Stefano Cortinovis

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EDUCATION

University of Oxford Oxford, United Kingdom
PhD in Statistical Machine Learning *2022 – 2026 (expected)*
- Advisors: Prof. François Caron and Prof. Mark van der Wilk.
- Research interests: Uncertainty quantification, Bayesian modelling, generative models, Gaussian processes.
- Part of the EPSRC CDT in Statistics and Machine Learning at Imperial and Oxford.

Bocconi University Milan, Italy
MSc in Data Science, GPA: 30/30, Final grade: 110/110 cum laude *2020 – 2022*
- Graduated **rank 1** of my class.
- Thesis: *Special Sampling Models: Foundations and Recent Developments.* Supervisor: Prof. Igor Prünster.

Bocconi University Milan, Italy
BSc in Economics and Computer Science, GPA: 30/30, Final grade: 110/110 cum laude *2017 – 2020*
- Graduated **rank 1** of my class.
- Thesis: *Hopfield Networks: Theory, Properties and Applications.* Supervisor: Prof. Igor Prünster.
- Study abroad at **Carnegie Mellon University** (Spring 2020). *Term GPA: 4.0/4.0.*

EXPERIENCE

Visiting Research Student Mar 2021 – Aug 2022
Bocconi Institute for Data Science and Analytics (BIDSA) *Milan, Italy*
- Mentors: Prof. Antonio Lijoi and Prof. Igor Prünster.
- Research areas: Bayesian nonparametrics, Bayesian computation and probabilistic ML.

Head of Technology Sep 2020 – Aug 2022
Build Sustainable Innovation (BSI) *Milan, Italy*
- Managed the technology division of BSI consisting of 20+ associates divided into 5+ projects per semester.
- Project areas: computer vision, predictive analysis, sentiment analysis, social media scraping.

TEACHING

Lecturer in Mathematics and Statistics Sep 2025 – Present
Keble College, University of Oxford *Oxford, United Kingdom*
- Tutorial sessions and grading in Probability.

Teaching Assistant Jan 2023 – Apr 2025
Department of Statistics, University of Oxford *Oxford, United Kingdom*
- Tutorial sessions and grading in Computational Statistics.

PUBLICATIONS AND PREPRINTS

Valentin Kilian[*], **Stefano Cortinovis**[*] and François Caron. Anytime-valid, Bayes-assisted, Prediction-Powered Inference. *Neural Information Processing Systems* (NeurIPS 2025).

Stefano Cortinovis and François Caron. Frequentist, Assisted by Bayes, Prediction-Powered Inference. *International Conference on Machine Learning* (ICML 2025).

Stefano Cortinovis, Laurence Aitchison, James Hensman, Stefanos Eleftheriadis, and Mark van der Wilk. Inverse-Free Sparse Variational Gaussian Processes. *NeurIPS Workshop on Bayesian Decision-making and Uncertainty* (2024).

Stefano Cortinovis[*], Valentin Kilian[*] and François Caron. Confidence Sequences with Informative, Bounded-influence Priors. Under review. *arXiv:2506.22925* (2025).

Stefano Cortinovis and François Caron. Bayes-assisted Confidence Regions: Focal Point Estimator and Bounded-influence Priors. Under review. *arXiv:2410.20169* (2024).

[*] Equal contribution.

Awards and Scholarships

Oxford-Radcliffe Scholarship	2022 – 2026
NeurIPS Travel Award	2024
Ermenegildo Zegna Founder's Scholarship	2022
Nova 111 Student List	2022
Bocconi Graduate Merit Award	2020 – 2022
INPS University Scholarship	2017 – 2022

Invited Talks

ISBA World Meeting 2026	Jun 2026
Bayes-assisted Inference with Machine Learning Models	*Nagoya, Japan*
StatML Statistical Wrappers Module	Oct 2025
Tutorial on Prediction-Powered Inference	*Oxford, United Kingdom*
UCL Statistical Science Seminar	Oct 2024
Gaussian Processes without Matrix Inverses	*London, United Kingdom*

Selected Posters

Anytime-valid, Bayes-assisted, Prediction-Powered Inference:

- NeurIPS 2025, San Diego, CA (Dec 2025).

FAB-PPI: Frequentist, Assisted by Bayes, Prediction-Powered Inference:

- ICML 2025, Vancouver, Canada (Jul 2025).
- Accelerating Statistical Inference with Machine Learning Workshop, Cambridge, UK (June 2025).

Inverse-free Sparse Variational Gaussian Processes:

- NeurIPS Workshop on Bayesian Decision-making and Uncertainty, Vancouver, Canada (Dec 2024).
- Amazon StatML Workshop 2024, Berlin, Germany (Apr 2024).

Professional Service

Reviewing: AISTATS (2026), NeurIPS (2025), JMLR.

Interviewing: Interviewer for undergraduate admissions in mathematics at Keble College (2022-Present).

Leadership: Organizer of E-values Reading Group (2025-Present), secretary of Oxford Young Statisticians Seminar (2024-Present), StatML student representative (2025-Present).

Skills

Scientific Python stack: NumPy, SciPy, pandas, JAX, PyTorch, TensorFlow.

Other programming languages: R, Julia, SQL, Bash.

Tooling: reproducible research (Jupyter, Git, CI/testing), HPC clusters (Linux, SLURM), experiment tracking (wandb), LaTeX.

Languages: English (fluent), Italian (native), Spanish (basic).