

Research Interests

Machine learning – in between statistics, optimization, game theory, and theoretical computer science.

- Online learning (prediction with limited feedback, prediction with expert advice)
- Online optimization (convex and non-convex)
- Deep learning theory

Education

- 2011 **Bachelor's degree in mathematics**, *University of Milan*, Milan, *magna cum laude*.
Problemi di identificazione per equazioni differenziali lineari astratte; *supervisor: A. Lorenzi*.
- 2015 **Master's degree in mathematics**, *University of Milan*, Milan, *magna cum laude*.
Online bandit convex optimization; *supervisor: N. Cesa-Bianchi*.
- 2020 **PhD in computer science**, *University of Milan*, Milan.
Algorithms, learning, and optimization; *supervisor: N. Cesa-Bianchi*.

Research Experience

2019–present Postdoctoral researcher at ANITI, Toulouse

Teaching Experience

- 2016–17, 17–18, 18–19 *Statistics and Data Analysis*, Department of Computer Science, University of Milan
- 2012–13, 13–14 *Mathematical Analysis II*, Department of Mathematics, University of Milan

Languages

Fluent English, Italian* *native speaker

Grants and Awards

- 2019 COST (GAMENET) grant for Short-Term Scientific Mission *individual grant*
- 2018 COST (GAMENET) grant for GAMENET Training School Kraków 2018 *individual grant*
- 2017 PRIN 2017 grant for project “Algorithms, Games, and Digital Markets”
- 2016 CRITEO Faculty Research Award 2017 *member of Nicolò Cesa-Bianchi's group*

Participation to Training Schools (as trainee)

- 2018 GAMENET Training School Kraków 2018
- 2017 DEEPLearn 2017 — International Summer School on Deep Learning

2016 REGML 2016 — Regularization Methods for Machine Learning

Participation to Workshops (invited speaker)

2019 MAPLE 2019 — Markets, Algorithms, Prediction, and Learning
2018 Google Algorithms and Optimization PhD Workshop 2018
2017 Data-driven Algorithmics 2017
2017 WAL-E 2017 — Workshop on Approximating and Learning Efficiently

Research Visits

5–6,10/2017 V. Perchet, *Topic: Dynamic Pricing*
3–4/2019 S. Gerchinovitz, *Topic: Online non-convex optimization*
6/2019 Y. Mansour, *Topic: Repeated A/B testing*
7/2019 S. Gerchinovitz and F. Bachoc, *Topic: Level set identification*

Participation to Conferences

2020	AAAI 2020	<i>PC member</i>
2019	ALT 2019	<i>paper presentation</i>
2018	WINE 2018	<i>poster presentation</i>
2018	GAMENET Conference Kraków 2018	<i>poster presentation</i>
2018	Journées MAS 2018	<i>invited speaker</i>

Organization

2019 Open day University of Milan
2017, 18 Entrance test University of Milan

Reviewing Activity

2019 IEEE Signal Processing Magazine, AAAI 2020, AISTATS 2020, ALT 2020
2018 AISTATS 2019, ICML 2019, NeurIPS 2019
2017 COLT 2018, Operations Research Letters
2016 ALT 2017, MLSP 2017

Outreach and Volunteering

2019 Workplace Experience for Canadian School of Milan
2011–present Blood donor at AVIS (Associazione Volontari Italiani Sangue)

Publications

- [1] Nicolò Cesa-Bianchi, Tommaso Cesari, and Vianney Perchet. Dynamic pricing with finitely many unknown valuations. In *Algorithmic Learning Theory*, pages 247–273, 2019.
- [2] Nicolò Cesa-Bianchi, Tommaso R Cesari, Yishay Mansour, and Vianney Perchet. Repeated a/b testing. *arXiv preprint arXiv:1905.11797*, 2019.
- [3] Nicolò Cesa-Bianchi, Tommaso R Cesari, and Claire Monteleoni. Cooperative online learning: Keeping your neighbors updated. *arXiv preprint arXiv:1901.08082*, 2019.