

MATTEO CARDELLINI

University of Genova, Italy \diamond Polytechnic of Torino, Italy

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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 "Dignità 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. Galatà, 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

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)

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 Non-monotonic Reasoning

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

WORK EXPERIENCE

SurgiQ SRL
Researcher

April 2021 - November 2021
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*CTO e Co-founder*

February 2018 - April 2021

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.