MATTEO CARDELLINI

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EDUCATION

Italian National PhD Programme in Artificial Intelligence *November 2021 - current*
Work Faculty: University of Genova, Italy
Administrative Faculty: Polytechnic of Torino, Italy

University of Genova, Italy *September 2019 - July 2021*
Master's Degree on Computer Engineering
Curriculum in Artificial Intelligence and Human-Centered Computing
Final Grade: 110/110 cum Laude and "Dignitá di Stampa"

University of Genova, Italy *September 2016 - September 2019*
Bachelor's degree on Computer Engineering
Final Grade: 110/110

JOURNAL PUBLICATIONS

– **Solving Rehabilitation Scheduling Problems via a Two-Phase ASP approach**. M. Cardellini, P. De Nardi, C. Dodaro, G. Galatà, A. Giardini, M. Maratea, I. Porro. Theory and Practice of Logic Programming, Volume 24, Issue 2, March 2024, pp. 344-367
– **Rescheduling Rehabilitation Sessions with Answer Set Programming**. M. Cardellini, C. Dodaro, G. Galatà, A. Giardini, M. Maratea, N. Nisopoli and I. Porro. Journal of Logic and Computation, Volume 33, Issue 3, April 2023

CONFERENCE PUBLICATIONS

– **Taming Discretised PDDL+ through Multiple Discretisations**. M. Cardellini, M. Maratea, F. Percassi, E. Scala and M. Vallati - Proceedings of the 34th International Conference on Automated Planning and Scheduling (ICAPS 2024)
– **Symbolic Numeric Planning With Patterns**. M. Cardellini, E. Giunchiglia and M. Maratea - Proceedings of the 38th Annual AAAI Conference on Artificial Intelligence (AAAI 2024)
– **A Framework for Risk-Aware Routing of Connected Autonomous Vehicles via Artificial Intelligence**. M. Cardellini, C. Dodaro, M. Maratea, and M. Vallati. In Proceedings of the 26th IEEE International Conference on Intelligent Transportation Systems
– **An ASP Framework for Efficient Urban Traffic Optimization**. M. Cardellini. Electronic Proceedings of the 18th Doctoral Consortium on Logic Programming (ICLP DC 2022), 2022
– **In-Station Train Dispatching: A PDDL+ Planning Approach**. M. Cardellini, M. Maratea, M. Vallati, G. Boleto, and L. Oneto. Proceedings of the 31st International Conference on Automated Planning and Scheduling. AAAI Press, 2021
– **An Efficient Hybrid Planning Framework for In-Station Train Dispatching**. M. Cardellini, M. Maratea, M. Vallati, G. Boleto, and L. Oneto. Proceedings of the 21st International Conference on Computational Science. Springer, 2021
– **In-Station Train Movements Prediction: from Shallow to Deep Multi Scale Models**. G. Boleto, L. Oneto, M. Cardellini, M. Maratea, M. Vallati, R. Canepa, D. Anguita. In Proceedings of the 29th European Symposium on Artificial Neural Networks. i6doc, 2021
– **A Two-Phase ASP Encoding for Solving Rehabilitation Scheduling**. M. Cardellini, P. De Nardi, C. Dodaro, G. Galatá, A. Giardini, M. Maratea and I. Porro. In Proceedings of RuleML+RR 2021. Springer, 2021
– **Answer Set Programming in Healthcare: Extended Overview**. M. Alviano, R. Bertolucci,

M. Cardellini, C. Dodaro, G. Galatá, M. Kamran Khan, M. Maratea, M. Mochi, V. Morozan, I. Porro, and M. Schouten. In Proceedings of IPS-RCRA@AI*IA 2020. CEUR, 2020

AWARDS

– **Award AIxIA Leonardo Lesmo 2022**. Special mention for the best Italian Master's Degree Thesis in Artificial Intelligence

SCHOLARSHIPS AND PROJECTS

– **DIBRIS, University of Genoa**. Post-graduate scholarship on "Induction and Deduction for Railway Traffic Planning in Small and Medium-sized Stations" - July 2020 to November 2020 - 5k EUR

TEACHING ACTIVITIES

– **Fondamenti di Informatica**. Teaching assistant. Prof. E. Giunchiglia, Nautical Engineering, University of Genova (2023)
– **Intelligent Systems**. Teaching assistant. Prof. M. Maratea, Computer Science, University of Calabria (2023)
– **Databases**. Teaching assistant. Prof. A. Boccalatte, Prof. M. Maratea, Computer Engineering, University of Genova (2022)
– **Advanced Artificial Intelligence**. Invited presentations on applications of Planning and Scheduling techniques for real world domains. University of Genova. (2020, 2021, 2022)

INVITED TALKS AND SEMINARS

– **University of Huddersfield**. *March 1, 2023*. Seminar "An ASP Framework for Efficient Urban Traffic Optimization"
– **Fondazione Bruno Kessler**. *February 16, 2024*. Seminar "Symbolic Pattern Planning"

EXPERIENCES ABROAD

– **University of Huddersfield**. *Visiting Researcher - From February to Mid May 2023*. Invited to work in the group of Prof. Mauro Vallati at the Centre for Planning, Autonomy and Representation of Knowledge (PARK)

SUPERVISOR ACTIVITIES

– *October 2022*. **A. Formica**. Master's Degree in Computer Engineering. *In-Station Train Dispatching via Artificial Intelligence Techniques: Optimisation, Rescheduling and Visualisation*. Co-supervisor with Prof. M. Maratea
– *July 2022*. **C. Ansaldo, N. Chiesa**. Bachelor's Degree in Computer Engineering. *Artificial Intelligence Techniques for Solving the Shift Scheduling Problem*. Co-supervisor with Prof. M. Maratea

EVENTS

– **ICAPS '23, '24**. *PC Member*. International Conference on Automated Planning and Scheduling
– **AAAI '23, '24**. *PC Member*. AAAI Conference on Artificial Intelligence
– **KEPS '23, '24**. *PC Member*. Workshop on Knowledge Engineering for Planning and Scheduling
– **ECAI '23**. *PC Member*. European Conference on Artificial Intelligence
– **LPNMR '22**. *Local Organizer*. 18th International Conference on Logic Programming and Nonmonotonic Reasoning

WORK EXPERIENCE

SurgiQ SRL April 2021 - November 2021
Researcher *Genoa - IT*

· Built and optimised scheduling systems based on state-of-the-art artificial intelligence's technologies for the scheduling of physiotherapy sessions for the rehabilitation of patients in hospitals.

Secondhand Mobile SRL February 2018 - April 2021
CTO e Co-founder *Genoa - IT*

· Built a cloud based management system accessed daily by more than 140 customers all-over Italy.
· Built and published an iOS/Android App with 65k active downloads.
· Helped the company to grow to 14 employees and a yearly revenue of 5 million euros.
· Managed 4 software engineers using an Agile methodology continuously delivering improvements to the corporate code-base.