

Mattia Silvestri

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Born in Mirandola (MO), Italy: 22/08/1994.

Currently living in Mirandola (MO), Italy.

Mattia Silvestri is a Ph. D. student at DISI, University of Bologna. His research focuses on the interplay between Machine Learning and Combinatorial optimization but also on the integration of prior and expert knowledge in Machine Learning. He has applied his research in several domains, like Predictive Maintenance and hybrid stochastic optimization problems.

Academic career

2020-now Since November 2020, he is a Ph.D. student in Computer Science and Engineering at DISI, University of Bologna.

2019-2020 From November 2019 to October 2020, he has been a Junior Research Fellow at DISI, University of Bologna, working on the project *Advancements in Empirical Model Learning with Application on Transprecision Computing*.

Education

2019 Master's degree in Computer Engineering, Alma Mater Studiorum - Università di Bologna.
Degree: 110/110 with honors.
Average grade: 28.81/30
Thesis title: *Combinatorial Optimization with Deep Reinforcement Learning: Theoretical Frameworks and Experimental Developments*
Supervisor: Professor Claudio Sartori
Co-supervisor: Professor Gianluca Moro

2016 Bachelor degree in Computer Engineering, Alma Mater Studiorum - Università di Bologna.
Degree: 98/110
Average grade: 24.93/30
Thesis title: *Servizi Cloud in ambiente Bluemix*
Supervisor: Professor Antonio Corradi
Co-supervisor: Professor Luca Foschini

2013 High school degree in scientific studies, Istituto superiore statale G. Galilei, Mirandola
Degree: 91/100

Partecipazione to national and international projects

2020-2022 From September 2020 to June 2022, he took part to the national project Bi-Rex KINeMA.

Papers on conference proceedings

2022 Silvestri, M., De Filippo, A., Ruggeri, F., Lombardi, M. (2022). Hybrid Offline/Online Optimization for Energy Management via Reinforcement Learning. CPAIOR 2022: 358-373.

2021 Mattia Silvestri, Michele Lombardi, Michela Milano: Injecting Domain Knowledge in Neural Networks: A Controlled Experiment on a Constrained Problem. CPAIOR 2021: 266-282.

2020 Mattia Silvestri, Michele Lombardi, Michela Milano: Injecting domain knowledge in neural networks: acontrolled experiment on a constrained problem. NeHuAI@ECAI 2020: 52-58

Professional skills

- Excellent knowledge of Python programming language. Good knowledge of C, C#, Java programming languages.
- Excellent knowledge of Keras and TensorFlow Deep Learning frameworks. Good knowledge of PyTorch framework.
- Good knowledge of Gurobi optimization software.
- Good Linux system administration skills.

Personal skills

Native language Italian

Other languages

Language	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
English	B2	B2	B2	B2	B2