

Matteo Papini

Curriculum Vitae

Contact Information

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Highlights

Matteo Papini is a **postdoctoral researcher** in the Artificial Intelligence and Machine Learning Research Group at **Universitat Pompeu Fabra** (UPF), Barcelona, Spain. His research is directed towards the development of intelligent systems, with a focus on the problem of *sequential decision making under uncertainty*, using the theory and algorithmic solutions of **reinforcement learning** and **contextual bandits**. In 2021 he earned a PhD in Information Technology (cum laude) from Politecnico di Milano, Milan, Italy, under the supervision of Marcello Restelli, with a dissertation on policy optimization, a class of reinforcement learning algorithms. In 2020 he worked as a research intern at Facebook AI Research (now Meta AI) working on representation learning for contextual bandits. Afterwards he joined the research team of Gergely Neu at UPF, where he carries on his research on reinforcement learning and contextual bandits. He is a recipient of the **Juan de la Cierva grant** for postdoctoral researchers.

He has authored 13 peer-reviewed conference papers, including publications at top artificial intelligence and machine learning conferences such as **NeurIPS (5 papers)**, **ICML (3)**, **AAAI (2)** and **IJCAI (1)**. Of these, one was awarded an oral presentation at NeurIPS 2018, which was only granted to the top 3% of the accepted papers. Moreover, he has published peer-reviewed manuscripts at renowned peer-reviewed machine learning journals — one on **JMLR** and one on Springer's **Machine Learning**. Among his recurring co-authors are Marcello Restelli (Politecnico di Milano), Matteo Pirotta, Alessandro Lazaric (Meta AI Paris), and Gergely Neu (UPF).

He is a member of **ELLIS** (European Laboratory for Learning and Intelligent Systems). He has worked as a teaching assistant for several classes at Politecnico di Milano and for two international reinforcement learning summer schools. He has served as a reviewer in the program committee of several conferences including NeurIPS, ICML and AAAI. With Vincent Adam (UPF), he is currently organizing the next edition of the **Reinforcement Learning Summer School**.

Research Positions

- 2021–present **Postdoctoral researcher**, *Universitat Pompeu Fabra*, Barcelona.
From 1 June 2021 to 30 November 2022: supported by the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (Grant agreement No. 950180), Principal Investigator: Gergely Neu, name of project: Provably Efficient Algorithms for Large-Scale Reinforcement Learning.
From December 1, 2022: as recipient of [Ayudas Juan de la Cierva-Formación 2021](#).
- Mar-Apr 2021 **Research Assistant** (Attività di Supporto alla Ricerca), *Dipartimento di Elettronica, Informazione e Bioingegneria, Politecnico di Milano*, Milan, Italy.
Research Topic: Reinforcement Learning Techniques for Developing Artificial Test Drivers on a F1 Simulator, Principal Investigator: Marcello Restelli
- Sep-Dec 2020 **Research Intern at Facebook AI Research**, working (remotely) with the Paris FAIR team, under the supervision of Matteo Pirota. Research topic: representation learning for contextual bandits. The project led to the publication of a paper at ICML 2021 [C3].
- Nov 2017–Mar 2021 **Research Assistant** (Assegno di Ricerca), *Dipartimento di Elettronica, Informazione e Bioingegneria, Politecnico di Milano*, Milan, Italy.
Research topic: *Study and Development of Reinforcement Learning Techniques in Industrial Settings*, Principal Investigator: Marcello Restelli.

Education

- 2017–2021 **Ph.D., Information Technology**, Politecnico di Milano, Milan, Italy.
Supervisor: Prof. Marcello Restelli
Dissertation: *Safe Policy Optimization* (<http://hdl.handle.net/10589/170196>)
[Awarded cum laude](#)
Date of degree: March 11, 2021
- 2015–2017 **M.Sc., Computer Science and Engineering**, Politecnico di Milano, Milan, Italy.
Master Thesis: *Adaptive Batch Size for Safe Policy Gradient Methods*, supervised by Prof. Marcello Restelli
Final mark: 110/110 cum laude
Date of degree: July 27, 2017
- 2012–2015 **B.Sc., Computer Engineering**, Politecnico di Milano, Milan, Italy.
Final mark: 110/110 cum laude
Date of degree: July 24, 2015
- 2007–2012 **High School Diploma**, *Istr. Sup. P.L. Nervi*, Morbegno (SO), Italy.
Final mark: 100/100

Author Profile

- Google **456 citations**, **h-index 10**, i10-index 11.
Scholar <https://scholar.google.it/citations?user=A2WxZlsAAAAJ>
- Scopus **100 citations** by 85 documents, **h-index 6**, 12 documents by author, 19 co-authors.
<https://www.scopus.com/authid/detail.uri?authorId=57202057824>
- dblp 12 Conference and Workshop Papers, 2 Journal Articles, 27 total records.
<https://dblp.uni-trier.de/pid/209/4897.html>

Summary of Publications

Journal/Conference	# Papers	Rating	Homepage
Machine Learning	1	Scimago Q1	https://www.springer.com/journal/10994
JMLR	1	Scimago Q1	http://www.jmlr.org/
NeurIPS	5	CORE A*, GGS A++	https://nips.cc/
ICML	3	CORE A*, GGS A++	https://icml.cc/
AAAI	2	CORE A*, GGS A++	https://aaai.org/Conferences/AAAI-23/
IJCAI	1	CORE A*, GGS A++	https://www.ijcai.org/
AISTATS	1	CORE A, GGS A+	https://aistats.org/
IJCNN	1	CORE B, GGS A-	https://2023.ijcnn.org/
ALT	1	CORE B, GGS B	http://algorithmiclearningtheory.org/

Selected Publications

- [1] G. Neu, J. Olkhovskaya, **M. Papini**, L. Schwartz: *Lifting the Information Ratio: An Information-Theoretic Analysis of Thompson Sampling for Contextual Bandits*. **NeurIPS** (2022) — **CORE A*, GGS A++**. (authors in alphabetical order).
- [2] A. Tirinzoni, **M. Papini**, A. Touati, A. Lazaric, M. Pirotta: *Scalable Representation Learning in Linear Contextual Bandits with Constant Regret Guarantees*. **NeurIPS** (2022) — **CORE A*, GGS A++**.
- [3] **M. Papini**, M. Pirotta, M. Restelli: *Smoothing policies and safe policy gradients*. Springer's **Machine Learning** (2022) — **Scimago Q1**.
- [4] **M. Papini**, A. Tirinzoni, A. Pacchiano, M. Restelli, A. Lazaric, M. Pirotta: *Reinforcement learning in linear mdps: Constant regret and representation selection*. **NeurIPS** (2021) — **CORE A*, GGS A++**.
- [5] **M. Papini**, A. Tirinzoni, M. Restelli, A. Lazaric, M. Pirotta: *Leveraging good representations in linear contextual bandits*. **ICML** (2021) — **CORE A*, GGS A++**.
- [6] A.M. Metelli, **M. Papini**, P. D'Oro, M. Restelli: *Policy optimization as online learning with mediator feedback*. **AAAI** (2021) — **CORE A*, GGS A++**.
- [7] A.M. Metelli, **M. Papini**, N. Montali, M. Restelli: *Importance Sampling Techniques for Policy Optimization*. **Journal of Machine Learning Research (JMLR)** 21.141 (2020) — **Scimago Q1**.
- [8] L. Bisi, L. Sabbioni, E. Vittori, **M. Papini**, M. Restelli: *Risk-averse trust region optimization for reward-volatility reduction*. **IJCAI** (2020) — **CORE A*, GGS A++**.
- [9] **M. Papini**, A.M. Metelli, L. Lupo, M. Restelli: *Optimistic policy optimization via multiple importance sampling*. **ICML** (2019) — **CORE A*, GGS A++**.
- [10] A.M. Metelli, **M. Papini**, F. Faccio, M. Restelli: *Policy optimization via importance sampling*. **NeurIPS (oral presentation, top 3%)** (2018) — **CORE A*, GGS A++**.
- [11] **M. Papini**, D. Binaghi, G. Canonaco, M. Pirotta, M. Restelli: *Stochastic variance-reduced policy gradient*. **ICML** (2018) — **CORE A*, GGS A++**.

- [12] **M. Papini**, M. Pirotta, M. Restelli: *Adaptive batch size for safe policy gradients*. **NeurIPS** (2017) — **CORE A***, **GGs A++**.

Awards, Grants, and Recognitions

- Nov 16, 2022 **Recipient of Ayudas Juan de la Cierva-Formación 2021**, *research grant for postdoctoral researchers instructed by the Spanish research agency (Agencia Estatal de Investigación), funded by NextGenerationEU*.
Role: researcher (Investigador)
[Ranked third](#) in national call for the area of Information and Communication Technologies
Total amount granted for 2 years: 64.800€
<https://www.aei.gob.es/convocatorias/buscador-convocatorias/ayudas-contratos-juan-cierva-formacion-2021>
- Feb 2022 **Member of ELLIS**, <https://ellis.eu/>.
- 2021 **Neurips outstanding reviewer award**, [top 8%](#).
- 2020 **ICML top reviewer** certificate of appreciation, *top 33%*.
- 2019 **ICML travel award**, *\$1300 USD*.
- 2018 **Oral presentation at NeurIPS**, [top 3%](#), [C12].
- 2018 **Neurips travel award**, *\$1000 USD*.
- 2018 **ICML travel award**, *\$1500 USD*.
- 2017 **Neurips travel award**, *\$1200 USD*.

Participation in Funded Projects

- 2019-2021 **Research Scientist**, *Provably Efficient Algorithms for Large-Scale Reinforcement Learning*.
ERC (Grant agreement No. 950180)
Principal Investigator: Gergely Neu
- 2019-2021 **Research Scientist**, *Reinforcement learning techniques for developing artificial test drivers on a F1 simulator*, Ferrari.
Industrial project.
Principal Investigator: Marcello Restelli
- 2017-2019 **Research Scientist**, *TOTAL EFFICIENCY 4.0, (POR FESR)*.
In collaboration with Pirelli Tyre S.p.A.
Principal Investigator: Marcello Restelli

Invited Talks

- May 11, 2023 **Invited talk at the AI Seminars**, *Politecnico di Milano, Milan, Italy*, titled "Thompson Sampling with Adversarial Contexts", (scheduled).
- Sep 16, 2022 **Invited talk at the Reinforcement Learning Conference**, *Technische Universität Dresden, Dresden, Germany*, titled "Lifting the Information Ratio".
- Jul 1, 2021 **Invited talk at Mathematical Statistics and Learning**, *Barcelona Graduate School of Economics, Barcelona, Spain*, titled "Leveraging Good Representations in Linear Contextual Bandits and MDPs".
- Nov 6, 2020 **Invited talk at Gerhard Neumann's research seminar**, *Karlsruhe Institute of Technology (delivered online)*, titled "Safe Policy Optimization".

Sep 19, 2019 **Invited talk at the Workshop on Markets, Algorithms, Prediction and LEarning (MAPLE)**, *Politecnico di Milano, Milan, Italy*, titled "Optimistic Policy Optimization via Multiple Importance Sampling".

Teaching Experience

- 11-15 Jul 2022 **Teaching Assistant**, *Reinforcement Learning Summer School, Vrije Universiteit Amsterdam, Amsterdam, the Netherlands*.
Role: delivered a tutorial on implementing policy-gradient algorithms with JAX, tutored students in practical sessions.
- 2022 **Teaching Assistant**, *Politecnico di Milano, Milan, Italy*.
Intelligenza Artificiale (Artificial Intelligence — online class), resp. Prof. Andrea Bonarini, 6 hours, attività di didattica integrativa, II semester 2021/2022
- 2021 **Teaching Assistant**, *Politecnico di Milano, Milan, Italy*.
Intelligenza Artificiale (Artificial Intelligence — online class), resp. Prof. Andrea Bonarini, 6 hours, attività di didattica integrativa, II semester 2020/2021
- 2020 **Teaching Assistant**, *Politecnico di Milano, Milan, Italy*.
Intelligenza Artificiale (Artificial Intelligence — online class), resp. Prof. Andrea Bonarini, 6 hours, attività di didattica integrativa, II semester 2019/2020
- 2019 **Teaching Assistant**, *Politecnico di Milano, Milan, Italy*.
Informatica B (introductory computer science class), resp. Prof. Luca Cassano, 26 hours, attività di didattica integrativa (esercitatori), I semester 2019/2020
- 2018 **Teaching Assistant**, *Politecnico di Milano, Milan, Italy*.
Informatica B (introductory computer science class), resp. Prof. Luca Cassano, 28 hours, attività di didattica integrativa (esercitatori), I semester 2018/2019
- 1-12 Jul 2019 **Teaching Assistant**, *Reinforcement Learning Summer School, Inria Lille-Nord Europe, Lille, France*.
Role: tutored students in practical sessions.
- 2018 **Teaching Assistant**, *Politecnico di Milano (Polo Territoriale di Como), Como, Italy*.
Web and Internet Economics, resp. Prof. Nicola Gatti, 10 hours, attività di didattica integrativa (esercitatori), II semester 2017-2018
- 2017 **Lab Assistant**, *Politecnico di Milano, Milan, Italy*.
Informatica B (introductory computer science class), resp. Prof. Luca Cassano, 9 hours, attività di didattica integrativa sperimentale (ex responsabili di laboratorio), I semester 2017-2018
- 2016 **Lab Tutor**, *Politecnico di Milano, Milan, Italy*.
Prova Finale-Ingegneria del Software (software engineering: final project), resp. Prof. Carlo Ghezzi, 32 hours, attività di tutorato (ex tutor di laboratorio), II semester 2015/2016

Participation on Committees

- 2022 **Evaluator** for the pre-screening of applicants to the ELLIS PhD program.
- July 5 2022 **Jury member for the undergraduate thesis defenses (TFG)** of D. Carrascosa and Q. de las Heras, *Universitat Pompeu Fabra, Barcelona, Spain*.
Jury president: Javier Segovia Aguas

- March 17 **Board member for the Thesis Proposal Defense** of Nneka Okolo, *PhD program in Information and Communication Technologies, Universitat Pompeu Fabra, Barcelona, Spain*.
Board president: Gergely Neu
- 2021 **Evaluator** for the pre-screening of applicants to the ELLIS PhD program.

Editorial Activities

- 2022-present Reviewer for Transactions on Machine Learning Research (TMLR).
- 2023 Reviewer for ICML.
- 2022 Reviewer for ICML, NeurIPS, EWRL.
- 2021 **Outstanding Reviewer** (top 8%) for NeurIPS, **expert reviewer** for ICML, reviewer for AISTATS, emergency reviewer for AAAI.
- 2020 **Top 33% reviewer** for ICML, reviewer for NeurIPS, AISTATS, AAAI, UAI, ECAI.
- 2019 Reviewer for ICML, NeurIPS, UAI.

Attendance to Conferences and Workshops

- 2022 **NeurIPS**, *New Orleans, USA*, presented 2 posters in poster sessions.
- 2022 **ELLIS ILIR Workshop**, *Feldberg, Germany*.
- 2022 **EWRL 15**, *Milan, Italy*, presented 2 posters in poster sessions.
- 2022 **Reinforcement Learning Conference**, *Dresden, Germany*, delivered talk upon invitation.
- 2022 **ICML-2022 Workshop on Complex Feedback in Online Learning**, *Baltimore, USA*, presented 1 poster in poster session.
- 2021 **NeurIPS**, *online edition*, presented 1 poster in online poster session and recorded 1 spotlight talk.
- 2021 **Mathematical Statistics and Learning**, *Barcelona, Spain*, delivered a talk upon invitation.
- 2021 **ICML**, *online edition*, presented 1 poster in online poster session and recorded 1 talk.
- 2021 **AAAI**, *online edition*, presented 1 poster in online poster session.
- 2021 **IJCAI**, *online edition*, presented 1 poster in online poster session.
- 2020 **NeurIPS**, *online edition*, attended online.
- 2020 **AISTATS**, *online edition*, recorded 1 talk.
- 2019 **Workshop MAPLE**, *Milan, Italy*, delivered 1 oral presentation upon invitation.
- 2019 **ICML**, *Long Beach, USA*, presented 1 poster and delivered 1 oral presentation.
- 2019 **ICML**, *Long Beach, USA*, presented 1 poster and delivered 1 oral presentation.
- 2018 **NeurIPS**, *Montreal, Canada*, presented 1 poster and delivered 1 oral presentation.
- 2018 **EWRL 14**, *Lille, France*, presented 1 poster.
- 2018 **ICML**, *Stockholm, Sweden*, presented 1 poster and delivered 1 oral presentation.
- 2017 **NeurIPS**, *Long Beach, USA*, presented 1 poster.

Attendance to Summer Schools and Exchange Programs

- Jul 24–Aug 2 2018 **CIFAR Deep Learning and Reinforcement Learning Summer School**, Toronto, Canada, presented 1 poster.
- 7-14 Oct 2017 **ACAI Summer School on Reinforcement Learning**, Nieuwpoort, Belgium.
- Autumn 2016 **Erasmus Programme**, KTH Royal Institute of Technology, Stockholm, Sweden.

Mentoring

- 2020 **Co-Supervisor of the Master Thesis** (Correlatore) of Pietro Melzi (now PhD student at Universidad Autónoma de Madrid), *"Deterministic policy optimization: an approach to safe reinforcement learning"*, supervised by M. Restelli, Politecnico di Milano, Milan, Italy.
- 2019 **Co-Supervisor of the Master Thesis** (Correlatore) of Guido Dino Ballabio, *"Cutting back on MDP's features. A theoretically grounded approach to feature selection in reinforcement learning"*, with A.M. Metelli and A. Tirinzoni, supervised by M. Restelli, Politecnico di Milano, Milan, Italy.
- 2019 **Co-Supervisor of the Master Thesis** (Correlatore) of Pierluca D'Oro (now PhD student at MILA), *"Reinforcement learning through adaptive policy spaces"*, with A.M. Metelli and A. Tirinzoni, supervised by M. Restelli, Politecnico di Milano, Milan, Italy.
- 2019 **Co-Supervisor of the Master Thesis** (Correlatore) of Giovanni Pelosi, *"Reinforcement learning through adaptive policy spaces"*, with M. Mutti, supervised by M. Restelli, Politecnico di Milano, Milan, Italy.
- 2019 **Co-Supervisor of the Master Thesis** (Correlatore) of Alessio Mongelluzzo (now Senior Research Engineer at Nuance Communications), *"A data-driven approach to detect faults in the tire building process"*, with F. Trovò, supervised by M. Restelli, Politecnico di Milano, Milan, Italy.
- 2019 **Co-Supervisor of the Master Thesis** (Correlatore) of Lorenzo Lupo (now PhD student at Université Grenoble Alpes), *"Exploration in policy search via multiple importance sampling"*, with A.M. Metelli, supervised by M. Restelli, Politecnico di Milano, Milan, Italy.
- 2018 **Co-Supervisor of the Master Thesis** (Correlatore) of Francesco Faccio (now PhD student at IDSIA), *"A study of importance sampling techniques for policy optimization"*, with A.M. Metelli and J. Schmidhuber, supervised by M. Restelli, Politecnico di Milano, Milan, Italy.
- 2018 **Co-Supervisor of the Master Thesis** (Correlatore) of Andrea Battistello, *"Balancing safety and exploration in policy gradient"*, supervised by M. Restelli, Politecnico di Milano, Milan, Italy.
- 2018 **Co-Supervisor of the Master Thesis** (Correlatore) of Giuseppe Canonaco (PhD from Politecnico di Milano) and Damiano Binaghi (now Computer Vision and Deep Learning Engineer at Artificialy), *"Stochastic variance reduced policy gradient"*, with M. Pirotta, supervised by M. Restelli, Politecnico di Milano, Milan, Italy.

Complete List of Papers

Journal Papers

- [J1] M. Papini, M. Pirotta, and M. Restelli. Smoothing policies and safe policy gradients. *Machine Learning*, 2022, 1-57 (<https://rdcu.be/c0a7S>).
- [J2] A. M. Metelli, M. Papini, N. Montali, M. Restelli. Importance Sampling Techniques for Policy Optimization. *J. Mach. Learn. Res.* 21.141., pp. 1-75, 2020.

Conference Papers

- [C1] A. Tirinzoni, M. Papini, A. Touati, A. Lazaric, and M. Pirotta. Scalable representation learning in linear contextual bandits with constant regret guarantees. In *NeurIPS*, 2022 (to appear in proceedings).
- [C2] G. Neu, J. Olkhovskaya, M. Papini, and L. Schwartz. Lifting the information ratio: An information-theoretic analysis of thompson sampling for contextual bandits. In *NeurIPS*, 2022 (to appear in proceedings).
- [C3] G. Gabbianelli, M. Papini, and G. Neu. Online learning with off-policy feedback. *Conference on Algorithmic Learning Theory*, 2023 (to appear in proceedings).
- [C4] M. Papini, A. Tirinzoni, M. Restelli, A. Lazaric, and M. Pirotta. Leveraging good representations in linear contextual bandits. In *ICML*, volume 139 of *Proceedings of Machine Learning Research*, pages 8371–8380. PMLR, 2021.
- [C5] M. Papini, A. Tirinzoni, A. Pacchiano, M. Restelli, A. Lazaric, and M. Pirotta. Reinforcement learning in linear mdps: Constant regret and representation selection. In *NeurIPS*, pages 16371–16383, 2021.
- [C6] A. M. Metelli, M. Papini, P. D'Oro, and M. Restelli. Policy optimization as online learning with mediator feedback. In *AAAI*, pages 8958–8966. AAAI Press, 2021.
- [C7] M. Papini, A. Battistello, and M. Restelli. Balancing learning speed and stability in policy gradient via adaptive exploration. In *AISTATS*, volume 108 of *Proceedings of Machine Learning Research*, pages 1188–1199. PMLR, 2020.
- [C8] P. D'Oro, A. M. Metelli, A. Tirinzoni, M. Papini, and M. Restelli. Gradient-aware model-based policy search. In *AAAI*, pages 3801–3808. AAAI Press, 2020.
- [C9] L. Bisi, L. Sabbioni, E. Vittori, M. Papini, and M. Restelli. Risk-averse trust region optimization for reward-volatility reduction. In *IJCAI*, pages 4583–4589. ijcai.org, 2020.
- [C10] M. Papini, A. M. Metelli, L. Lupo, and M. Restelli. Optimistic policy optimization via multiple importance sampling. In *ICML*, volume 97 of *Proceedings of Machine Learning Research*, pages 4989–4999. PMLR, 2019.
- [C11] M. Beraha, A. M. Metelli, M. Papini, A. Tirinzoni, and M. Restelli. Feature selection via mutual information: New theoretical insights. In *IJCNN*, pages 1–9. IEEE, 2019.
- [C12] M. Papini, D. Binaghi, G. Canonaco, M. Pirotta, and M. Restelli. Stochastic variance-reduced policy gradient. In *ICML*, volume 80 of *Proceedings of Machine Learning Research*, pages 4023–4032. PMLR, 2018.

- [C13] A. M. Metelli, M. Papini, F. Faccio, and M. Restelli. Policy optimization via importance sampling. In *NeurIPS*, pages 5447–5459, 2018.
- [C14] M. Papini, M. Pirotta, and M. Restelli. Adaptive batch size for safe policy gradients. In *NeurIPS*, pages 3591–3600, 2017.

Workshop Papers

- [W1] G. Neu, J. Olkhovskaya, M. Papini and L. Schwartz. Lifting the Information Ratio: An Information-Theoretic Analysis of Thompson Sampling for Contextual Bandits. 15th European Workshop on Reinforcement Learning, Milan, Italy, 2022.
- [W2] A. Tirinzoni, M. Papini, A. Touati, A. Lazaric, and M. Pirotta. Scalable Representation Learning in Linear Contextual Bandits with Constant Regret Guarantees. 15th European Workshop on Reinforcement Learning, Milan, Italy, 2022.
- [W3] G. Gabbianelli, M. Papini, G. Neu. Online Learning with Off-Policy Feedback. ICML-2022 workshop on Complex Feedback in Online Learning, Baltimore, USA, 2022.
- [W4] A. Gianola, M. Montali, and M. Papini. Automated Reasoning for Reinforcement Learning Agents in Structured Environments. OVERLAY workshop on fOrmal VERification, Logic, Automata and sYNthesis, Padova, Italy, 2021.
- [W2] M. Papini, A. Tirinzoni, A. Pacchiano, M. Restelli, A. Lazaric, and M. Pirotta. Reinforcement Learning in Linear MDPs: Constant Regret and Representation Selection. ICML Workshop on Reinforcement Learning Theory, virtual, 2021.
- [W5] M. Papini, A. Battistello, and M. Restelli. Safe Exploration in Gaussian Policy Gradient. NeurIPS-2019 Workshop on Safety and Robustness in Decision Making, Vancouver, Canada, 2019.
- [W6] M. Papini, A. Battistello, and M. Restelli. Safely Exploring Policy Gradient. 14th European Workshop on Reinforcement Learning, Lille, France, 2018.

Languages

Italian, *native speaker*.

English, *fluent (Cambridge FCE, Grade A — C1 CEFR level)*.

Spanish, *intermediate (completed course of level B1 at UPF)*.

Programming Languages

Python (several research projects) including experience with deep learning libraries **TensorFlow** and **PyTorch**, **LaTeX** (typesetting of several manuscripts), **C++** (one research project, one project as master student), **C**, **MATLAB** (taught as TA), **Java** (final project of B.Sc.).

Hobbies

Climbing, piano.