# Piersilvio De Bartolomeis

A Personal Website | Google Scholar

### Education -

#### Eidgenossische Technische Hochschule (ETH) Zurich

 $2023-{
m present}$ 

PhD in Computer Science

Zurich, Switzerland

- Advisors: Prof. Fanny Yang and Prof. Jonas Peters
- Research interests: robustness and causal inference

### Eidgenossische Technische Hochschule (ETH) Zurich

2020 - 2022

MSC IN DATA SCIENCE CUM LAUDE

Zurich, Switzerland

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

# Hong Kong University of Science and Technology

2019

VISITING STUDENT IN COMPUTER SCIENCE

Hong Kong SAR

• Advisor: Prof. Gary Chan

Politecnico di Milano

2017-2020

BSC IN COMPUTER ENGINEERING CUM LAUDE Milan, Italy

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

# Research Experience -

### Eidgenossische Technische Hochschule (ETH) Zurich

2021 - 2022

RESEARCH INTERN

Zurich, Switzerland

- 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

### 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

2023

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

### Full scholarship covering tuition and living expenses

2019-2020

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

### Scholarship for undergraduate studies abroad

2019

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

# Best freshmen award

2018

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

# Conference and Workshop Talks —

Contributed Talk: "Certified defences hurt generalisation"

2022

Workshop on Understanding Deep Learning Through Empirical Falsification at NeurIPS

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)

TEACHING ASSISTANT

Zurich, Switzerland

- Instructors: Prof. Andreas Krause and Prof. Fanny Yang
- Designed homework assignments and held tutorial lectures

# Machine Learning for Geobiology

2021-2022

2023

TEACHING ASSISTANT

Zurich, Switzerland

- Instructor: Prof. Cara Magnabosco
- Designed homework assignments and a Kaggle competition as part of the final course project

### Advanced Machine Learning

2020 and 2023

- Instructors: Prof. Joachim Buhmann and Dr. Carlos Cotrini
- Co-authored lecture notes for the course  $(10+ \bigstar)$

Zurich, Switzerland

# Volounteering -

Organizer

**TEDxBattipaglia** 

2023-present

• 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

• 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  $\mathcal{E}$  Technologies Languages

Git, JAX, PyTorch, SciKit, Pandas, NumPy, Spark Native Italian, Fluent English, Beginner Japanese