

Davide Maran, Ph.D. Student

✉ davidemaranzfc@gmail.com

✉ @DavideMaran3

in davide-maran

🌐 <https://davidezfc.github.io/>

Experience

- June 2025 – Aug 2025 ■ **Quant Researcher, G-Research.** Summer internship. Worked with a large (\approx 1TB) market dataset from 12 stock universes to optimize trade execution strategies. The project involved reinforcement learning, control theory, and market impact modeling. Gained experience running large-scale experiments on a high-performance computing cluster.
- Feb 2025 – May 2025 ■ **Adjunct Lecturer, Politecnico di Milano.** Course: Probability and Statistics.
- Sept 2024 – Jan 2025 ■ **Research Assistant, University of Alberta.** Supervisor: **Prof. Csaba Szepesvári.**
- Jan 2022 – Oct 2022 ■ **Research Fellow, Politecnico di Milano.** DEIB (Department Electronics Computer Science and Engineering).

Education

- 2022 – now ■ **Ph.D. Machine Learning, Politecnico di Milano.**
Supervisor: **Prof. Marcello Restelli.** Research topics: *Reinforcement Learning, Statistical Learning Theory, Representation Learning and Nonparametric Statistics.*
- 2019 – 2021 ■ **M.Sc. Mathematical Engineering, Politecnico di Milano.**
Final grade: **110 cum laude/110**
Thesis title: *Delayed Reinforcement Learning, an Imitation Game.*
- 2016 – 2019 ■ **B.Sc. Mathematical Engineering, Politecnico di Milano.**
Thesis title: *Condition number of random matrices with i.i.d. rows.*

Research Publications

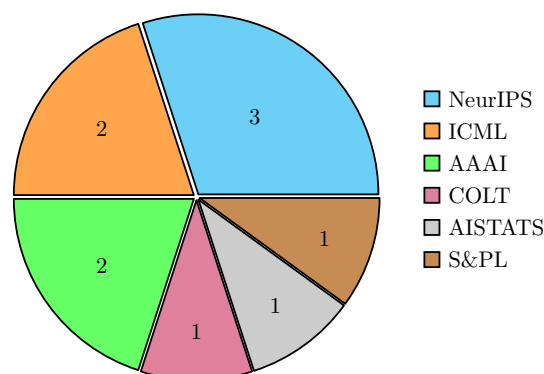
Ten publications first-author or co-first-author in top conferences (NeurIPS, ICML, AAAI, COLT, AISTATS) and journals (S&PL).

Research interests include:

1. Reinforcement Learning
2. Stochastic optimization
3. Online Learning
4. Nonparametric statistics

Selected publications:

1. **Davide Maran**, Csaba Szepesvári. Beyond Least Squares: Uniform Approximation and the Hidden Cost of Misspecification. Proceedings of the 39th Conference on Neural Information Processing Systems (**NeurIPS**), 2025.
2. **Davide Maran**, Alberto Maria Metelli, Matteo Papini and Marcello Restelli. Local Linearity: the Key for No-regret Reinforcement Learning in Continuous MDPs. Proceedings of the 38th Conference on Neural Information Processing Systems (**NeurIPS**), 2024.
3. Pierre Liotet*, **Davide Maran***, Lorenzo Bisi and Marcello Restelli. Delayed reinforcement learning by imitation. Proceedings of the 39th International Conference on Machine Learning (**ICML**), 2022.



Skills

Languages	📖 Italian (native), English (fluent).
Coding	📖 PYTHON (NumPy, Pandas, SciPy, Scikit-learn and many others), MATLAB, C/C++, R, SQL (basic), DOCKER (basic).
ML Frameworks	📖 PYTORCH, TENSORFLOW, JAX, STABLEBASELINES.
Tools.	📖 GIT, L ^A T _E X, VS CODE, JUPYTER, B _E T _E X.

Miscellaneous Experience

Positions Held

- 2020 📖 **Secretary of the Association of Mathematical Engineers.** I was appointed secretary of the Association of Mathematical Engineers (AIM) in the 2020 board. I was involved in organizing various seminars, meetings with companies and team building events aimed at members.