capizzi, G. (2023). “Alternative Parameter Learning Schemes for Monitoring Process Stability”. *Quality Engineering*.

Skills

Programming	Python, Julia, R, SQL, C++, C, SAS, bash
Other	git, GitHub, Google Cloud, Microsoft Office, Jekyll
Competencies	Outlier detection, stochastic optimization, machine learning, data visualization
Soft skills	Public speaking, teamwork, project management, critical thinking, adaptability
Languages	Italian (native), English (fluent, C2), German (moderate), Spanish (moderate)