

Matilde Dolfato [matilde \(dot\) dolfato \(at\) studbocconi.it](mailto:matilde(dot)dolfato(at)studbocconi.it) | github.com/matildedol | [linkedin.com/in/matilde-dolfato](https://www.linkedin.com/in/matilde-dolfato)

Education Bocconi University, Milan, Italy

M.Sc. Artificial Intelligence

Sep 2024–Present

· Courses: Linear Algebra, Algorithms for Opt and Inference, Software Eng,
Deep and Reinforcement Learning, NLP, Computer Vision, Information Theory

B.Sc. Economic and Social Sciences

2021–2024

· Advised by Prof. Jérôme Adda

· Final work: *Can Machine Learning Aid Econometrics?*

Universitat Pompeu Fabra, Barcelona, Spain

Exchange Program

2024

Università degli Studi di Milano Statale

B.Sc. Biotechnology, Single Courses

2022–2023

Experience Research fellow

Nov 2025–Present

NOVA Information Management School, Lisbon

· Supervisor: Prof. Mauro Castelli

· Research area: explaining *double descent* phenomenon, what underlies
stochastic gradient descent preference for smoothness, what is smoothness

Visiting Student

Apr 2025–Nov 2025

Bocconi Institute for Data Science and Analytics (BIDSA)

· Mentor: Prof. Elia Brué

· Research area: Ricci curvature bounds for discrete spaces, optimal transport,
convergence of diffusion processes and functional inequalities in spectral theory

· *Technical notes* and two presentations (1,2)

Founding and Board Member

Sep 2025–Present

Bocconi Student Association for Mathematical Sciences

· Gave a *lecture on optimal transport*

Reading Seminars Information Geometry (*Technical notes*)

Spring 2025

Research Internship Algebraic Topology

Spring 2025

Department of Decision Sciences, Bocconi

Research Assistant

Jun 2023–Dec 2023

Innocenzo Gasparini Institute for Economic Research, Bocconi

· Mentor: Prof. Massimo Marinacci

· Research area: re-interpretation and adaptation of the first quantitative analysis
in social sciences by Cesare Beccaria (with tools of probability and decision theory)

Selected Projects *saLM-1: Self-Aware Language Model Ensemble* (LLM ensemble archi-
tecture)

Adversarial Robustness Pipeline (CNN adversarial training)

Wordle Guesser (Entropy-based guesser)

Movie Recommendation System (Web app) Skills Programming: Python (proficient), R, STATA
(advanced), C, C++ (beginner)

Languages: Italian (native), English (proficient), Spanish (advanced)

Other Interests Sailing, surfing, windsurfing; volleyball (ex-professional); mountain hiking
and skiing; piano; theater and cinema