Daniele Loiacono

Name	Daniele Loiacono
Date of birth	September 20, 1980
Citizenship	Italian
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Highlights

- **Associate Professor** at Dipartimento di Elettronica e Informazione, Politecnico di Milano since July 2020.
- **General Chair** of the *IEEE Conference on Games* (CoG) 2024.
- **Co-PI** of the *AuToMI* project (Italian Ministry of Health) 2021-2025.
- **Associate Editor** of *Transaction of Games* (IEEE).
- **Keynote Speaker** at *2nd INTERNATIONAL CONFERENCE OF GEOMATICS AND RESTORATION* in 2019.
- 95 peer-reviewed publications [since 2020: 33 publications]
- h-index=30 and 2881 citations [since 2020: h-index=17 and 1128 citations] (source: Google Scholar)

Position and Education

Record of Employment

Jul. 2020 – present

Associate professor at the Department of Electronics and Information of the Politecnico di Milano.

Dec. 2011 – 2020

Assistant professor at the Department of Electronics and Information of the Politecnico di Milano.

Mar. 2008 – Nov. 2011

Postdoc researcher (assegnista di ricerca) at the Department of Electronics and Information of the Politecnico di Milano.

Mar. 2005 – Feb. 2008

Ph.D. student in Information Technology at Politecnico di Milano.

Education

- Ph.D. in Information Technology at Politecnico di Milano. 2008.
  (Title: *Rule-Based Evolutionary Systems for Generalized Reinforcement Learning*, Advisor: *P.L. Lanzi*, Reviewer: *L. Bull*)
- M.Sc. in Computer Science and Engineering. Dec. 2004. Grade: 100/100 cum laude.
  (Thesis title: *Evolving Rules with XCSF: Analysis of Generalization and Performance*, Advisor *P.L. Lanzi*)
- Scientific high school diploma from L.S.S. Einstein. 1999. Grade: 98/100.

Awards

AW.1. Best Paper Candidate "Interactive evolution for the procedural generation of tracks in a high-end racing game." [IC.29] *Proceedings of the 13th annual conference on Genetic and evolutionary computation (GECCO '11), pages 395–402, New York, NY, USA, 2011.*

AW.2. Best Paper Candidate "Overtaking Opponents with Blocking Strategies Using Fuzzy Logic." [IC.32] *Proceedings of the 2010 IEEE Conference on Computational Intelligence and Games (CIG'10)*, pages 123–130, Copenhagen, Denmark, 2010.

AW.3. Winner of the competition "Evolving Trading Rules" at the ACM Genetic and Evolutionary Computation Conference (GECCO), 2007

AW.4. Best Paper Award "Classifier prediction based on tile coding", [IC.50] *GECCO '06: Proceedings of the 8th annual Conference on Genetic and Evolutionary Computation*, pages 1497–1504, New York, NY, USA, 2006. ACM Press.

AW.5. Award for the best M.Sc. thesis in the Artificial Intelligence field. Italian Association for Artificial Intelligence (AIXIA), 2005.

Teaching activity

LECTURER

2023 – present

Machine Learning and Artificial Intelligence (5 CFU) - MD level - Humanitas University and Politecnico di Milano (campus Hunimed).

2022 – present

Data Mining (5 CFU) - M.Sc. level - Politecnico di Milano (campus Leonardo).

2020 – now

Machine Learning (5 CFU) - M.Sc. level - Politecnico di Milano (campus Leonardo).

2020

Interpretability and Explainability in Machine Learning (5 CFU) - Ph.D. in Data and Decision Science - Ph.D. level - Politecnico di Milano (campus Leonardo).

2020

Data and Results Visualization (5 CFU) - Ph.D. in Information Technology - Ph.D. level - Politecnico di Milano (campus Leonardo).

2019

Virtual and Mixed Reality (5 CFU) - Ph.D. in Information Technology - Ph.D. level - Politecnico di Milano (campus Leonardo).

2019

Data and Results Visualization (5 CFU) - Ph.D. in Data and Decision Science - Ph.D. level - Politecnico di Milano (campus Leonardo).

2019

Data Visualization - Master Artificial Intelligence & Machine Learning - Post Graduate level - Cefriel.

2018

Data and Results Visualization (5 CFU) - Ph.D. in Information Technology - Ph.D. level - Politecnico di Milano (campus Leonardo).

2017 – 2019

Fondamenti di Informatica (10 CFU) - Computer Science, Telecommunications, Automation, Electrical, and Electronic Engineering - Undergraduate level - Politecnico di Milano (campus Leonardo).

2015 – 2016

Fondamenti di Informatica (10 CFU) - Electronic Engineering - Undergraduate level - Politecnico di Milano (campus Leonardo).

2008 – 2017

Informatica B (7 CFU) - Mechanical and Energy Engineering - Undergraduate level - Politecnico di Milano (campus Bovisa).

Teaching Assistant

2007–2013, 2019

Data Mining and Text Mining (5 CFU) - Computer Science and Engineering - Graduate level - Politecnico di Milano (campus Leonardo).

2010 – 2019

Videogame Design and Programming (5 CFU) - Computer Science and Engineering - Graduate level - Politecnico di Milano (campus Leonardo).

2010–2013

Algoritmi e Calcolo Parallelo (10 CFU) - Mathematical Engineering - Graduate level - Politecnico di Milano (campus Leonardo).

2008–2010

Algoritmi e Strutture Dati (5 CFU) - Mathematical Engineering - Undergraduate level - Politecnico di Milano (campus Leonardo).

2004, 2006–2008

Informatica 3 (5 CFU) - Computer Science and Engineering - Undergraduate level - Politecnico di Milano (campus Leonardo).

2005–2006

Informatica 2 (5 CFU) - Computer Science and Engineering - Undergraduate level - Politecnico di Milano (campus Leonardo).

Lab Supervisor

2008–2009

Algoritmi e Strutture Dati (5 CFU) - Mathematical Engineering - Undergraduate level - Politecnico di Milano (campus Leonardo).

2005–2006, 2007–2008

Informatica 2 (5 CFU) - Computer Science and Engineering - Undergraduate level - Politecnico di Milano (campus Leonardo).

2005–2006, 2007–2008

Informatica B (7 CFU) - Mechanical and Energy Engineering - Undergraduate level - Politecnico di Milano (campus Bovisa).

Scientific Activities

Research Projects

- **AuToMI**
  TYPE: Ricerca Finalizzata (Italian Ministry of Health)
  DATE: 2021-2025
  TOPIC: Artificial Intelligence algorithms to automate the Total Marrow (Lymph-node) Irradiation.
  ROLE: **Co-PI (Head of the Politecnico di Milano Unit)**

  Funding: 90K€ (Politecnico di Milano) – 450K€ (Overall Project)

- **BASE 5G**
  TYPE: European Regional Development Fund
  DATE: 2020-2022
  TOPIC: Design of services based on smart environments; vertical integration of 5G technology with IoT platforms to support advanced services (e.g., mixed reality content for educational experiences).
  ROLE: Member of the research team (Work Package 4 - Smart Learning)
  FUNDING: 1.1M€ (Politecnico di Milano) – 3M€ (Overall Project)

EDITORIAL BOARDS

- **Associate Editor** of the IEEE Transaction on Games, 2025 – present.
- **Guest Editor** of special issue on "Advances in Learning Classifier Systems". *Evolutionary Intelligence, 5(2), June 2012*.
- **Guest Editor** of special issue on "GECCO 2013 Competitions". *Genetic Programming and Evolvable Machines, 15(4), December 2014*.

CONFERENCE ORGANIZATION

- **General Chair** for the IEEE Conference on Games (CoG), 2024.
- "Digital Entertainment Technologies and Arts (DETA)" **Track Chair** for ACM Genetic and Evolutionary Computation Conference (GECCO), 2017.
- "Digital Entertainment Technologies and Arts (DETA)" **Track Chair** for ACM Genetic and Evolutionary Computation Conference (GECCO), 2016.
- **Competitions Chair** for the ACM Genetic and Evolutionary Computation Conference (GECCO), 2013.
- **Competitions Chair** for the ACM Genetic and Evolutionary Computation Conference (GECCO), 2012.
- **Chair** of the International Workshop on Learning Classifier Systems (IWLCS), 2012
- **Chair** of the International Workshop on Learning Classifier Systems (IWLCS), 2011
- **Local Chair** for the IEEE Conference on Computational Intelligence and Games (CIG), 2009.
- **Organizer of the special session** on "Car Racing Games" at the IEEE Conference on Computational Intelligence and Games (CIG), 2010.
- **Organizer of the special session** on "Computational Intelligence and Games" at the IEEE Congress on Evolutionary Computation (CEC), 2009.
- **Organizers of several competitions** at the ACM Genetic and Evolutionary Computation Conference (GECCO), IEEE Congress on Evolutionary Computation (CEC), IEEE Conference on Computational Intelligence and Games (CIG), and EvoStar (Evo*), 2008–2015.

STEERING COMMITTEES

- Member of **Games Technical Committee** (GTC) of the **Computational Intelligence Society** (IEEE-CIS), 2017 – 2022.
- Member of **Entertainment and Gaming** (ENT) of the **Consumer Technology Society** (IEEE-CTSoc), 2020 – present.

PROGRAM COMMITTEE MEMBERSHIP

Daniele Loiacono was a member of the Program Committee of the following conferences:

- ACM Genetic and Evolutionary Computation Conference (GECCO), 2007 – present.
- IEEE Congress on Evolutionary Computation (CEC), 2009 – present.
- IEEE Conference on Computational Intelligence and Games (CIG), 2009 – present.
- International Conference on Parallel Problem Solving From Nature (PPSN), 2012 - present.
- International Workshop on Learning Classifier Systems (IWLCS), 2009 – present.
- IEEE International Conference on Fuzzy Systems (FUZZ-IEEE), 2010.
- International Conference on Evolutionary Computation (ICEC), 2009.

REFEREE SERVICES

Daniele Loiacono is a reviewer for the following conferences/journals:

- The Journal of Applied Clinical Medical Physics (JACMP), Wiley
- Computer Methods and Programs in Biomedicine (CMPB), Elsevier.
- Computers in Biology and Medicine (CIBM), Elsevier.
- Transactions on Evolutionary Computation (TEC), IEEE.
- Transactions on Computational Intelligence and AI in Games (TCIAIG), IEEE.
- Genetic Programming and Evolvable Machines (GPEM), Springer.
- Evolutionary Computation Journal (ECJ), MIT Press.
- Information Sciences (INS), Elsevier.
- Engineering Computations, Emerald.
- Conference on Computational Intelligence and Games (CIG).
- International Conference on Artificial Neural Networks (ICANN)
- IEEE Congress on Evolutionary Computation (CEC).
- Genetic and Evolutionary Computation Conference (GECCO).
- International Workshop on Learning Classifier Systems (IWLCS).
- Italian Workshop on Evolutionary Computation (GSICE).

Talks and Tutorials

Invited talks

- **Keynote Speaker** at *International Conference of Geomatics and Restoration* (GEORES), 2019, Milan.
- "Learning, evolution and adaptation in racing games" at the 9th ACM Conference on Computing Frontiers, 2012.
- "Evolving Rules with XCSF: Analysis of Generalization and Performance" at the Congress of the Italian Association for Artificial Intelligence, 2005.

Tutorials

- "Computational Intelligence in Games" at the the ACM Genetic and Evolutionary Computation Conference (GECCO), 2012
- "Computational Intelligence in Games" at the the ACM Genetic and Evolutionary Computation Conference (GECCO), 2013

Talks at International Conferences and Workshops

So far, Daniele Loiacono has given more than 30 talks at International Conference and Workshops presenting his works.

Research interests

Generative AI and Machine Learning for Game Design

My research explores how AI can enhance creativity and interactivity in game design. I am particularly interested in leveraging evolutionary computation for procedural content generation, such as racetrack and level design, and using GANs for aesthetic enhancements. I also investigate how intelligent agents—developed through neuroevolution, reinforcement learning, and imitation learning—can create more dynamic and adaptive gameplay experiences. Recently, I have become intrigued by the role of large language models (LLMs) as co-creators, aiming to empower game designers through AI-assisted ideation and narrative development.

Deep Learning applied to Radiotherapy

I am focused on developing deep learning methods that improve precision, efficiency, and privacy in radiotherapy workflows. My interests include automated segmentation for complex treatment targets and organs-at-risk (OARs), synthetic CT generation from MRI data, and dose distribution prediction. I am also investigating federated learning techniques to facilitate collaborative model development across institutions while preserving patient data privacy, thereby enabling safer and more effective treatments.

AI in Construction

My research in construction technology centers on the use of AI for early-stage design optimization. I explore how multi-objective genetic algorithms can support architects and engineers in generating diverse, sustainable, and cost-effective structural solutions. This line of inquiry aims to facilitate more data-informed decision-making processes during the conceptual design phase, balancing economic and environmental priorities.

Virtual and Mixed Reality

I investigate the potential of virtual and mixed reality to transform education, particularly in STEM disciplines. My research focuses on designing immersive learning environments that help users grasp complex spatial and procedural concepts. I conduct empirical evaluations of different VR and MR technologies to understand their pedagogical effectiveness, user engagement, and usability, with the goal of enhancing the educational value of immersive media.

Complete publication list

PUBLICATION LIST

REFEREED INTERNATIONAL JOURNALS

JR.1. Nicola Lambri, Damiano Dei, Ricardo Coimbra Brioso, Leonardo Crespi, DANIELE LOIACONO, Marta Scorsetti, and Pietro Mancosu. Automatic base-dose planning for a robust field junction in total marrow irradiation. *Physica Medica*, 130, 2025.

[doi: https://doi.org/10.1016/j.ejmp.2025.104898]

JR.2. Cinzia Brunelli, Sara Alfieri, Emanuela Zito, Marco Spelta, Laura Arba, Linda Lombi, Luana Caselli, Augusto Caraceni, Claudia Borreani, Anna Roli, Rosalba Miceli, Gabriele Tine, Ernesto Zecca, Marco Platania, Giuseppe Procopio, Nicola Nicolai, Luigi Battaglia, Laura Lozza, Morena Shkodra, Giacomo Massa, DANIELE LOIACONO, and Giovanni Apolone. Patient voices: Multimethod study on the feasibility of implementing electronic patient-reported outcome measures in a comprehensive cancer center. *JMIR Cancer*, 11, 2025.

[doi: https://doi.org/10.2196/56625]

JR.3. Damiano Dei, Nicola Lambri, Leonardo Crespi, Ricardo Coimbra Brioso, DANIELE LOIACONO, Elena Clerici, Luisa Bellu, Chiara De Philippis, Pierina Navarria, Stefania Bramanti, Carmelo Carlo-Stella, Roberto Rusconi, Giacomo Reggiori, Stefano Tomatis, Marta Scorsetti, and Pietro Mancosu. Deep learning and atlas-based models to streamline the segmentation workflow of total marrow and lymphoid irradiation. *Radiologia Medica*, 129(3):515 – 523, 2024.

[doi: https://doi.org/10.1007/s11547-024-01760-8]

JR.4. Nicola Lambri, Damiano Dei, Giulia Goretti, Leonardo Crespi, Ricardo Coimbra Brioso, Marco Pelizzoli, Sara Parabicoli, Andrea Bresolin, Pasqualina Gallo, Francesco La Fauci, Francesca Lobefalo, Lucia Paganini, Giacomo Reggiori, DANIELE LOIACONO, Ciro Franzese, Stefano Tomatis, Marta Scorsetti, and Pietro Mancosu. Machine learning and lean six sigma for targeted patient-specific quality assurance of volumetric modulated arc therapy plans. *Physics and Imaging in Radiation Oncology*, 31, 2024.

[doi: https://doi.org/10.1016/j.phro.2024.100617]

JR.5. Nicola Lambri, Giorgio Longari, DANIELE LOIACONO, Ricardo Coimbra Brioso, Leonardo Crespi, Carmela Galdieri, Francesca Lobefalo, Giacomo Reggiori, Roberto Rusconi, Stefano Tomatis, Luisa Bellu, Stefania Bramanti, Elena Clerici, Chiara De Philippis, Damiano Dei, Pierina Navarria, Carmelo Carlo-Stella, Ciro Franzese, Marta Scorsetti, and Pietro Mancosu. Deep learning-based optimization of field geometry for total marrow irradiation delivered with volumetric modulated arc therapy. *Medical Physics*, 51(6):4402 – 4412, 2024.

[doi: https://doi.org/10.1002/mp.17089]

JR.6. Nicola Lambri, Damiano Dei, Victor Hernandez, Isabella Castiglioni, Elena Clerici, Leonardo Crespi, Chiara De Philippis, DANIELE LOIACONO, Pierina Navarria, Giacomo Reggiori, Roberto Rusconi, Stefano Tomatis, Stefania Bramanti, Marta Scorsetti, and Pietro Mancosu. Automatic planning of the lower extremities for total marrow irradiation using volumetric modulated arc therapy. *Strahlentherapie und Onkologie*, 199(4):412 – 419, 2023.

[doi: https://doi.org/10.1007/s00066-022-02014-0]

JR.7. Nicola Lambri, Victor Hernandez, Jordi Sáez, Marco Pelizzoli, Sara Parabicoli, Stefano Tomatis, DANIELE LOIACONO, Marta Scorsetti, and Pietro Mancosu. Multicentric evaluation of a machine learning model to streamline the radiotherapy patient specific quality assurance process. *Physica Medica*, 110, 2023.

[doi: https://doi.org/10.1016/j.ejmp.2023.102593]

JR.8. Erica Stella, Isabella Agosti, Nicoletta Di Blas, Marco Finazzi, Pier Luca Lanzi, and DANIELE LOIACONO. A virtual reality classroom to teach and explore crystal solid state structures. *Multimedia Tools and Applications*, 82(5):6993 – 7016, 2023.

[doi: https://doi.org/10.1007/s11042-022-13410-0]

JR.9. Damiano Dei, Nicola Lambri, Sara Stefanini, Veronica Vernier, Ricardo Coimbra Brioso, Leonardo Crespi, Elena Clerici, Luisa Bellu, Chiara De Philippis, DANIELE LOIACONO, Pierina Navarria, Giacomo Reggiori, Stefania Bramanti, Marcello Rodari, Stefano Tomatis, Arturo Chiti, Carmelo Carlo-Stella, Marta Scorsetti, and Pietro Mancosu. Internal guidelines for reducing lymph node contour variability in total marrow and lymph node irradiation. *Cancers*, 15(5), 2023.
[doi: https://doi.org/10.3390/cancers15051536]

JR.10. Ciro Franzese, Damiano Dei, Nicola Lambri, Maria Ausilia Teriaca, Marco Badalamenti, Leonardo Crespi, Stefano Tomatis, DANIELE LOIACONO, Pietro Mancosu, and Marta Scorsetti. Enhancing radiotherapy workflow for head and neck cancer with artificial intelligence: A systematic review. *Journal of Personalized Medicine*, 13(6), 2023.
[doi: https://doi.org/10.3390/jpm13060946]

JR.11. Edoardo Giacomello, Pier Luca Lanzi, and DANIELE LOIACONO. An analysis of doom level generation using generative adversarial networks. *Entertainment Computing*, 46, 2023.
[doi: https://doi.org/10.1016/j.entcom.2023.100549]

JR.12. Nicola Lambri, Simone Leopoldo Antonetti, Damiano Dei, Luisa Bellu, Stefania Bramanti, Ricardo Coimbra Brioso, Carmelo Carlo-Stella, Isabella Castiglioni, Elena Clerici, Leonardo Crespi, Chiara De Philippis, Carmela Galdieri, DANIELE LOIACONO, Pierina Navarria, Giacomo Reggiori, Roberto Rusconi, Stefano Tomatis, Marta Scorsetti, and Pietro Mancosu. Impact of the extremities positioning on the set-up reproducibility for the total marrow irradiation treatment. *Current Oncology*, 30(4):4067 – 4077, 2023.
[doi: https://doi.org/10.3390/curroncol30040309]

JR.13. Noemi Gozzi, Edoardo Giacomello, Martina Sollini, Margarita Kirienko, Angela Ammirabile, Pierluca Lanzi, DANIELE LOIACONO, and Arturo Chiti. Image embeddings extracted from cnns outperform other transfer learning approaches in classification of chest radiographs. *Diagnostics*, 12(9), 2022.
[doi: https://doi.org/10.3390/diagnostics12092084]

JR.14. Alper Kanyilmaz, Patricia Raquel Navarro Tichell, and DANIELE LOIACONO. A genetic algorithm tool for conceptual structural design with cost and embodied carbon optimization. *Engineering Applications of Artificial Intelligence*, 112, 2022.
[doi: https://doi.org/10.1016/j.engappai.2022.104711]

JR.15. Pietro Mancosu, Nicola Lambri, Isabella Castiglioni, Damiano Dei, Mauro Iori, DANIELE LOIACONO, Serenella Russo, Cinzia Talamonti, Elena Villaggi, Marta Scorsetti, and Michele Avanzo. Applications of artificial intelligence in stereotactic body radiation therapy. *Physics in Medicine and Biology*, 67(16), 2022.
[doi: https://doi.org/10.1088/1361-6560/ac7e18]

JR.16. Margarita Kirienko, Martina Sollini, Gaia Ninatti, DANIELE LOIACONO, Edoardo Giacomello, Noemi Gozzi, Francesco Amigoni, Luca Mainardi, Pier Luca Lanzi, and Arturo Chiti. Distributed learning: a reliable privacy-preserving strategy to change multicenter collaborations using AI. *European Journal of Nuclear Medicine and Molecular Imaging* vol. 48, pp. 3791–3804, 2021.
[doi: https://doi.org/10.1007/s00259-021-05339-7]

JR.17. Camilla Colombo, Nicoletta Di Blas, Ioannis Gkolias, Pier Luca Lanzi, DANIELE LOIACONO, and Erica Stella. An Educational Experience to Raise Awareness About Space Debris, in *IEEE Access*. vol. 8, pp. 85162-85178, 2020.
[doi: https://doi.org/10.1109/ACCESS.2020.2992327]

JR.18. DANIELE LOIACONO, Luca Arnaboldi. Multi-Objective Evolutionary Map Design for Cube 2: Sauerbraten. *IEEE Transactions on Games*, vol. 11, no. 1, pp. 36–47, March 2019. (Published online 26 April 2018).
[doi: https://doi.org/10.1109/TG.2018.2830746]

JR.19. Luigi Cardamone, Pier Luca Lanzi, DANIELE LOIACONO. TrackGen: An interactive track generator for TORCS and Speed-Dreams. *Applied Soft Computing*, 28: 550–558, 2015.
[doi: https://doi.org/10.1016/j.asoc.2014.11.010]

JR.20. Pier Luca Lanzi, DANIELE LOIACONO. XCSF with tile coding in discontinuous action-value landscapes. *Evolutionary Intelligence*, 8(2-3): 117–132, 2015.
[doi: http://doi.org/10.1007/s12065-015-0129-7]

JR.21. Luigi Cardamone, Pier Luca Lanzi, DANIELE LOIACONO, Enrique Onieva. Advanced overtaking behaviors for blocking opponents in racing games using a fuzzy architecture. *Expert Systems with Applications*, 40(16): 447 –6458, 2013
[doi: http://dx.doi.org/10.1016/j.eswa.2013.04.030]

JR.22. DANIELE LOIACONO, Luigi Cardamone, Pier Luca Lanzi. Automatic Track Generation for High-End Racing Games Using Evolutionary Computation. *Computational Intelligence and AI in Games, IEEE Transactions on*, 3(3):245 –259, sep. 2011.
[doi: http://dx.doi.org/10.1109/TCIAIG.2011.2163692]

JR.23. Luigi Cardamone, DANIELE LOIACONO, Pier Luca Lanzi. Learning to Drive in the Open Racing Car Simulator Using Online Neuroevolution. *Computational Intelligence and AI in Games, IEEE Transactions on*, 2(3):176 –190, sep. 2010.
[doi: http://dx.doi.org/10.1109/TCIAIG.2010.2052102]

JR.24. DANIELE LOIACONO, Pier Luca Lanzi, Julian Togelius, Enrique Onieva, David A. Pelta, Martin V. Butz, Thies D. Lonneker, Luigi Cardamone, Diego Perez, Yago Saez, Mike Preuss and Jan Quadflieg. The 2009 Simulated Car Racing Championship *Computational Intelligence and AI in Games, IEEE Transactions on*, 2(2):131 –147, jun. 2010.
[doi: http://dx.doi.org/10.1109/TCIAIG.2010.2050590]

JR.25. Fabio Dercole, DANIELE LOIACONO, and Sergio Rinaldi. Synchronization in ecological networks: A byproduct of Darwinian evolution? *International Journal of Bifurcation and Chaos*, 17(7):2435 – 2446, 2007.
[doi: http://dx.doi.org/10.1142/S0218127407018506]

JR.26. Pier Luca Lanzi, DANIELE LOIACONO, Stewart W. Wilson, and David E. Goldberg. Generalization in the XCSF classifier system: Analysis, improvement, and extension. *Evolutionary Computation*, 15(2):133–168, 2007.
[doi: http://dx.doi.org/10.1162/evco.2007.15.2.133]

EDITORIAL CONTRIBUTIONS

ED.1. DANIELE LOIACONO, Moshe Sipper. Special issue on GECCO competitions. *Genetic Programming and Evolvable Machines*, 15(4): 375–377, 2014.
[doi: http://doi.org/10.1007/s10710-014-9226-0]

ED.2. DANIELE LOIACONO, Albert Orriols-Puig, Ryan J. Urbanowicz. Special issue on advances in learning classifier systems. *Evolutionary Intelligence*, 5(2): 57-58, June 2012.
[doi: http://dx.doi.org/10.1007/s12065-012-0081-8]

REFEREED CHAPTERS IN INTERNATIONAL BOOKS

IB.1. Martina Sollini, DANIELE LOIACONO, Daria Volpe, Alessandro Giaj Levra, Elettra Lomeo, Edoardo Giacomello, Margarita Kirienko, Arturo Chiti, and Pierluca Lanzi. Artificial Intelligence in Diagnostic Imaging. *Radiology-Nuclear Medicine Diagnostic Imaging*, 2023.
[doi: https://doi.org/10.1002/9781119603627.ch31]

IB.2. G. N. Yannakakis, P. Spronck, DANIELE LOIACONO and E. Andre. Player Modeling. In Simon M. Lucas, Michael Mateas, Mike Preuss, Pieter Spronck, and Julian Togelius, editors, *Artificial and Computational Intelligence in Games*, volume 6 of *Dagstuhl Follow-Ups*, pages 45–59. Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, Dagstuhl, Germany, 2013.
[doi: http://dx.doi.org/10.4230/DFU.Vol6.12191.45]

IB.3. Pier Luca Lanzi and DANIELE LOIACONO. Speeding Up Matching in Learning Classifier Systems using CUDA. In *A Compilation of two exciting workshop years - IWLCS 2008/2009*, J. Bacardit et al. (Eds.), LNAI 6471, pages 1–20. Springer, 2010.
[doi: http://dx.doi.org/10.1007/978-3-642-17508-4_1]

IB.4. DANIELE LOIACONO and Pier Luca Lanzi. Recursive Least Squares and Quadratic Prediction in Continuous Multi-step Problems. In *A Compilation of two exciting workshop years - IWLCS 2008/2009*, J. Bacardit et al. (Eds.), LNAI 6471, pages 70–86. Springer, 2010.
[doi: http://dx.doi.org/10.1007/978-3-642-17508-4_6]

IB.5. Christian Pilato, DANIELE LOIACONO, Antonino Tumeo, Fabrizio Ferrandi, Pier Luca Lanzi and Donatella Sciuto. Speeding-Up Expensive Evaluations in High-Level Synthesis Using Solution Modeling and Fitness Inheritance, In *Computational Intelligence in Expensive Optimization Problems.* Y. Tenne and C.-K. Goh (Eds.), Springer, February 2010, pp. 701-723.
[doi: http://dx.doi.org/10.1007/978-3-642-10701-6]

IB.6. DANIELE LOIACONO and Pier Luca Lanzi. Tile coding based on hyperplane tiles. In *Recent Advances in Reinforcement Learning, 8th European Workshop, EWRL 2008, Villeneuve d'Ascq, France, June 30 - July 3, 2008, Revised and Selected Papers*, volume 5323 of *Lecture Notes in Computer Science*, pages 179–190. Springer, 2008.
[doi: http://dx.doi.org/10.1007/978-3-540-89722-4_14]

IB.7. DANIELE LOIACONO, Jan Drugowitsch, Alwyn Barry, and Pier Luca Lanzi. Analysis and improvements of the classifier error estimate in XCSF. In *Learning Classifier Systems, 10th International Workshop, IWLCS 2006, Seattle, MA, USA, July 8, 2006 and 11th International Workshop, IWLCS 2007, London, UK, July 8, 2007, Revised Selected Papers*, volume 4998 of *Lecture Notes in Computer Science*, pages 117–135. Springer, 2008.
[doi: http://dx.doi.org/10.1007/978-3-540-88138-4_7]

IB.8. Pier Luca Lanzi, DANIELE LOIACONO, and Matteo Zanini. Evolving classifiers ensembles with heterogeneous predictors. In *Learning Classifier Systems, 10th International Workshop, IWLCS 2006, Seattle, MA, USA, July 8, 2006 and 11th International Workshop, IWLCS 2007, London, UK, July 8, 2007, Revised Selected Papers*, volume 4998 of *Lecture Notes in Computer Science*, pages 218–234. Springer, 2008.
[doi: http://dx.doi.org/10.1007/978-3-540-88138-4_13]

REFEREED INTERNATIONAL CONFERENCES

IC.1. Elio Sasso, DANIELE LOIACONO, and Pier Luca Lanzi. A tool for the procedural generation of shaders using interactive evolutionary algorithms. In *2024 IEEE Gaming, Entertainment, and Media Conference, GEM 2024*, 2024.
[doi: https://doi.org/10.1109/GEM61861.2024.10585418]

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