

Work experience

Researcher in Statistical Optimal Transport

University College London

📅 Jun 2024 – Present

📍 Remote

- Informal research collaboration on: *Bayes Rule via Entropic Approximation of the Knothe–Rosenblatt Rearrangement*.
- Supervisor: **Prof. Carlo Ciliberto**.

Researcher in Optimization Under Uncertainty

University of Cyprus / VU Amsterdam

📅 Oct 2024 – Dec 2024

📍 Remote

🔗 [Research report](#)

- Informal research collaboration on: *Submodular functions for Distributionally Robust Optimization*.
- Supervisors: **Prof. Angelos Georghiou**, **Prof. Rosario Paradiso**.

Academic Tutor

University of Pavia

📅 Oct 2021 – Sep 2025

📍 Pavia, Italy

- Teaching assistant for Calculus (Engineering BSc) and Probability (AI and Mathematics BSc).
- Supervisors: **Prof. Elisabetta Rocca**, **Prof. Abramo Agosti**, **Prof. Emanuele Dolera**, **Prof. Carlo Orrieri**.

Statistics Summer Research Intern

University of Cambridge

📅 Jul 2024 – Aug 2024

📍 Cambridge, UK

🔗 [Research report](#)

- Summer researcher at the Statistical Laboratory on: *Simulation Study on the Statistical Properties of Stochastic Optimization Problems*.
- Supervisors: **Prof. Qingyuan Zhao**, **Tobias Freidling**.

Researcher in Operations Research

LIP6 – Sorbonne Université / CNRS

📅 Mar 2024 – Jul 2024

📍 Paris, France

- Research on *Dynamic Algorithm Configuration*: optimal parameter policies for genetic algorithms (Python).
- Results to be presented at **ROADEF 2025**.
- Supervisor: **Prof. Carola Doerr**.

Machine Learning Researcher

Sphaera

📅 Aug 2023 – Feb 2024

📍 Hybrid

🔗 [Brief report](#)

- Developed a tracking algorithm for 5-a-side soccer (Python: NumPy, PyTorch, OpenCV, Matplotlib).
- Supervisors: **Dr. Mirko Messori**, **Dr. Giuseppe Roberto Marseglia**.

Education

PhD Program in Statistics and Computer Science

Bocconi University

📅 Sep 2025 – Sep 2029

📍 Milan, Italy

- PhD student in Statistics and Computer Science (Computer Science track): currently undertaking an intensive training in computer science, probability, analysis and statistics.

Master's in Mathematics

Grade: 110/110 cum laude; GPA: 29.5/30

University of Pavia

📅 Sep 2022 – Feb 2025

📍 Pavia, Italy

🔗 [Master's Thesis](#)

- Relevant courses:** Functional Analysis, Machine Learning, Econometrics, Statistical Methods, Mathematical Finance, Biomathematics, FEM, Advanced Probability, Stochastic Processes, Dynamical Systems.
- Thesis:** *Dynamic Parameter Policies for LeadingOnes on Enhanced State Spaces*. Supervisors: **Prof. Carola Doerr**, **Prof. Stefano Gua-landi**.
- Erasmus+ Traineeship** 📅 Mar 2024 – Jul 2024
 - Research internship for master's thesis at *LIP6 Sorbonne Université / CNRS* (Paris, France).

Alumnus of Merit-Based Program

Collegio Borromeo

📅 Sep 2022 – Jul 2024

📍 Pavia, Italy

- Selected for a merit-based college program (accommodation benefits, personal tutor, personalized formative plan).
- Awarded a **2000€** scholarship for being among the best students of the program.

Bachelor's in Mathematics

Grade: 110/110 cum laude; GPA: 29.8/30

University of Pavia

📅 Oct 2019 – Sep 2022

📍 Pavia, Italy

🔗 [Bachelor's Thesis](#)

- Relevant courses:** Linear Algebra; Mathematical Analysis 1–4; Programming 1–2; Probability; Statistics; Optimization Algorithms and Models for Data Science; Foundations of Data Analysis; Numerical Analysis; Numerical Modeling.
- Thesis:** *Ewens Sampling Formula and Applications to Biodiversity*. Supervisor: **Prof. Emanuele Dolera**.

Awards & Scholarships

- Erasmus+ Traineeship** (Mar–Jul 2024): research internship at LIP6 Sorbonne Université/CNRS, Paris.
- Merit-based scholarship** (2000€), Collegio Borromeo (awarded during 2022–2024 program).
- Scholarships / fee waivers for advanced training:**
 - Festum Pi Summer School in Analysis and Machine Learning (Chania, Jul 2025).
 - Bocconi–StatML Spring School (Windsor, Apr 2025).

Lecturer

Almo Collegio Borromeo

📅 Oct 2023 – Dec 2023 📍 Pavia, Italy

- Designed and taught *Advanced Computational Statistics* (theory + applications in R).
- Supervisor: **Prof. Emanuele Dolera**.

Auditor & Data Analyst

JE Italy

📅 Oct 2022 – Oct 2023

- Monitoring and analysis of data within the confederation.
- Audit consulting services for junior enterprises.

IT Consultant

JECO Pavia

📅 May 2021 – Sep 2023 📍 Pavia, Italy

🔗 <https://jecopavia.it/>

- Data management activities.
- PMI digitalization projects.
- **Head of IT** 📅 Sep 2021 – Oct 2022
 - Area members management.
 - Annual strategy planning using OKR.

Publications

Conference publication

Foundations of Genetic Algorithms (FOGA) 2025

📅 Aug 2025 📍 Leiden, NL

- Gianluca Covini, Denis Antipov, Carola Doerr. *Enhancing Parameter Control Policies with State Information*. Proceedings of FOGA 2025. [arXiv:2507.08368](https://arxiv.org/abs/2507.08368)

Talks

Conference presentation

ROADEF 2025 – Conference of the French Operations Research Society

📅 Feb 2025 📍 Champs-sur-Marne, France

🔗 [Conference website](#)

- Presented my master's thesis research on dynamic parameter policies for randomized local search on *LeadingOnes*.
- Abstract published in the ROADEF 2025 Book of Abstracts.

Certifications

- TOEFL iBT 106/120 (C1), **ETS**, Oct 2024
- GRE Q168 V162, **ETS**, Oct 2024
- *Getting Started with Deep Learning*, **NVIDIA**, Mar 2023
- *Introduction to startups*, **Pack**, Jan 2022
- *IBM Data Science*, **IBM through Coursera**, Mar 2021
- *Startups 101: Come portare un'idea sul mercato*, **Entrepreneurship Club Pavia**, Dec 2020
- *DELFI B1*, **Ministère de l'éducation nationale**, Aug 2016

- Copenhagen PhD School of Stochastic Programming (Copenhagen, Jun 2024).

Advanced training

- **Summer School in Analysis & Machine Learning** (Festum Pi, Chania, Greece, Jul 2025) — ML, optimal transport, diffusion models.
- **Theoretical Foundations of Machine Learning** (MaLGe – UniGe, Genoa, Italy, Jun 2025) — Statistical learning, kernels, neural networks, optimization.
- **Bocconi-StatML Spring School** (Oxford University, Windsor, UK, Apr 2025) — Computational optimal transport; learning with missing data.
- **PhD Winter School in Stochastic Optimization** (NTNU, Trondheim, Norway, Dec 2024) — Stochastic and robust optimization, energy applications.
- **Copenhagen PhD School of Stochastic Programming** (University of Copenhagen, Jun 2024) — Scenario-based optimization, risk and uncertainty.
- **Intensive School in Data Science** (University of Pavia, Sep 2020) — 70h intensive ML course with life-science applications.

IT skills

- **Proficient** in MATLAB and Python for data analysis, optimization, and algorithm development, with extensive use of NumPy, Pandas, Matplotlib, OpenCV, Pyomo, and multiprocessing for scalable computations; advanced use of \LaTeX for technical documentation.
- **Working knowledge** of R and Excel for statistical analysis and reporting; experience with commercial solvers (Gurobi, CPLEX) for mathematical optimization; version control with Git; basic cloud workflows on AWS; familiarity with Julia for numerical computing.
- **Basic knowledge** of Linux environments (command line, scripting) and WordPress for website management.

Extracurricular experiences

Volunteer

Sant'Egidio – Youth for Peace

📅 Jul 2022 – Sep 2022 📍 Pavia, Italy

- Recreational activities for children in difficult situations.
- Activities to counter school dropout.

Activity Manager

Entrepreneurship Club Pavia

📅 Oct 2020 – Sep 2021 📍 Pavia, Italy

- Organized public events with entrepreneurs and startups.
- Managed internal activities.

Co-Founder and Board Member

The Most Maiorum

📅 Oct 2018 – Sep 2021 📍 Pavia, Italy

- Independently organized cultural and charity events with hundreds of spectators.