

Piersilvio De Bartolomeis

[🏠 Personal Website](#) | [🎓 Google Scholar](#)

Education

Eidgenössische Technische Hochschule (ETH) Zurich

PHD IN COMPUTER SCIENCE

- Main advisor: Prof. Fanny Yang
- Second advisor: Prof. Jonas Peters
- Research interests: causal inference, treatment effect estimation, drug discovery

2023 – present
Zurich, Switzerland

Eidgenössische Technische Hochschule (ETH) Zurich

MSC IN DATA SCIENCE CUM LAUDE

- Selected courses: Causality, Statistical Learning Theory, Mathematical Statistics, Reinforcement Learning

2020 – 2022
Zurich, Switzerland

Hong Kong University of Science and Technology

VISITING STUDENT IN COMPUTER SCIENCE

- Advisor: Prof. Gary Chan

2019
Hong Kong SAR

Politecnico di Milano

BSC IN COMPUTER ENGINEERING CUM LAUDE

- Selected courses: Probability and Statistics, Mathematical Analysis, Linear Algebra, Algorithms and Principles of Theoretical Computer Science

2017-2020
Milan, Italy

Research Experience

Eidgenössische Technische Hochschule (ETH) Zurich

RESEARCH INTERN

- Advised by Prof. Cara Magnabosco and part of the Geobiology group
- Application of machine learning methods for the identification of protein secretion systems in bacterial genomes

2021 – 2022
Zurich, Switzerland

Conference and Journal Publications

- [1] M. Mutti, R. D. Santi, **Piersilvio De Bartolomeis**, and M. Restelli. Challenging common assumptions in convex reinforcement learning. *Advances in Neural Information Processing Systems (NeurIPS)*, 2022.
- [2] M. Mutti, R. D. Santi, **Piersilvio De Bartolomeis**, and M. Restelli. Convex reinforcement learning in finite trials. *Journal of Machine Learning Research (JMLR)*, 2023.

Fellowships & Awards

Ermenegildo Zegna Founder's Scholarship

Scholarship of \$5000 awarded to Italian students visiting a leading institution abroad

2023

Full scholarship covering tuition and living expenses

Scholarship of \$6000 from Politecnico di Milano, awarded based on academic merit

2019-2020

Scholarship for undergraduate studies abroad

Scholarship of \$3000 from Politecnico di Milano, awarded to students visiting an institution abroad

2019

Best freshmen award

Prize of \$1500 awarded to the best freshmen at Politecnico di Milano

2018

Conference and Workshop Talks

Contributed Talk: "Certified defences hurt generalisation"

Workshop on Understanding Deep Learning Through Empirical Falsification at NeurIPS

2022
New Orleans, USA

Academic Service

Conference reviewing

- NeurIPS 2023, ICLR 2024, AISTATS 2024

Workshop reviewing

- I Can't Believe It's Not Better Workshop (NeurIPS 2023)
- Pitfalls of limited data and computation for Trustworthy ML Workshop (ICLR 2023)

Teaching Experience

Introduction to Machine Learning (1000+ students)	2023
TEACHING ASSISTANT	Zurich, Switzerland
<ul style="list-style-type: none">• Instructors: Prof. Andreas Krause and Prof. Fanny Yang• Designed homework assignments and held tutorial lectures	
Machine Learning for Geobiology	2021-2022
TEACHING ASSISTANT	Zurich, Switzerland
<ul style="list-style-type: none">• Instructor: Prof. Cara Magnabosco• Designed homework assignments and a Kaggle competition as part of the final course project	
Advanced Machine Learning	2020 and 2023
<ul style="list-style-type: none">• Instructors: Prof. Joachim Buhmann and Dr. Carlos Cotrini• Co-authored lecture notes for the course (10+ ★)	
	Zurich, Switzerland

Volunteering

TEDxBattipaglia	2023-present
ORGANIZER	
<ul style="list-style-type: none">• Organizing the first TEDx event in my hometown, bringing together high-level Italian speakers to share their ideas and insights with the local community	
LeadTheFuture	2021-present
MENTOR	
<ul style="list-style-type: none">• LeadTheFuture is a non-profit mentoring organization and the largest merit-based STEM community in Italy. Currently, it counts more than 150 mentors, including researchers and entrepreneurs, and 500 selected mentees	

Technical Skills

Programming Languages	C, Java, Python, R, SQL, \LaTeX
Tools & Technologies	Git, JAX, PyTorch, SciKit, Pandas, NumPy, Spark
Languages	Native Italian, Fluent English, Beginner Japanese