

Curriculum vitae

Michele Lombardi

Born in Rimini, Italy, May 17 1980, Currently living in Bologna

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Michele Lombardi is an associate professor at DISI, University of Bologna. His research activity covers Artificial Intelligence, Constrained Optimization, and their integration. He has applied such methods in multiple domains, including planning and scheduling, decision making under uncertainty, online optimization, informed Machine Learning, fairness in AI, safety in AI, and predictive maintenance. He is a co-founder of MindIT S.r.L., a spin-off of the University of Bologna later acquired by XTEL group.

Job positions

Oct 2021 - now	Associate Professor at DISI, University of Bologna
Nov 2018 - Oct 2021	Senior fixed-term assistant professor (RTD-B) at DISI, University of Bologna
Apr 2014 - Oct 2018	Fixed-term assistant professor (RTD-A) at DISI, University of Bologna
Jan 2010 - Apr 2014	Post-doc at DEIS, University of Bologna

Education

Jan 2007 - Dec 2009	PhD in Electrical, Computer, and Telecommunication Engineering at DEIS, University of Bologna, with topic <i>"Hybrid methods for resource allocation and scheduling problems in deterministic and stochastic environment"</i>
Mar 2003 - Mar 2006	Master Degree in Computer Engineering at University of Bologna with thesis: <i>"Allocation and Scheduling of Conditional Task Graphs: a stochastic, constrained, approach"</i> and degree 110/110 CL
Oct 1999 - Mar 2003	Bachelor degree in Computer Engineering at University of Bologna with thesis: <i>"Development of a web site for scientific research"</i> and degree 110/110
Sep 1994 - Jul 1999	High school degree on classical studies (humanities) with degree 100/100

Participation to national and international projects

2023 - now	Scientific referent for University of Bologna for the Bi-Rex project "EVOCATION"
2023 - now	Head of the CIRI-ICT research unit for the regional PR-FESR project "S4C"
2022 - now	Scientific referent for University of Bologna in the HEU project "TUPLES" , GA n. 101070149
2021 - 2023	Work Package leader for the H2020 project, "StairwAI" , G.A. n. 101017142
2021 - 2024	Task leader for the project H2020, "TAILOR" , G.A. n. 952215
2020 - 2022	Scientific referent for University of Bologna for the Bi-Rex project "KINeMA"
2019 - 2022	Principal Investigator for the POR-FESR project "Polis-Eye"
2018 - 2021	Task leader for the H2020 project "AI4EU Initiative" , GA n. 825619
2016 - 2018	Participation to the "Google Faculty Research Award" with title "DeepOpt - Encoding"

Deep Networks in Combinatorial Optimization Models

2013 – 2017 Participation to the **FP7 project “DAREED”** (Decision support Advisor for innovative business models and user engagement for smart Energy Efficient Districts), GA n. 609082

2013 – 2015 Participation to the **FP7 project “ePolicy”** (Engineering the Policy-making Life CYcle), GA n. 288147.

2012 – 2013 Participation to the **“Google Focused Grant on Mathematical Optimization and Combinatorial Optimization in Europe”** with title **“Model Learning in Combinatorial Optimization: a Case Study on Thermal Aware Dispatching”**

2012 - 2013 Participation to the **FP7 ERC project “MULTITHERMAN”** (Multi-scale Thermal Management of Computing Systems), GA n. 291125.

2012 - 2013 Participation to the **FP7 project “Therminator”** (GA n. 248603)

2011 – 2012 Participation to the **JTI ARTEMIS project “SMECY”** (Smart Multicore Embedded Systems).

2010 – 2011 Participation to the **FP7 project “Predator”** (Design for Predictability and Efficiency)

Research activity abroad

Mar 2015 **Visiting professor at University of Edinburgh**, Business School, with prof. Roberto Rossi

Jan 2015 **Visiting professor at Université de Nice-Sophia Antipolis**, Département d'Informatique, with prof. Jean-Charles Régim

2013 **Visiting professor at Université Catholique de Louvain**, Belgian Constraints Group, with prof. Pierre Schaus.

Jul 2009 – Dec 2009 **Visiting Researcher at LSI, Laboratory of System Integration, École Polytechnique Fédérale de Lausanne**, with prof. Giovanni De Micheli.

Apr. 2006 – Sep 2006 **Visiting Researcher at IISI, Intelligent Information Systems Institute, Cornell**
then Feb 2007 **University (Ithaca, NY)**, with prof. Carla Gomes.

Participation as an invited speaker to Scientific Events

- **Invited participation to the Dagstuhl seminar on “Machine Learning Augmented Algorithms for Combinatorial Optimization Problems” (24441)**, in Oct 2024
- **Invited lecture at the summer school of the Association for Constraint Programming** in 2023 (ACP Summer School).
- **Invited seminar at the University of Bielefeld** in 2022
- Invited talk at the workshop “Integrative AI”, within the international conference LOD 2020.
- **Tutorial at IJCAI 2018 with topic “Boosting Optimization via Machine Learning”**, co-authored with prof. Michela Milano
- Invited talk at the workshop ModRef 2018, within the international conference CP 2018.
- **Invited participation to the Dagstuhl seminar on “Planning and Operations Research” (18071)**, in Feb 2018
- Invited presentations at the International Symposium on Mathematical Programming (ISMP) in 2015 and 2012
- Invited presentation at the annual conference of the Gwalior Academy of Mathematical Sciences (GAMS), 2013 (Bhopal, India)
- Invited presentation at the workshop COPLAS within the international conference ICAPS 2013
- **Invited lecture in the Master Class of the international conference CPAIOR 2012**
- **Invited lecture at the summer school of the Association for Constraint Programming 2012** (ACP Summer

School).

- Invited talk at the workshop SOMRES within the international conference Real Time System Symposium (RTSS) 2011
- Invited talk at the INFORMS Annual Meeting 2008

Reviewer activities

Editorial board member for the international journal “**Artificial Intelligence**” (2024-now) “**Constraints**” (2016-2024)

Reviewer for international journals:

- Artificial Intelligence
- Journal of Artificial Intelligence Research
- IEEE Transactions on Computers
- IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems
- Constraints
- Annals of Operations Research
- European Journal of Operations Research
- IEEE Transactions on Industrial Informatics
- INFORMS Journal on Computing
- ACM Journal of Emerging Technologies in Computing
- IIE Transactions
- ACM Transactions on Embedded Computing Systems

Participation to program committees and event organization

Organization of scientific events:

- **Dagstuhl seminar 22431 on “Data-Driven Combinatorial Optimization”** in 2022 (co-chair with prof. Emma Frejinger, prof. Andrea Lodi, and prof. Neil Yorke-Smith)
- **Co-Chair of the IJCAI workshop “Data Science Meets Optimization”** in 2019-2024
- **Co-program chair of the international conference CPAIOR 2017**, 5-8 June 2017, Padova
- **Co-chair of the ACP summer school on Constraint Programming** in 2014
- **Chair of the workshop Opt4SmartCities 2015** (within the international conference CPAIOR 2015)
- **Co-chair of the doctoral programme** of the international conference CP2012 and of the AI*IA Annual Symposium 2012
- **Chair of the workshop COESD 2010** (within the international conference CPAIOR 2010)
- **Co-chair of a “thematic track”** at the International Conference on Principles and Practice of Constraint Programming (CP), on “CP Data Science and Machine Learning” in 2017-2020 e on “Application” in 2021
- **Session organizer** at the International Symposium on Mathematical Programming (ISMP) in 2017 (Bordeaux) and 2015 (Pittsburgh, Pennsylvania)
- **Session organizer** at the 2015 INFORMS Computing Society Conference (Richmond, Virginia)
- **Conference committee member** for CPAIOR 2010

Senior program committee member for international conferences:

- SPC member for the International Joint Conference on Artificial Intelligence (IJCAI): 2017-2025
- SPC member for AAAI: 2019-2025
- SPC member for the International Conference on Principles and Practice of Constraint Programming (CP): 2020

Program committee member for international conferences:

- International Joint Conference on Artificial Intelligence (IJCAI): 2011, 2013, 2016
- AAAI 2014-2016, 2018
- International Conference on Automated Planning and Scheduling (ICAPS): 2012-2014, 2018-2019, 2022
- International Conference on Principles and Practice of Constraint Programming (CP): 2012-2013, 2015-2021

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- International Conference on the Integration of Artificial Intelligence and Operations Research techniques in Constraint Programming (CPAIOR): 2011-2013, 2015- 2019, 2021-2024

Program committee member for international workshops:

- PAIS2020 (at IJCAI 2020)
- RCRA 2013, ModRef 2012 e ModRef 2013

Awards

- AAAI 2019 award as “Outstanding Senior Program Committee Member”
- AIXIA “Marco Cadoli” award for the best PhD thesis in 2010
- Honorable mention for the CP 2011 Doctoral Dissertation Award
- Honorable mention for the ICAPS 2012 PhD award
- Gauss Award 2016 for the paper “Predictive Modeling for Job Power Consumption in HPC Systems”¹

Institutional assignments

- **Member of the academic board of the PhD in “Computer Science and Engineering”** of University of Bologna 2020-2023
- **Member of the executive board (giunta)** of the Computer Science and Engineering Department of the University of Bologna 2021-2024

Student supervision activities

PhD Thesis supervisions:

- **PhD supervisor** for Gaetano Signorelli (2023-now), Matto Francobaldi (2022-now), Eleonora Misino (2021-2024), Luca Giuliani (2021-2024), Mattia Silvestri (2020-2023)
- **Supervision support activities** for the students Alessio Bonfietti, Allegra De Filippo, Thomas Bridi, Andrea Borghesi, Fabrizio Detassis, Federico Baldo
- **Member of the PhD thesis committee for Sascha Van Cauweleart**, at Université Catholique del Louvain (2016-2018)

Thesis supervisor for:

- 67 Master Students
- 4 Bachelor Students

Teaching experience

Teacher for the courses:

- “Integrated Machine Learning and Constrained Optimization” for the Computer Science and Engineering PhD of University of Bologna, in 2021 and 2024
 - Co-teacher for the course “AI and Data Science” at Bologna Business School (16 hours) in 2023
 - Co-teacher for the course “AI in Industry” at Bologna Business School (12 hours) in 2023
 - “Machine Learning” (two courses) at Bologna Business School, in 2019 (30 hours and 16 hours)
 - “Machine Learning” (two courses, co-teacher) at Bologna Business School, in 2018 (10 hours and 8 hours)
 - PhD Course on Combinatorial Optimization (co-teacher) at Scuola Superiore Sant’Anna, Pisa (in 2011)
 - “AI in the Industry” for the master degree in “Artificial Intelligence” at Università di Bologna, in 2020-2024
 - “Sistemi con Vincoli” (constraint systems) for the master degree in Computer Science at University of Padova, in 2015 and 2016
 - “Laboratory of AI Applications” at the master degree in Management Engineering of University of Bologna, in 2022-2024
 - “Fondamenti di Informatica T” (fundamentals of Computer Science) at the bachelor degree in Automation and Electrical Engineering of University of Bologna, in 2018-2025
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- “Laboratorio di Informatica T” (Computer Science laboratory) at the bachelor degree in Chemical and Biochemical Engineering of University of Bologna, in 2016, 2017, 2018, 2019
 - “Elementi di Informatica ed Applicazioni Numeriche T” (elements of Computer Science and numerical applications) for the bachelor degree in Chemical and Biochemical Engineering of University of Bologna, in 2015
 - “Fondamenti di Informatica” (fundamentals of Computer Science), laboratory module, for the bachelor degree in Electronics and Telecommunication Engineering of the University of Bologna, in 2012, 2013, 2014
 - “Fondamenti di Informatica” (fundamentals of Computer Science), laboratory module, for the bachelor degree in Electrical Engineering of the University of Bologna, in 2010
 - “Informatica Grafica” (graphical Computer Science), one module for the master degree in Architecture and Civil Engineering of University of Bologna, in 2010

Course seminars and lab sessions:

- Seminars and laboratory sessions for the course “Applicazioni di Intelligenza Artificiale” (applications of Artificial Intelligence) in the master degree on Computer Engineering of University of Bologna, in 2010-2013
- Seminars for the course “Metodologie di Sviluppo Hardware/Software” (HW/SW design methodologies) in the master degree on Electronics and Telecommunication Engineering of University of Bologna, in 2011-2012

Language skills

- Italian – native
- English – very good
- French – beginner

Journal papers

- 2024
- Mattia Silvestri, Allegra De Filippo, Michele Lombardi, Michela Milano: *UNIFY: A unified policy designing framework for solving integrated Constrained Optimization and Machine Learning problems*. Knowledge-based Systems, 303, 112383
-
- C Fabbri, M Lombardi, E Malaguti, M Monaci: *On-line strategy selection for reducing overcrowding in an Emergency Department*. Omega 127, 103098
-
- M Skocaj, LM Amorosa, M Lombardi, R Verdone: *Gumble: Uncertainty-aware conditional mobile data generation using bayesian learning*. IEEE Transactions on Mobile Computing
-
- L Cellini, A Macaluso, M Lombardi: *QAL-BP: an augmented Lagrangian quantum approach for bin packing*. Nature Scientific Reports 14 (1), 5142
-
- A Magnini, M Lombardi, TBMJ Ouarda, A Castellarin: *AI-driven morphoclimatic regional frequency modelling of sub-daily rainfall-extremes*. Journal of Hydrology 631, 130808
-
- 2023
- Andrea Magnini, Michele Lombardi, Armir Bujari, Pietro Mattivi, Iuliia Shustikova, Simone Persiano, Marco Patella, Gabriele Bitelli, Paolo Bellavista, Francesco Lo Conti, Antonio Tirri, Stefano Bagli, Paolo Mazzoli, Attilio Castellarin: *Geomorphic flood hazard mapping: from floodplain delineation to flood hazard characterization*. Hydrological Sciences Journal 68 (16), 2388-2403
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- Federico Baldo, Allison Piovesan, Marijana Rakvin, Giuseppe Ramacieri, Chiara Locatelli, Silvia Lanfranchi, Sara Onnivello, Francesca Pulina, Maria Caracausi, Francesca Antonaros, Michele Lombardi, Maria Chiara Pelleri: *Machine learning based analysis for intellectual disability in Down syndrome*. Heliyon 9 (9)
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- A Magnini, M Lombardi, S Persiano, A Tirri, F Lo Conti, A Castellarin: *Machine-learning blends of geomorphic descriptors: value and limitations for flood hazard assessment across large floodplains*. Natural Hazards and Earth System Sciences Discussions 2021, 1-29
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- 2021 Allegra De Filippo, Michele Lombardi, Michela Milano: *Integrated Offline and Online Decision Making under Uncertainty*. J. Artif. Intell. Res. 70: 77-117 (2021)
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- H Helmberg, F Lacalandra, M Schmidt, C Henriques, A De Filippo, M Lombardi, M Milano, P Ezran, Y Haddad, M Diekerhof, M Madani: *Finance, Regulations, Politics and Market Design*. Mathematical Optimization for Efficient and Robust Energy Networks, 59-75
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- M Diekerhof, A Monti, E Lebedeva, AH Tkaczyk, I Yüksel-Ergün, J Zittel, LF Escudero, A Soroudi, C Helmberg, Ž Kanović, M Petkovic, F Lacalandra, A Frangioni, J Lee, A De Filippo, M Lombardi, M Milano, P Ezran, Y Haddad: *Production and demand management*. Mathematical Optimization for Efficient and Robust Energy Networks, 3-25
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- 2019 Andrea Borghesi, Andrea Bartolini, Michele Lombardi, Michela Milano, Luca Benini: *A semisupervised autoencoder-based approach for anomaly detection in high performance computing systems*. Eng. Appl. of AI 85: 634-644 (2019)
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- 2018 Sascha Van Cauwelaert, Michele Lombardi, Pierre Schaus: *How efficient is a global constraint in practice? - A fair experimental framework*. Constraints 23(1): 87-122 (2018)
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- Andrea Borghesi, Andrea Bartolini, Michele Lombardi, Michela Milano, Luca Benini: *Scheduling-based power capping in high performance computing systems*. SUSCOM 19: 1-13 (2018)
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- 2017 Michele Lombardi, Michela Milano, Andrea Bartolini: *Empirical decision model learning*. Artif. Intell. 244: 343-367 (2017)
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- Domenico Salvagnin, Michele Lombardi: *Introduction to the CPAIOR 2017 fast track issue*. Constraints 22(4): 491-492 (2017)
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- 2016 Michele Lombardi, Stefano Gualandi: *A lagrangian propagator for artificial neural networks in constraint programming*. Constraints 21(4): 435-462 (2016)
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- Thomas Bridi, Andrea Bartolini, Michele Lombardi, Michela Milano, Luca Benini: *A Constraint Programming Scheduler for Heterogeneous High-Performance Computing Machines*. IEEE Trans. Parallel Distrib. Syst. 27(10): 2781-2794 (2016)
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- 2014 Alessio Bonfiatti, Michele Lombardi, Luca Benini, Michela Milano: *CROSS cyclic resource-constrained scheduling solver*. Artif. Intell. 206: 25-52 (2014)
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- Michela Milano, Michele Lombardi: *Strategic decision making on complex systems*. Constraints 19(2): 174-185 (2014)
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- 2013 Michele Lombardi, Michela Milano, Luca Benini: *Robust Scheduling of Task Graphs under Execution Time Uncertainty*. IEEE Transactions on Computers 62(1): 98-111 (2013)
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- Alessio Bonfiatti, Michele Lombardi, Michela Milano, Luca Benini: *Maximum-throughput mapping of SDFGs on multi-core SoC platforms*. J. Parallel Distrib. Comput. 73(10): 1337-1350 (2013)
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- 2012 Michele Lombardi, Michela Milano: *A min-flow algorithm for Minimal Critical Set detection in Resource Constrained Project Scheduling*. Artificial Intelligence 182-183: 58-67 (2012)
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- Michele Lombardi, Michela Milano: *Optimal methods for resource allocation and scheduling: a cross-disciplinary survey*. Constraints 17(1): 51-85 (2012)
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- 2011 Luca Benini, Michele Lombardi, Michela Milano, Martino Ruggiero: *Optimal Resource Allocation and Scheduling for the CELL BE Platform*. Annals of OR 184(1): 51-77 (2010)
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- Michele Lombardi, Michela Milano, Andrea Roli, Alessandro Zanarini: *Deriving Information from Sampling and Diving*. Fundamenta Informaticae 107(2-3): 267-287 (2011)
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2010 Michele Lombardi, Michela Milano: *Allocation and scheduling of Conditional Task Graphs*.
Artificial Intelligence 174(7-8): 500-529 (2010)

Michele Lombardi, Michela Milano, Martino Ruggiero, Luca Benini: *Stochastic allocation and scheduling for conditional task graphs in multi-processor systems-on-chip*.
Journal of Scheduling 13(4): 315-345 (2010)

Papers on conference proceedings

2024 Luca Giuliani, Eleonora Misino, Roberta Calegari, Michele Lombardi: *Long-Term Fairness Strategies in Ranking with Continuous Sensitive Attributes*.
AEQUITAS@ECAI 2024

Michele Braccini, Allegra De Filippo, Michele Lombardi, Michela Milano: *Swarm Intelligence: A Novel and Unconventional Approach to Dance Choreography Creation*.
CREAI@ECAI 2024: 162-172

Eleonora Misino, Roberta Calegari, Michele Lombardi, Michela Milano: *Ensuring Fairness Stability for Disentangling Social Inequality in Access to Education: the FAIRDAS General Method*.
IJCAI 2024: 7412-7420

2023 Alessandro Maggio, Luca Giuliani, Roberta Calegari, Michele Lombardi, Michela Milano: *A geometric framework for fairness*.
AEQUITAS@ECAI 2023

Eleonora Misino, Roberta Calegari, Michele Lombardi, Michela Milano: *FAIRDAS: Fairness-Aware Ranking as Dynamic Abstract System*.
AEQUITAS@ECAI 2023

Mattia Silvestri, Federico Baldo, Eleonora Misino, Michele Lombardi: *An Analysis of Universal Differential Equations for Data-Driven Discovery of Ordinary Differential Equations*.
ICCS (4) 2023: 353-366

Luca Giuliani, Eleonora Misino, Michele Lombardi: *Generalized Disparate Impact for Configurable Fairness Solutions in ML*.
ICML 2023: 11443-11458

Samuele Marro, Michele Lombardi: *Computational Asymmetries in Robust Classification*.
ICML 2023: 24082-24138

2022 Mattia Silvestri, Allegra De Filippo, Federico Ruggeri, Michele Lombardi: *Hybrid Offline/Online Optimization for Energy Management via Reinforcement Learning*.
CPAIOR 2022: 358-373

Federico Baldo, Michele Iannello, Michele Lombardi, Michela Milano: *Informed Deep Learning for Epidemics Forecasting*.
PAIS@ECAI 2022: 86-99

Mattia Silvestri, Michele Lombardi, Emiliano Mucchi, Luca Cadei, Giovanna Magnago, Marco Piantanida, Valentina D'Ottavio, Nguyen Van Tu, Simona Duma, Silvia Taddei, Annagiulia Tiozzo, Andrea Corneo, Lorenzo Lancia, Laura Rocchi, Pietro Coffari di Gilferraro: *Supervised Anomaly Detection in Crude Oil Stabilization*.
PAIS@ECAI 2022: 114-127

Alessandro Seravalli, Mariaelena Busani, Simone Venturi, Arianna Brutti, Carlo Petrovich, Angelo Frascella, Fabrizio Paolucci, Marco Di Felice, Michele Lombardi, Elena Bellodi, Riccardo Zese, Francesco Bertasi, Elia Balugani, Alket Cecaj, Rita Gamberini, Marco Mamei, Marco Picone: *Towards Smart Cities for Tourism: the POLIS-EYE Project*.
ISC2 2022: 1-7

António Morais, Raul Barbosa, Nuno Lourenço, Frederico Cerveira, Michele Lombardi, Henrique Madeira: *Strategies for Improving the Error Robustness of Convolutional Neural Networks*.
QRS 2022: 874-883

2021 Fabrizio Detassis, Michele Lombardi, Michela Milano: *Teaching the Old Dog New Tricks: Supervised Learning with Constraints*.
AAAI 2021: 3742-3749

	Maxime Mulamba, Jayanta Mandi, Michelangelo Diligenti, Michele Lombardi, Victor Bucarey, Tias Guns: <i>Contrastive Losses and Solution Caching for Predict-and-Optimize</i> . IJCAI 2021: 2833-2840
	Mattia Silvestri, Michele Lombardi, Michela Milano: <i>Injecting Domain Knowledge in Neural Networks: A Controlled Experiment on a Constrained Problem</i> . CPAIOR 2021: 266-282
	Allegra De Filippo, Michele Lombardi, Michela Milano: <i>Robust Optimization Models For Local Flexibility Characterization of Virtual Power Plants</i> . AI*IA 2021: 609-623
2020	Andrea Borghesi, Giuseppe Tagliavini, Michele Lombardi, Luca Benini, Michela Milano: <i>Combining learning and optimization for transprecision computing</i> . CF 2020: 10-18
	Fabrizio Detassis, Michele Lombardi, Michela Milano: <i>Teaching the old dog new tricks: supervised learning with constraints</i> . NeHuAI@ECAI 2020: 44-51
	Mattia Silvestri, Michele Lombardi, Michela Milano: <i>Injecting domain knowledge in neural networks: a controlled experiment on a constrained problem</i> . NeHuAI@ECAI 2020: 52-58
	Allegra De Filippo, Michele Lombardi, Michela Milano: <i>Hybrid Offline/Online Optimization Under Uncertainty</i> . ECAI 2020: 2899-2900
	Allegra De Filippo, Michele Lombardi, Michela Milano: <i>The Blind Men and the Elephant: Integrated Offline/Online Optimization Under Uncertainty</i> . IJCAI 2020: 4840-4846
	Andrea Borghesi, Federico Baldo, Michele Lombardi, Michela Milano: <i>Injective Domain Knowledge in Neural Networks for Transprecision Computing</i> . LOD (1) 2020: 587-600
	Ferdinando Fioretto, Pascal Van Hentenryck, Terrence W. K. Mak, Cuong Tran, Federico Baldo, Michele Lombardi: <i>Lagrangian Duality for Constrained Deep Learning</i> . ECML/PKDD (5) 2020: 118-135
	Michele Lombardi, Federico Baldo, Andrea Borghesi, Michela Milano: <i>An Analysis of Regularized Approaches for Constrained Machine Learning</i> . TAILOR 2020: 112-119
2019	Andrea Borghesi, Andrea Bartolini, Michele Lombardi, Michela Milano, Luca Benini: <i>Anomaly Detection Using Autoencoders in High Performance Computing Systems</i> . AAAI 2019: 9428-9433
	Danuta Sorina Chisca, Michele Lombardi, Michela Milano, Barry O'Sullivan: <i>Logic-Based Benders Decomposition for Super Solutions: An Application to the Kidney Exchange Problem</i> . CP 2019: 108-125
	Danuta Sorina Chisca, Michele Lombardi, Michela Milano, Barry O'Sullivan: <i>A Sampling-Free Anticipatory Algorithm for the Kidney Exchange Problem</i> . CPAIOR 2019: 146-162
	Allegra De Filippo, Michele Lombardi, Michela Milano: <i>How to Tame Your Anticipatory Algorithm</i> . IJCAI 2019: 1071-1077
2018	Allegra De Filippo, Michele Lombardi, Michela Milano: <i>Off-Line and On-Line Optimization Under Uncertainty: A Case Study on Energy Management</i> . CPAIOR 2018: 100-116
	Andrea Galassi, Michele Lombardi, Paola Mello, Michela Milano: <i>Model Agnostic Solution of CSPs via Deep Learning: A Preliminary Study</i> . CPAIOR 2018: 254-262
	Danuta Sorina Chisca, Michele Lombardi, Michela Milano, Barry O'Sullivan: <i>From Offline to Online Kidney Exchange Optimization</i> .

	ICTAI 2018: 587-591
	Allegra De Filippo, Michele Lombardi, Michela Milano: <i>Methods for off-line/on-line optimization under uncertainty.</i> IJCAI 2018: 1270-1276
	Michele Lombardi, Michela Milano: <i>Boosting Combinatorial Problem Modeling with Machine Learning.</i> IJCAI 2018: 5472-5478
2017	Allegra De Filippo, Michele Lombardi, Michela Milano, Alberto Borghetti: <i>Robust Optimization for Virtual Power Plants.</i> AI*IA 2017: 17-30
2016	Thomas Bridi, Michele Lombardi, Andrea Bartolini, Luca Benini, Michela Milano: <i>DARDIS: Distributed And Randomized Dispatching and Scheduling.</i> AI*IA 2016: 493-507
	Alessio Bonfietti, Alessandro Zanarini, Michele Lombardi, Michela Milano: <i>The Multirate Resource Constraint.</i> CP 2016: 113-129
	Allegra De Filippo, Michele Lombardi, Michela Milano: <i>Non-linear Optimization of Business Models in the Electricity Market.</i> CPAIOR 2016: 81-97
	Thomas Bridi, Michele Lombardi, Andrea Bartolini, Luca Benini, Michela Milano: <i>DARDIS: Distributed And Randomized Dispatching and Scheduling.</i> ECAI 2016: 1598-1599
	Andrea Borghesi, Andrea Bartolini, Michele Lombardi, Michela Milano, Luca Benini: <i>Predictive Modeling for Job Power Consumption in HPC Systems.</i> ISC 2016: 181-199
2015	Alessio Bonfietti, Michele Lombardi, Michela Milano: <i>Embedding Decision Trees and Random Forests in Constraint Programming.</i> CPAIOR 2015: 74-90
	Thomas Bridi, Michele Lombardi, Andrea Bartolini, Luca Benini, Michela Milano: <i>A CP Scheduler for High-Performance Computers.</i> DC@AI*IA 2015: 37-42
	Michele Lombardi, Alessio Bonfietti, Michela Milano: <i>Deterministic Estimation of the Expected Makespan of a POS Under Duration Uncertainty.</i> CP 2015: 279-294
	Andrea Borghesi, Francesca Collina, Michele Lombardi, Michela Milano, Luca Benini: <i>Power Capping in High Performance Computing Systems.</i> CP 2015: 524-540
	Andrea Borghesi, Christian Conficoni, Michele Lombardi, Andrea Bartolini: <i>MS3: A Mediterranean-style job scheduler for supercomputers - do less when it's too hot!</i> HPCS 2015: 88-95
	Sascha Van Cauwelaert, Michele Lombardi, Pierre Schaus: <i>Understanding the Potential of Propagators.</i> CPAIOR 2015: 427-436
2014	Andrea Bartolini, Andrea Borghesi, Thomas Bridi, Michele Lombardi, Michela Milano: <i>Proactive Workload Dispatching on the EURORA Supercomputer.</i> CP 2014: 765-780
	Alessio Bonfietti, Michele Lombardi, Michela Milano: <i>Disregarding Duration Uncertainty in Partial Order Schedules? Yes, We Can!</i> CPAIOR 2014: 210-225
	Michele Lombardi, Pierre Schaus: <i>Cost Impact Guided LNS.</i> CPAIOR 2014: 293-300
2013	Alessio Bonfietti, Michele Lombardi, Michela Milano: <i>De-cycling Cyclic Scheduling Problems.</i> ICAPS 2013

	Michele Lombardi, Stefano Gualandi: <i>A New Propagator for Two-layer Neural Networks in Empirical Model Learning</i> . CP 2013
	Michele Lombardi, Stefano Gualandi: <i>A Simple and Effective Decomposition for the Multidimensional Binpacking Constraint</i> . CP 2013
	Michele Lombardi, Michela Milano: <i>A Min-Flow Algorithm for Minimal Critical Set Detection in Resource Constrained Project Scheduling</i> . ICAPS 2013 (Journal Presentation Track)
2012	Alessio Bonfietti, Michele Lombardi: <i>The Weighted Average Constraint</i> . CP 2012: 191-206
	Bartolini, A., M. Lombardi, M. Milano, and L. Benini: <i>Optimization and Controlled Systems: A Case Study on Thermal Aware Workload Dispatching</i> . AAAI 2012
	Alessio Bonfietti, Michele Lombardi, Luca Benini, Michela Milano: <i>Global Cyclic Cumulative Constraint</i> . CPAIOR 2012: 81-96
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