

Simone Maria Giancola

Milan, Italy

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EDUCATION

Université Paris-Saclay, Orsay Mathematics department

M2 Mathematics of randomness; probability and statistics

Paris, FRA

Sep 2024 – Present

Bocconi University

MS data Science — data science major

Milan, ITA

Aug 2021 – Apr 2024

- GPA: 29 / 30; final grade: 110 Cum Laude / 110
- Thesis “A roadmap to Message Passing methods for inference on Mixed Generalized Linear Models, with emphasis on Mixed Noiseless Phase Retrieval”; advisor Prof. Carlo Lucibello

Arizona State University

Undergraduate exchange

Phoenix, USA

Jan 2021 - May 2021

- GPA 4.17 / 4.00

Bocconi University

BS economics, management and computer science

Milan, ITA

Aug 2018 - Jul 2021

- GPA 29.18 / 30 — final grade 110 Cum Laude / 110

EXPERIENCE

Research intern

King Abdullah University of Science and Technology (KAUST)

Feb 2024 - May 2024

Jeddah, KSA

- Advisor: Prof. Peter Richtárik
- Optimization, conditioned gradient descent methods, machine learning

Research intern

École Normale Supérieure (ENS)

Oct 2023 - Dec 2023

Paris, FRA

- Advisor: Bruno Loureiro
- Neural network theory, high-dimensional data, stochastic gradient descent, gradient flow

Research Intern

Institute of Science and Technology Austria (ISTA)

Jun 2023 - Aug 2023

Wien, AUT

- Advisor: Prof. Marco Mondelli
- Statistical to computational gaps, information theory, algorithms, message passing

ISTernship summer programme, ref. num. MPC-2023-01128, financed by ISTA, awarded by the OeAD

PAPERS

Richtárik, **Giancola**, Lubczyk, and Yadav. *Local Curvature Descent: squeezing more curvature out of standard and Polyak gradient descent*. In: NeurIPS OPT24 Workshop, 2024. arXiv: [2405.16574](https://arxiv.org/abs/2405.16574) [[math.OC](#)].

SKILLS

Advanced Python, Latex, Sklearn, Numpy, Matplotlib, Scipy;

Intermediate Julia, Git, Unix, R, SQL, Matlab, C++, Keras, TensorFlow.

SERVICE

Reviewer: NeurIPS 2024, ICLR 2025.

LANGUAGES

English (proficient); Italian (native); French (basic); Spanish (basic).

PROFILE & INTERESTS

Aspiring researcher with a background in statistics, computer science, and probability. Passionate about the interplay of rigorous research and insights from physics. In my spare time, I enjoy rugby, motorbike trips, podcasts, and running.