

Simone Maria Giancola

mail simonegiancola09@gmail.com | webpage simonegiancola09.github.io

EDUCATION

Université Paris-Saclay, Orsay mathematics department <i>M2 Mathematics of randomness; probability and statistics</i>	Paris, FRA Sep 2024 – present
Bocconi University <i>MS data science — data science major</i>	Milan, ITA Aug 2021 – Apr 2024
<ul style="list-style-type: none">GPA: 29 / 30; final grade: 110 Cum Laude / 110Thesis “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 <i>Undegraduate exchange</i>	Phoenix, USA Jan 2021 - May 2021
<ul style="list-style-type: none">GPA 4.17 / 4.00	
Bocconi University <i>BS economics, management and computer science</i>	Milan, ITA Aug 2018 - Jul 2021
<ul style="list-style-type: none">GPA 29.18 / 30 — final grade 110 Cum Laude / 110	

EXPERIENCE

Research intern <i>King Abdullah University of Science and Technology (KAUST)</i>	Feb 2024 - May 2024 Jeddah, KSA
<ul style="list-style-type: none">Advisor: Prof. Peter RichtárikOptimization, conditioned gradient descent methods, machine learning	
Research intern <i>École Normale Supérieure (ENS)</i>	Oct 2023 - Dec 2023 Paris, FRA
<ul style="list-style-type: none">Advisor: Bruno LoureiroNeural network theory, high-dimensional data, stochastic gradient descent, gradient flow	
Research intern <i>Institute of Science and Technology Austria (ISTA)</i>	Jun 2023 - Aug 2023 Wien, AUT
<ul style="list-style-type: none">Advisor: Prof. Marco MondelliStatistical 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](https://arxiv.org/abs/2405.16574)].

SKILLS

Advanced Python, Latex, Sklearn, Numpy, Matplotlib, Scipy;
Basic Julia, Git, Unix, R, SQL, Matlab, C++, Keras, TensorFlow.

SERVICE

Reviewer: NeurIPS 2024, ICLR 2025.

LANGUAGES

English (proficient); Italian (native); French (intermediate); 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, reading, and running.