Alessandro Farinelli

Curriculum Vitae

Personal Data

Date of Birth: 18 June, 1976
Current Position: Full Professor, SSD: INF/01
Institution: Università degli Studi di Verona, Dipartimento di Informatica
(Computer Science Department)

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Abstract

Alessandro Farinelli is full professor at University of Verona and Head of the Computer Science Department.

His research interests focus on developing novel methodologies for Artificial Intelligence systems applied to robotics. In particular, he focuses on multi-agent coordination, decentralized optimization, reinforcement learning and data analysis for cyber-physical systems.

Alessandro Farinelli was principal investigator for several national and international research projects in the broad area of Artificial Intelligence. His research contributions target mainly international journals in the area of Artificial Intelligence (e.g., Artificial Intelligence journal and Journal of Artificial Intelligence Research) and Autonomous Robotic Systems (Autonomous Robots and Robotics and Autonomous Systems). The main scientific conferences he contributes to (both as organizer and speaker) include the International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS), the International Joint Conference on Artificial Intelligence (IJCAI) and the International Conference on Intelligent Robots and Systems (IROS).

Education and Career

Career

2021-	Head of Computer Science Department, University of Verona.

2019-	Full Professor at Computer Science Department, University of Verona, SSD INF/01.
2014–2019	Associate Professor at Computer Science Department, University of Verona, SSD INF/01.
2008–2014	Assistant Professor at Computer Science Department, University of Verona, SSD INF/01.
2008	Research Fellow at ECS (Electronic and Computer Science) Southampton University (UK), working with the research group headed by Prof. N. R. Jennings on the project "Control and Management of Autonomous Mobile Sensors" funded by SEAS DTC, Principal Investigators Prof. N. R. Jennings and Dr. Alex Rogers; Period: July 2008–December 2008.
2007–2008	Research Fellow at ECS (Electronic and Computer Science) Southampton University (UK), working with the research group headed by Prof. N. R. Jennings on the project "Market Based Control of Complex Computational Systems" funded by Engineering and Physical Sciences Research Council (EPSRC), Principal Investigator Prof. N. R. Jennings; Period: April 2007–July 2008.
2005–2007	two year post-doc at Dipartimento di Informatica e Sistemistica, Universita' di Roma *La Sapienza* on the project *An integrated framework for situation assessment and task assignment in real rescue scenarios*. Post-Doc Supervisor: Prof. Daniele Nardi; Period April 2005–April 2007.

Education

2005	PhD in Computer Science at Dipartimento di Informatica e Sistemistica (DIS), University of Rome *La Sapienza*. Thesis title: Distributed Task Assignment for Real World Environments.
2001–2004	PhD student with scolarship funded by the ministry of Education at Dipartimento di Informatica e Sistemistica, Università di Roma *La Sapienza*.
2001	Master Degree in Compute Science (Ingegneria Informatica) (5 years curriculum) final grade 110/110 cum Laude at University of Rome *La Sapienza*. Thesis title: Tecniche di pianificazione delle traiettorie in ambiente dinamico.

RESEARCH ACTIVITY

Awards

2023	*Nomination as best paper* for the 22nd International Conference on Autonomous Agents and Multi-Agent Systems

	(AAMAS) 2023, London, UK, Paper title: "Learning Logic Specifications for Soft Policy Guidance in POMCP", Mazzi G., Meli D., Castellini A., Farinelli A.
2018	*Nomination as best paper* for the 15th International Conference on Intelligent Autonomous Systems, Baden-Baden, Germany, Paper title: "Deep Learning Waterline Detection for Low-cost Autonomous Boats", Steccanella L., Bloisi D., Blum J., Farinelli A.
2018	*Best poster* for the 33rd ACM Sysmposium on Applied Computing (SAC), Pau, France, Poster title: "Unsupervised Activity Recognition for Autonomous Water Drones", Castellini A., Beltrame G., Bicego M., Blum J., Denitto M., Farinelli A.
2015	*Nomination as best paper in Innovative Applications Track* at International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS) 2015, Istanbul, Turkey, Paper title: "A Mechanism for Smoothly Handling Human Interrupts in Team Oriented Plans", Farinelli, A., Marchi, N., Raeissi, M. M., Brooks, N., Scerri, P.
2008	*Best Industrial Demo* at International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS) 2008, Estoril, Portogallo, demo title: "Max-Sum Decentralised Coordination for Sensor Systems" Teacy W. T. L., Farinelli A., Grabham N. J., Padhy P., Rogers A., Jennings N. R.
2007	winner of the RoboCup Rescue Infrastructure competition with the Aladdin Rescue team, University of Southampton UK. Team Members: Farinelli A., Ramchurn S. D., Vytelingum P., Vetsikas I.

Research Projects – Principal Investigator

International and national research projects funded on the basis of competitive calls with peer reviews

2024-2027	<u>Title</u>: Development of technologies based on Artificial Intelligence methods for the controlled release of petide-based drugs (Sviluppo di tecnologie basate su metodi di Intelligenza Artificiale per il rilascio controllato di farmaci a base peptidica.) (DigiSprayDrying); <u>Funded by</u>: MIMIT (Ministero dell'Industria e del Made in Italy); <u>Project Duration</u>: 36 months; <u>Role</u>: PI for the University of Verona research unit, €300K. The project funds two research fellowship positions (AdR) for 36 months each.
2020-2021	<u>Title</u>: Intelligent Heating Control based on Reinforcement Learning Techniques; <u>Funded by</u>: University of Verona (Joint projects, cooperation scheme with industrial partners), Industrial partner: Giordano controls s.p.a.; <u>Project Duration</u>:

12 months; Role: PI €160K (University contribution: €80K). The project funded one research contract position (BdR) for 12 months and two research contract positions (BdR) for 6 months.

2017-2018   Title: Active Malware Analysis based on Reinforcement Learning techniques; Funded by: University of Verona (Joint projects, cooperation scheme with industrial partners), Industrial partner: Cythereal Inc., 2017; Project Duration: 12 months; Role: PI €153K (University contribution: €76K). The project funded one research fellowship position (AdR, INF/01) for 12 months, one research contract position (BdR) for 5 months.

2016-2020   Title: Development and application of Novel, Integrated Tools for monitoring and managing Catchments (INTCATCH); Funded by: EU, H2020, WATER-1-2014/2015, 2015; Project Duration: 48 months; Role: PI for the UNIVR research unit on AI and robotics, WP leader (WP4) and technical director for the project, €8.7 M (€370 K for the research unit). The project funded one research fellowship position (AdR, INF/01) for 24 months, three research fellowship position (AdR, INF/01) for 12 months and a temporary faculty position (RTDa, ING-INF/05) at the Computer Science Department, University of Verona.

2013-2014   Title: Controllo automatico di processo per risparmio energetico e recupero di risorse dalle acque reflue (automatic process control for energy saving and resource recovery in waste water management); together with INNOVen s.r.l. and EDALab s.r.l. Funded by: Regione Veneto (Fondo Sociale Europeo), 2013; Project duration: 12 months (2 Research contracts of 12 months each) Role: Principal Investigator, €71 K. The project funded two research fellowship positions (AdR, ING-IND/25 and ING-INF/05), 12 months each, at the Computer Science Department, University of Verona.

Research projects funded by qualified public and private institutions

2022-2023   Title: Comparative analysis of solutions based on evolutionary algorithms for generalized and multi-objective VRP, within the project AIDESS (L.P. n. 6 del 1999 della Provincia di Trento); Funded by: HPA S.p.A.; Role: Principal Investigator, €20K. The project funded one research scolarship positions (BdR) for 8 months.

2022-2023   Title: Development of Artificial Intelligence methods to support insurance policy sales; Funded by: REVO Insurance S.p.A.; Role: Principal Investigator, €63K. The project funded two research scolarship positions (BdR) for 11 months each.

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2017-2018	Title: Data analysis and high level control for autonomous water drones (Analisi dei dati e controllo di alto livello per droni acquatici autonomi;); Partially Funded by: Computer Science Department, University of Verona, 2017; Role: Principal Investigator, €23.5 K (Department contribution €7.936 K). The project funded one research fellowship position (AdR, INF/01) for 12 months.
2016-2017	Title: Data collection and analysis for water monitoring with robotic platforms (Analisi e acquisizione dati per il monitoraggio dell'acqua tramite piattaforme robotiche); Partially Funded by: Computer Science Department, University of Verona, 2016; Role: Principal Investigator, €23.5 K (Department contribution €11.75 K). The project funded one research fellowship position (AdR, INF/01) for 12 months.
2015-2016	Title: Artificial Intelligence models and techniques for sustainable mobility (Sviluppo di modelli e tecniche di Intelligenza Artificiale per la mobilità sostenibile); Partially Funded by: Computer Science Department, University of Verona, 2015; Role: Principal Investigator, €24 K (Department contribution €22 K). The project funded one research fellowship position (AdR, INF/01) for 12 months.
2012-2013	Title: RMASBench: Benchmarking Dynamic Multi-Agent Coordination in Urban Search and Rescue; Together with Linkoeping University and University of Southampton; Funded by: RoboCup Federation, 2012; Project duration: 12 months Role: Principal Investigator for the Research Unit of Verona, US$ 3.9 K.
2011-2012	Title: Agent-Based Coordination Approaches for Intelligent Sensor Networks (Coordinamento multi-agente per reti di sensori intelligenti); Funded by: Computer Science Department, University of Verona, 2011; Role: Principal Investigator, €19 K. The project funded one research fellowship position (AdR, ING-INF/05) for 12 months.
2005-2007	Title: An integrated framework for situation assessment and task assignment in real rescue scenarios; Funded by: EOARD (European Office of Aerospace Research and Development, Award No. FA8655-05-1-3015), 2005; Project duration: 24 months Role: Co-PI, US$ 74 K.

Research Projects – Research Collaborator

2019-2020	Title: ROS-based design and synthesis of monitors for semi-formal verification of robotics applications; Funded by: Istituto Nazionale di Alta Matematica (INdAM); Role: supervisor for the development of multi-robot coordination techniques; Project duration: 12 months.

2019-2020	<u>Title</u>: Model-Based Design and Verification Flow for Embedded Vision Applications; <u>Funded by</u>: Istituto Nazionale di Alta Matematica (INdAM); <u>Role</u>: supervisor for the development of Simultaneous Localization And Mapping (SLAM) techniques that can operate on low-power embedded devices; <u>Project duration</u>: 12 months.
2018-2022	<u>Title</u>: Computer Engineering for Industry 4.0; <u>Funded by</u>: Ministero dell'Istruzione dell'Università e della Ricerca (MIUR), Dipartimenti di Eccellenza; <u>Role</u>: co-supervisor (together with Paolo Fiorini) for the activities related to the development of intelligent robotic systems for Industry 4.0 (Enabling Technology 1: Advanced Manufacturing Solutions); <u>Project duration</u>: 60 months.
2017-2020	<u>Title</u>: Global House Thermal & Electrical Energy Management (GHOTEM); <u>funded by</u>: Regione Veneto (POR - Obiettivo "Incremento dell'attività di innovazione delle imprese" Parte FESR fondo europeo di sviluppo regionale 2014-2020); <u>Role</u>: supervisor for one research fellow position (AdR, 12 months) on topics related to the development of data analysis methods and Artificial Intelligence approaches for energy management in the smart grid; <u>Project duration</u>: 36 months.
2017-2020	<u>Title</u>: "Riposizionamento Competitivo della filiera del legno" (COREWOOD); <u>funded by</u>: Regione Veneto (POR - Obiettivo "Incremento dell'attività di innovazione delle imprese" Parte FESR fondo europeo di sviluppo regionale 2014-2020); <u>Role</u>: supervisor for one research fellow position (AdR, 18 months) on topics related to the development of data analysis methods and Artificial Intelligence approaches for energy management in smart buildings; <u>Project duration</u>: 36 months.
2016-2018	<u>Title</u>: EXPO-AGRI: EXtra-field Plant Observation for monitoring and forecast of agricultural infections; <u>Funded by</u>: Regione Veneto (Fondo Sociale Europeo); <u>Role</u>: research manager for the AI activities; <u>Project duration</u>: 24 months.
2008-2009	<u>Title</u>: Control and Management of Autonomous Mobile Sensors <u>Funded by</u>: SEAS DTC (Systems Engineering for Autonomous Systems Defence Technology Centre, UK, Contract No. C/WPE/N03751); <u>Role</u>: development of decentralized optimization techniques for coordinating low-power devices; <u>Project duration</u>: 30 months.
2005-2009	<u>Title</u>: Market Based Control of Complex Computational Systems <u>Funded by</u>: EPSRC (Engineering and Physical Sciences Research Council - EPSRC Reference GR/T10664/01);

	Role: development of decentralized constraint optimization techniques for multi-agent system coordination; Project Duration: 60 months.
2003-2005	Title: Sistemi di simulazione e robotici per l'intervento in scenari di emergenze (Simulation and robotic systems for operation in emergency scenarios) Funded by: MIUR (2003 - prot. 2003097252); Role: development of coordination approaches for multi-robot system operating in rescue scenarios; Project duration: 24 months.
2003-2006	Title: RoboCare Funded by: MIUR (2002); Role: development of path planning techniques for service robots; Project duration: 36 months.

Research Visits

2008–2009	Research visitor in the agent group headed by Prof. N. R. Jennings, ECS (Electronic and Computer Science) University of Southampton, UK; Period: December 2008–May 2009.
2003–2004	Research visitor in the Teamcore Research Group, headed by Prof. Milind Tambe, University of Southern California, Los Angeles, CA, USA; Period: November 2003–June 2004.

National and International collaborations

Delft, NL	Delft University of Technology, The Netherlands. Main collaborator: Matthijs Spaan
Chania, GR	Collaboration with Technical University of Crete (TUC). Main collaborator: Prof. Georgios Chalkiadakis.
USRA, US	Research agreement with Universities Space Research Association (USRA) for the use of quantum machines (the D-Wave). Main Collaborator: Dr. Davide Venturelli.
Barcelona, ES	IIIA-CSIC, Main collaborators: Dr. Juan-Antonio Rodriguez Aguilar, Dr. Jesus Cerquides Bueno, Dr. Pedro Meseguer.
Bar Ilan, IL	Industrial Engineering and Management, Ben Gurion University of the Negev. Main collaborators: Dr. Roie Zivan, Dr. Harel Yedidsion
California, US	TEAMCORE research group, University of Southern California. Main collaborators: Prof. Milind Tambe.
Minneapolis, US	College of Science and Engineering, University of Minnesota. Main collaborators: Prof. Maria Gini.
Pittsburgh, US	Robotic Institute, Carnegie Mellon University. Main collaborators: Dr. Paul Scerri.

Padova, IT	Intelligent Autonomous System Laboratory (IAS-Lab), Dipartimento di Ingegneria dell'Informazione (DEI), Università degli studi di Padova. Main collaborators: Prof. Enrico Pagello, Prof. Emanuele Menegatti.	
Roma, IT	Dipartimento di Ingegneria Informatica, Automatica e Gestionale (DIAG), Sapienza Università di Roma. Main collaborators: Prof. Daniele Nardi, Prof. Luca Iocchi.	
Southampton, UK	Cooperation agreement with Southampton University for exchanging PhD students, Post-Docs and researchers.	
Southampton, UK	Agents, Interaction and Complexity Group, Electronics and Computer Science (ECS), Faculty of Physical Sciences and Engineering. Main collaborators: Dr. Sarvapali Ramchurn, Dr. Alex Rogers, Prof. Nick Jennings.	

Publications

Bibliometric Indices

Bibliometric indicators according to google scholar and scopus databases (last updated May 2024)

	Google Scholar	Scopus
Number of publications	292	205
H-index	35	25
Number of citations	5799	3044

Publications

For international journals the classification according to Scimago[1] is reported, indicating also the subject category. The reported classification refers to the year of publication. For the publications of 2024 the last available data is reported (i.e., 2023).

International Journals

[J.1] Meli, D., Castellini, A., Farinelli, A. Learning Logic Specifications for Policy Guidance in POMDPs: an Inductive Logic Programming Approach (2024) *Journal of Artificial Intelligence Research*; **(Q1, Artificial Intelligence)**; doi: 10.1613/jair.1.15826

[J.2] Fenoy, A., Bistaffa, F., Farinelli, A. An attention model for the formation of collectives in real-world domains (2024) *Artificial Intelligence* **(Q1, Artificial Intelligence)**; doi: 10.1016/j.artint.2023.104064.

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[1] https://www.scimagojr.com/

[J.3] Castellini, A., Masillo, F., Azzalini, D., Amigoni, F., Farinelli, A. Adversarial Data Augmentation for HMM-Based Anomaly Detection (2023) *IEEE Transactions on Pattern Analysis and Machine Intelligence* (**Q1, Artificial Intelligence**), 45(12), 2023, 10.1109/TPAMI.2023.3303099.

[J.4] Mazzi, G., Castellini, A., Farinelli, A. Risk-aware shielding of Partially Observable Monte Carlo Planning policies (2023) *Artificial Intelligence* (**Q1, Artificial Intelligence**), 324, 2023, doi: 10.1016/j.artint.2023.103987.

[J.5] Zuccotto, M, Piccinelli, M., Castellini, A., Marchesini, E., Farinelli, A. Learning State-Variable Relationships in POMCP: A Framework for Mobile Robots. (2022) *Frontiers in Robotics and AI* (**Q2, Artificial Intelligence**), 2022, doi: 10.3389/frobt.2022.819107.

[J.6] Castellini, A., Bianchi, F., Farinelli, A. Generation and interpretation of parsimonious predictive models for load forecasting in smart heating networks (2022) *Applied Intelligence* (**Q2, Artificial Intelligence**), 52(9), 2022, doi: 10.1007/s10489-021-02949-4.

[J.7] Bistaffa, F., Chalkiadakis, G., Farinelli, A. Efficient Coalition Structure Generation via Approximately Equivalent Induced Subgraph Games (2022) *IEEE Transactions on Cybernetics* (**Q1, Computer Science Applications**), 52(6), 2022, doi: 10.1109/TCYB.2020.3040622.

[J.8] Bistaffa, F., Blum, C., Cerquides, J., Farinelli, A., Rodriguez-Aguilar, J.A. A Computational Approach to Quantify the Benefits of Ridesharing for Policy Makers and Travellers (2021) *IEEE Transactions on Intelligent Transportation Systems* (**Q1, Computer Science Applications**), 22 (1), art. no. 8917688, pp. 119-130, doi: 10.1109/TITS.2019.2954982.

[J.9] Denitto, M., Bicego, M., Farinelli, A., Vascon, S., Pelillo, M. Biclustering with dominant sets (2020) *Pattern Recognition* (**Q1, Artificial Intelligence**), 104, art. no. 107318, doi: 10.1016/j.patcog.2020.107318.

[J.10] Castellini, A., Bicego, M., Masillo, F., Zuccotto, M., Farinelli, A. Time series segmentation for state-model generation of autonomous aquatic drones: A systematic framework (2020) *Engineering Applications of Artificial Intelligence* (**Q1, Artificial Intelligence**), 90, art. no. 103499, doi: 10.1016/j.engappai.2020.103499.

[J.11] Steccanella, L., Bloisi, D.D., Castellini, A., Farinelli, A. Waterline and obstacle detection in images from low-cost autonomous boats for environmental monitoring (2020) *Robotics and Autonomous Systems* (**Q1, Computer Science Applications**), 124, art. no. 103346, doi: 10.1016/j.robot.2019.103346.

[J.12] Sartea, R., Farinelli, A., Murari, M. SECUR-AMA: Active Malware Analysis Based on Monte Carlo Tree Search for Android Systems (2020) *Engineering Applications of Artificial Intelligence* (**Q1, Artificial Intelligence**), 87, art. no. 103303, doi: 10.1016/j.engappai.2019.103303.

[J.13] Raeissi, M. M., Farinelli, A. Cooperative Queuing Policies for Effective Scheduling of Operator Intervention. *Autonomous Robots* (**Q1, Artificial**

Intelligence), 44 (3-4)(first online: 15 July 2019), pp. 617-626, ISSN: 0929-5593, 2020, doi:10.1007/s10514-019-09877-w .

[J.14] Bottarelli, L., Bicego, M., Blum, J., Farinelli, A. Orienteering-based informative path planning for environmental monitoring. *Engineering Applications of Artificial Intelligence* **(Q1, Artificial Intelligence)**, 77, pp. 46-58, ISSN: 0952-1976, 2019, doi:10.1016/j.engappai.2018.09.015

[J.15] Bistaffa, F., Farinelli, A. A COP model for graph-constrained coalition formation. *Journal of Artificial Intelligence Research* **(Q1, Artificial Intelligence)**, 62, pp. 133-153, ISSN: 1076-9757, 2018, doi:10.1613/jair.1.11205

[J.16] Yedidsion, H., Zivan, R., Farinelli, A. Applying max-sum to teams of mobile sensing agents. *Engineering Applications of Artificial Intelligence* **(Q1, Artificial Intelligence)**, 71, pp. 87-99, ISSN: 0952-1976, 2018, doi:10.1016/j.engappai.2018.02.017

[J.17] Bottarelli, L., Bicego, M., Denitto, M., Di Pierro, A., Farinelli, A., Mengoni, R. Biclustering with a quantum annealer. *Soft Computing* **(Q2, Theoretical Computer Science)**, 22 (18), pp. 6247-6260, ISSN: 1432-7643, 2018, doi:10.1007/s00500-018-3034-z

[J.18] Parker, J., Farinelli, A., Gini, M. Lazy max-sum for allocation of tasks with growing costs. *Robotics and Autonomous Systems* **(Q1, Computer Science Applications)**, 110, pp. 44-56, ISSN: 0921-8890, 2018, doi:10.1016/j.robot.2018.08.015

[J.19] Bicego, M., Farinelli, A., Grosso, E., Paolini, D., Ramchurn, S. D. On the distinctiveness of the electricity load profile. *Pattern Recognition*, **(Q1, Artificial Intelligence)**, 74, pp. 317-325, ISSN: 0031-3203, 2018, doi:10.1016/j.patcog.2017.09.039

[J.20] Denitto, M., Farinelli, A., Figueiredo, M. A. T., Bicego, M. A biclustering approach based on factor graphs and the max-sum algorithm. *Pattern Recognition* **(Q1, Artificial Intelligence)**, 62, pp. 114-124, ISSN: 0031-3203, 2017, doi:10.1016/j.patcog.2016.08.033

[J.21] Bistaffa, F., Farinelli, A., Chalkiadakis, G., Ramchurn, S. D. A cooperative game-theoretic approach to the social ridesharing problem. *Artificial Intelligence* **(Q1, Artificial Intelligence)**, 246, pp. 86-117, ISSN: 0004-3702, 2017, doi:10.1016/j.artint.2017.02.004

[J.22] A. Farinelli, M. Bicego, F. Bistaffa, S. D. Ramchurn. A hierarchical clustering approach to large-scale near-optimal coalition formation with

quality guarantees. *Engineering Applications of Artificial Intelligence* (**Q1, Artificial Intelligence**), 59, pp. 170-185, ISSN: 0952-1976, 2017, doi:10.1016/j.engappai.2016.12.018

[J.23] A. Farinelli, N. Boscolo, E. Zanotto, E. Pagello. Advanced approaches for multi-robot coordination in logistic scenarios. *Robotics and Autonomous Systems* (**Q1, Artificial Intelligence**), 90, pp. 34-44, ISSN: 0921-8890, 2017, doi:10.1016/j.robot.2016.08.010

[J.24] F., Lezama, J., Palominos, A.Y., Rodríguez-González, A., Farinelli, E., Munoz de Cote. Agent-Based Microgrid Scheduling: An ICT Perspective. *Mobile Networks and Applications* (**Q1, Computer Networks and Communications**), pp. 1-17, ISSN: 1383-469X, 2017, doi:10.1007/s11036-017-0894-x.

[J.25] F. Bistaffa, A. Farinelli, J. Cerquides, J. Rodríguez-Aguilar, S. D. Ramchurn. Algorithms for graph-constrained coalition formation in the real world. *ACM Transactions on Intelligent Systems and Technology* (**Q1, Artificial Intelligence**), 8 (4), art. no. 60, pp. 1-24, ISSN: 2157-6904, 2017, doi:10.1145/3040967

[J.26] F. Bistaffa, N. Bombieri, A. Farinelli. An Efficient Approach for Accelerating Bucket Elimination on GPUs. *IEEE Transactions on Cybernetics* (**Q1, Computer Science Applications**), 47 (11), pp. 3967-3979, ISSN: 2168-2267, 2017, doi:10.1109/TCYB.2016.2593773

[J.27] M., Roncalli, F., Bistaffa, A., Farinelli. Decentralized Power Distribution in the Smart Grid with Ancillary Lines: An Approach Based on Distributed Constraint Optimization. *Mobile Networks and Applications* (**Q1, Computer Networks and Communications**), pp. 1-9, ISSN:1383-469X, 2017, doi:10.1007/s11036-017-0893-y.

[J.28] A. Farinelli, L. Iocchi, D. Nardi. Distributed on-line dynamic task assignment for multi-robot patrolling. *Autonomous Robots* (**Q1, Artificial Intelligence**), 41 (6), pp. 1321-1345, ISSN: 0929-5593, 2017, doi:10.1007/s10514-016-9579-8

[J.29] A. Farinelli, M. M. Raeissi, N. Marchi, N. Brooks, P. Scerri. Interacting with team oriented plans in multi-robot systems. *Autonomous Agents and Multi-Agent Systems* (**Q2, Artificial Intelligence**), 31 (2), pp. 332-361, ISSN: 1387-2532, 2017, doi:10.1007/s10458-016-9344-6

[J.30] M. Denitto, M., Bicego, A., Farinelli, M.A.T., Figueiredo. Spike and slab biclustering. *Pattern Recognition* (**Q1, Artificial Intelligence**), 72, pp.

186-195, ISSN: 0031-3203, 2017, doi:10.1016/j.patcog.2017.07.021

[J.31] M. Tamassia, A. Farinelli, V. Murino, and A. Del Bue. Directional Visual Descriptors and Multirobot Strategies for Large-Scale Coverage Problems. *Journal of Field Robotics* (**Q1, Computer Science Applications**), 33(4): pp. 489-511, ISSN: 1556-4959, 2016, doi:10.1002/rob.21612

[J.32] M. Vinyals, K. S. Macarthur, A. Farinelli, S. D. Ramchurn, N. R. Jennings. A message-passing approach to decentralised parallel machine scheduling. *The Computer Journal* (**Q2, Computer Science (miscellaneous)**), 57(6): pp. 856-874, ISSN: 0010-4620, 2014, doi: 10.1093/comjnl/bxt140.

[J.33] J. Cerquides, A. Farinelli, P. Meseguer, S. D. Ramchurn. A Tutorial on Optimization for Multi-Agent Systems. *The Computer Journal* (**Q2, Computer Science (miscellaneous)**), 57(6): pp. 799-824, ISSN: 0010-4620, 2014, doi: 10.1093/comjnl/bxt146

[J.34] A. Farinelli, A. Rogers, N. R. Jennings. Agent-based decentralised coordination for sensor networks using the max-sum algorithm. *Journal of Autonomous Agents and Multi-Agent Systems* (**Q2, Artificial Intelligence**), 28(3): pp. 337-380, ISSN: 1387-2532, 2014, doi:10.1007/s10458-013-9225-1.

[J.35] A. Farinelli, D. Nardi, R. Pigliacampo, M. Rossi, and G. P. Settembre. Cooperative situation assessment in a maritime scenario. *International Journal of Intelligent Systems* (**Q1, Artificial Intelligence**), 27(5): pp. 477-501, ISSN: 0884-8173, 2012, doi:10.1002/int.21532.

[J.36] A. Rogers, A. Farinelli, R. Stranders, N. R. Jennings. Bounded approximate decentralised coordination via the max-sum algorithm. *Artificial Intelligence* (**Q1, Artificial Intelligence**), 175(2):pp. 730-759, ISSN: 0004-3702, 2011, DOI:10.1016/j.artint.2010.11.001.

[J.37] A. Farinelli, H. Fujii, N. Tomoyasu, M. Takahashi, A. D'Angelo, E. Pagello. Cooperative control through objective achievement. *Robotics and Autonomous Systems* (**Q1, Computer Science Applications**),58(7): pp. 910-920, ISSN: 0921-8890, 2010, doi:10.1016/j.robot.2010.03.012.

[J.38] S. D. Ramchurn, A. Farinelli, K. S. Macarthur, N. R. Jennings. Decentralized Coordination in RoboCup Rescue. *Computer Journal* (**Q1, Computer Science (miscellaneous)**), 53(9): pp. 1447-1461, ISSN: 0010-4620, 2010, doi:10.1093/comjnl/bxq022.

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Intelligent Systems **(Q2, Computer Science (miscellaneous))**, 24(8-9): pp. 763-777, ISSN:1556-4959, 2007, doi:10.1002/rob.20216.

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[C.95] P. Scerri, A. Farinelli, S. Okamoto, and M. Tambe. Allocating Tasks in Extreme Teams. In *Proceedings of the 4th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 05)*, pp. 727–734, Utrecht, Netherland, ISBN: 1-59593-093-0 2005.

[C.96] D. Calisi, A. Farinelli, L. Iocchi, and D. Nardi. Autonomous navigation and exploration in a rescue environment. In *Proceedings of the IEEE International Workshop on Safety, Security and Rescue Robotics (SSRR 2005)*, Kobe, Japan, June 2005.

[C.97] P. Scerri, A. Farinelli, S. Okamoto, and M. Tambe. Token Approach for Role Allocation in Extreme Teams: analysis and experimental evaluation. In *Proc. of 13th IEEE International Workshops on Enabling Technologies: Infrastructures for Collaborative Enterprises (WETICE-2004).*, pp. 397–402, Modena; Italy. ISBN: 0-7695-2183-5, 2004.

[C.98] F. Cottefoglie, A. Farinelli, L. Iocchi, and D. Nardi. Dynamic token generation for constrained tasks in a Multi-Robot System. In *International Conference on Systems, Man and Cybernetics (SMC 2004)*, pp. 911–917, The Hague, The Netherlands, ISBN: 0-7803-8567-5 2004.

[C.99] P. Scerri, A. Farinelli, S. Okamoto, and M. Tambe. Allocating roles in extreme team. In *Proceedings of the 3rd International Conference on Autonomous Agents and Multi-Agent Sytems (AAMAS 2004)*, pp. 1500–1501, New York, USA, 2004.

[C.100] A. Farinelli, G. Grisetti, and L. Iocchi. Spqr-rdk: a modular framework for programming mobile robots. In *RoboCup 2004: Robot Soccer World Cup VIII*, pp. 653–660. ISBN: 3-540-25046-8 Springer Verlag Berlin, Heidelberg 2005.

[C.101] A. Farinelli, G. Grisetti, L. Iocchi, S. Lo Cascio, and D. Nardi. Design and Evaluation of Multi Agent Systems for Rescue Operations. In *Proc. of IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2003)*, pp. 3138–3143, Las Vegas, Nevada, ISBN:0-7803-7861-X (USA) 2003.

[C.102] A. Farinelli, L. Iocchi, and D. Nardi. An Analysis of Coordination in Multi-Robot Systems. In *Proc. of IEEE Int. Conf. on Systems, Man and Cybernetics (SMC 2003)*, pp. 1487–1492, Wachington D. C., (USA), ISBN:0-7803-7953-5 2003.

[C.103] A. Farinelli and L. Iocchi. Planning trajectories in dynamic environments using a gradient method. In *RoboCup 2003: Robot Soccer World Cup VII*, pp. 320–331. Springer Verlag Berlin, Heidelberg, 2004.

[C.104] A. Farinelli, G. Grisetti, L. Iocchi, S. Lo Cascio, and D. Nardi. Robocup rescue simulation: Methodologies, tools and evaluation for practical applications. In *RoboCup 2003: Robot Soccer World Cup VII*, Padua, Italy, pp. 645–652. Springer Verlag Berlin, Heidelberg, 2004.

[C.105] F. D'Agostino, A. Farinelli, G. Grisetti, L. Iocchi, and D. Nardi. Monitoring and Information Fusion for Search and Rescue Operations in Large-Scale Disasters. In *Proceedings of IEEE International Conference Information Fusion (IF 2002)*, pp. 672–679, AnnaPolis, Maryland, (USA), ISBN:0-9721844-0-6 July 2002.

International Workshops (with peer review)

[W.1] Castellini, A., Blum, J., Bloisi, D., Farinelli, A. Intelligent battery management for aquatic drones based on task difficulty driven POMDPs. In *CEUR Workshop Proceedings*, 2352, pp. 1-5, 2019.

[W.2] Denitto, M., Bicego, M., Farinelli, A., Pelillo, M. Dominant set biclustering. In *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 10746 LNCS, pp. 49-61, 2018.

[W.3] Castellini, A., Beltrame, G., Bicego, M., Bloisi, D., Blum, J., Denitto, M., Farinelli, A. Activity recognition for autonomous water drones based on unsupervised learning methods. In *CEUR Workshop Proceedings*, 2054,

pp. 16-21, 2017.

[W.4] L. Steccanella, A., Farinelli, L., Iocchi, D., Nardi. Coloured Petri Net Plans for cooperative multi-robot systems. In *CEUR Workshop Proceedings*, 1834, pp. 51-55, 2017.

[W.5] L. Bottarelli, M., Bicego, J., Blum, N., Bombieri, A., Farinelli, L., Veggian. Orienteering-based path selection for mobile sensors. In *CEUR Workshop Proceedings*, 1834, pp. 36-40, 2017.

[W.6] A. Jeradi, M.M., Raeissi, A, Farinelli, N., Brooks, P., Scerri. Focused exploration for cooperative robotic watercraft. In *CEUR Workshop Proceedings*, vol. 1544, pp. 89–93, 2015.

[W.7] A. Chapman, A. Farinelli, S. D. Ramchurn. Robust Distributed Constraint Optimization. In *International Joint Workshop on Optimisation in Multi-Agent Systems (OPTMAS 15)*, held in conjuction with AAMAS 2015.

[W.8] J. Parker, A. Farinelli and M. Gini Decentralized allocation of tasks with costs changing over time. In *Second Workshop on Synergies between Multiagent Systems, Machine Learning and Complex Systems (TRI 2015)*, held in conjunction with IJCAI 2015.

[W.9] Marc Pujol-Gonzalez, Jesus Cerquides, Alessandro Farinelli, Pedro Meseguer and Juan Antonio Rodriguez Aguilar. Binary max-sum for multi-team task allocation in RoboCup Rescue. In *International Joint Workshop on Optimisation in Multi-Agent Systems and Distributed Constraint Reasoning (OPTMAS-DCR 14)*, May 5, 2014, Paris, France.

[W.10] Filippo Bistaffa, Alessandro Farinelli, Jesús Cerquides, Juan A. Rodríguez-Aguilar and Sarvapali D. Ramchurn. Anytime Coalition Structure Generation on Scale-Free and Community Networks. In *International Joint Workshop on Optimisation in Multi-Agent Systems and Distributed Constraint Reasoning (OPTMAS-DCR 14)*, May 5, 2014, Paris, France.

[W.11] Luca Iocchi, Alessandro Farinelli and Daniele Nardi. Distributed On-Line Coordination for Multi-Robot Patrolling. In *International Workshop on Autonomous Robots and Multirobot Systems(ARMS 14)* May 6, 2014, Paris, France.

[W.12] M. Vinyals, F. Bistaffa, A. Farinelli, and A. Rogers. Stable coalition formation among energy consumers in the smart grid. Proceedings of the 3rd International Workshop on Agent Technologies for Energy Systems (ATES 2012)

[W.13] K. Macarthur, M. Vinyals, A. Farinelli, S. Ramchurn, and N. R. Jennings. Decentralised Parallel Machine Scheduling for Multi-Agent Task Allocation. In *Fourth International Workshop on Optimisation in Multi-Agent Systems (OPTMAS 11)*, May 3, 2011, Taipei, Taiwan.

[W.14] K. Macarthur, A. Farinelli, S. Ramchurn, N. R. Jennings. Efficient, Superstabilizing Decentralised Optimisation for Dynamic Task Allocation Environments. In *Proc. of International Workshop on: Optimisation in Multi-Agent Systems (OptMas)* at the Ninth Joint Conference on Autonomous and Multi-Agent Systems, 10 May 2010, Toronto, Canada. pp. 25-32.

[W.15] A. Farinelli, A. Rogers, N. R. Jennings Bounded Approximate Decentralised Coordination using the Max-Sum Algorithm. In *In Proc. of IJCAI-09 Workshop on Distributed Constraint Reasoning (DCR)*, 13th July 2009, Pasadena, California, USA.

[W.16] A. Farinelli, A. Rogers, N. R. Jennings. Maximising Sensor Network Efficiency Through Agent-Based Coordination of Sense/Sleep Schedules In *WEWSN 2008 Workshop on Energy in Wireless Sensor Networks* to be held in conjuction with DCOSS 2008, Santorini Island, Greece, June 2008.

[W.17] A. Farinelli and P. Scerri. Low-overhead cooperative detection of false sensor readings. In *Proc. of AAMAS workshop: Challenges in the Coordination of Large Scale Multi-Agent Systems (LSMAS)*, pp. 11–16, Utrecht, July 2005.

[W.18] S. Bahadori, D. Calisi, A. Censi, A. Farinelli, G. Grisetti, L. Iocchi, and D. Nardi. Intelligent systems for search and rescue. In *Proc. of IROS Workshop "Urban search and rescue: from Robocup to real world applications"*, 2004.

[W.19] A. Farinelli, P. Scerri, and M. Tambe. Building large-scale robot systems: Distributed role assignment in dynamic, uncertain domains. In *Representation and approaches for time-critical decentralized resources/role/task allocation (AAMAS WorkShop)*, 2003.

[W.20] A. Farinelli, G. Grisetti, L. Iocchi, and D. Nardi. Coordination in dynamic environments with constraint on resources. In *IROS Workshop on Cooperative Robotics*, Lausanne, Switzerland, October 2002.

[W.21] A. Farinelli, G. Grisetti, L. Iocchi, D. Nardi, and R. Rosati. Generation and execution of partially correct plans in dynamic environments. In *Proc. of 3rd Int. Cognitive Robotics Workshop (COGROB'02)*, Edmonton, Canada, 2002.

Seminars and Presentations

Tutorials

[T.1] Coordination approaches for teams of mobile robots, two lessons, 3.5 hours in total, offered for the 2019 Advanced Course on AI (ACAI)/ Hellenic Artificial Intelligence Summer School (HAISS), sponsored by EurAI and EETN (Hellenic AI society).

[T.2] Distributed Constraint Optimization in Multi-Agent Systems Dipartimento di Ingegneria informatica automatica e gestionale Antonio Ruberti,

Sapienza Università di Roma. Two lessons, two hours each, PhD course on "Competition and Cooperation in Multi-Agent Systems" course organizers: Stefano Leonardi and Luca Iocchi.

[T.3] Distributed search and constraint handling two lessons, two hours each, offered for the summer school EASSS 2012 (European Agent Systems Summer School). Tutors: Alessandro Farinelli, Alex Rogers, Meritxell Vinyals. June 2012, Valencia, Spain.

[T.4] Team Coordination in Multiagent Systems one lesson, two hours, offered for the workshop: Austrian Robotics Workshop. Tutor: Alessandro Farinelli. May 2012, Graz, Austria.

[T.5] Optimization in Multi Agent Systems Full day tutorial offered at IJ-CAI 11 (four sessions, two hours each). Tutors: Alessandro Farinelli, Jesús Cerquides, Sarvapali D. Ramchurn, Pedro Meseguer, Juan A. Rodriguez-Aguilar. July 2011, Barcelona, Spain.

Seminars

[S.1] Safe Reinforcement Learning for Intelligent Robotic Systems: challenges and current trends, Skema business school, online, 2023.

[S.2] IA per la cooperazione tra sistemi multi-robot nelle fabbriche intelligenti, Biennale Macchine Utensili (BI-MU), panel, Milano, 2022.

[S.3] Safe Reinforcement Learning for Intelligent Robotic Systems, Intelligent Robotics Lab, Birmingham University, online, 2023.

[S.4] Safe Reinforcement Learning for Intelligent Robotic Systems, Invited talk at Artificial Intelligence and RObotics (AIRO) workshop, co-located with AIxIA, Udine, Italy, 2021.

[S.5] Recent advances on optimization approaches for joint decision making in Multi-Agent Systems, Università degli Studi di Padova, Padova, Italy, 2014.

[S.6] A Graphical Model Approach to Decentralized Coordination for Robotic Agents, Istitute for Systems and Robotics (ISR) Lisbon, Portugal, 2012.

[S.7] Agent Coordination Using the Max-Sum Algorithm, Istituto Italiano di Tecnologia (IIT), Genova, Italy, 2011.

[S.8] Agent Coordination Using the Max-Sum Algorithm, Universita' degli Studi di Padova, Padova, Italy, 2011.

[S.9] Factored Decentralised Coordination of embedded Agents, Università degli studi di Sevilla, Sevilla, Spain, 2010.

[S.10] Decentralised Coordination Using the Max-Sum Algorithm, University of Southern California (USC), Los Angeles, U.S., 2009.

[S.11] Decentralised Coordination of Low-Power Embedded Devices Using the Max-Sum Algorithm, Southampton University, Science and Engineering of Natural Systems, Southampton, 2008.

[S.12] Distributed Coordination for Robotic Agents, University of Birmingham, Artificial Intelligence and Natural Computation Seminar, Birmingham, 2008.

[S.13] Cooperative Behaviors Using Local Interactions, Università La Sapienza di Roma, Dipartimento di Informatica e Sistemistica, Roma, 2007.

[S.14] Token Passing approach to Task Assignment, Southampton University, Intelligence, Agents and Multimedia group, Agent seminars, Southampton, 2007.

[S.15] Design, Development and Evaluation of Coordinated Multi-Robot Systems, Università Federico II, Dipartimento di Scienze Matematiche Fisiche e Naturali, Napoli, 2007.

[S.16] Tool per il coordinamento di sistemi multi-agente, Selex Sistemi Integrati, Roma, 2007.

[S.17] Distributed Task Assignment for Real World Environment, Daghstul Seminars, Multi-Robot Systems: Perception, Behaviors, Learning, and Action, Dagstuhl, N. 06251,19.06.-23.06.06, 2006.

SUPERVISION OF PhD STUDENTS

Supervisor

2022-	Luca Marzari. Thesis subject: "Formal Verification for Safe Deep Reinforcement Learning". (PhD cycle XXXVIII).
2019-2023	Davide Corsi. Thesis title: "Safe Deep Reinforcement Learning: Enhancing the Reliability of Intelligent Systems". (PhD cycle XXXV). Davide Corsi is a Postdoctoral Associate at University o f California Irvine (updated on 2024).
2019-2023	Adrià Fenoy. Thesis title: "Combining Optimization and Machine Learning for the Formation of Collectives". (PhD cycle XXXV). Adrià Fenoy is an AI engineer at MeteoSim (updated on 2024)
2018-2023	Giulio Mazzi. Thesis title: "Rule-Based Policy Interpretation and Shielding for Partially Observable Monte Carlo Planning" (PhD cycle XXXIV).
2018-2022	Enrico Marchesini. Thesis title: "Enhancing Exploration and Safety in Deep Reinforcement Learning". (PhD cycle XXXIV). Erico Marchesini is a Postdoctoral Associate at Massachusetts Institute of Technology (MIT) (updated on 2024).
2016-2021	Riccardo Sartea. Thesis title: "Active Malware Analysis based on reinforcement learning techniques". (PhD cycle XXXII). Riccardo Sartea is Data Scientist at Amazon Web Services (AWS) (updated on 2024).

2015–2018	Lorenzo Bottarelli. Thesis Title: "Optimizing Information Gathering for Environmental Monitoring Applications". (PhD Cycle XXXI). Lorenzo Bottarelli is head of Machine Learning at Ignitia AB (updated on 2024).
2014–2017	Masoume M. Raeissi. Thesis Title: "Modeling Supervisory Control in Multi-Robot Applications". (PhD cycle XXX). Masoume Raeissi is Research Associate (AI) at Wageningen University & Research (updated on 2024)
2013–2015	Filippo Bistaffa. Thesis Title: "Constraint Optimisation Techniques for Real-World Applications". (PhD Cycle XXVIII). Winner of a Marie Curie grant, title: *Collectiveware: Highly-parallel algorithms for collective intelligence* (Grant N. 751608); host institution: *Artificial Intelligence Research Institute (IIIA-CSIC)*, start date: 16 June 2017, duration 24 months. The PhD thesis of Filippo Bistaffa was awarded the AIxIA honorable mention in 2017. Filippo Bistaffa is tenured researcher at IIIA-CSIC (updated on 2024)

Co-supervisor

2021-	Francesco Trotti. Thesis subject: "A model-based reinforcement learning control system for multi agent planning under uncertainty exploiting agent's dynamic model" (PhD cycle XXXVII); supervisor: Riccardo Muradore.
2021-	Federico Bianchi. Thesis subject: "Safe Policy Improvement via Monte Carlo Tree Search" (PhD cycle XXXVII); supervisor: Alberto Castellini.
2020-	Maddalena Zuccotto. Thesis subject: "Learning in Monte-Carlo Tree-Search Planning" (PhD cycle XXXVI); supervisor: Alberto Castellini.

ACTIVITY AS EDITOR AND REVIEWER

Editor

2024-	Standard Editor for AIJ (Artificial Intelligence Journal). AIJ is classified as Q1 for the subject category "Artificial Intelligence" (Scimago)
2019-	Associate Editor for JAIR (Journal of Artificial Intelligence Research). JAIR is classified as Q1/Q2 (depending on the year) for the subject category "Artificial Intelligence" (Scimago)
2011	Guest Editor for a special issue of the Journal of Autonomous Agents and Multi-Agent Systems (JAAMAS), Vol. 22(3),

2011. Special issue title: Optimization in Multi-Agent Systems. JAAMAS in 2011 was classified as Q2 for the subject category "Artificial Intelligence" (Scimago).

Organization of International Conferences and Workshops

2019	Area Chair for IEEE MRS (IEEE International Symposium on Multi-robot and Multi-agent Systems), 2019.
2019	Co-Chair for the International Conference on "Smarter Catchment Monitoring, Cleaner Waters", 2019. Co-chair: Mark Scrimshaw.
2018	Mentor for the Doctoral Symposium at the International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2018)
2018	Co-organizer for the workshop AIRO-18: Artificial Intelligence and Robotics, co-located with the AIxIA 2018 conference (Associazione Italiana per Intelligenza Artificiale). Co-organizers: Alberto Finzi, Fulvio Mastrogiovanni, Salvatore Anzalone.
2018	Co-chair of the demonstration track at the International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2018); Co-chair: Iolanda Leite.
2017	Co-organizer for the workshop AIRO-17: Artificial Intelligence and Robotics, co-located with the AIxIA 2017 conference (Associazione Italiana per Intelligenza Artificiale). Co-organizers: Alberto Finzi, Fulvio Mastrogiovanni, Salvatore Anzalone.
2017	Co-chair of the robotics track at the International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2017); Co-chair: Chris Amato.
2016	Co-organizer for the workshop AIRO-16: Artificial Intelligence and Robotics, co-located with the AIxIA 2016 conference (Associazione Italiana per Intelligenza Artificiale). Co-organizers: Alberto Finzi, Fulvio Mastrogiovanni.
2016	Co-organizer for the workshop ARMS16: Autonomous Robots and Multi-Robot Systems co-located with the International Conference on Autonomous Agents and Multi-Agent systems (AAMAS 16). Co-organizers: G. Kaminka, K. Hindriks, N. Agmon, Manuela Veloso, Maria Gini, Daniele Nardi, Pedro Lima, Erol Sahin.
2015	Co-organizer for the workshop ARMS15: Autonomous Robots and Multi-Robot Systems co-located with the International Conference on Autonomous Agents and Multi-Agent systems (AAMAS 15). Co-organizers: G. Kaminka, K. Hindriks, N.

	Agmon, Manuela Veloso, Maria Gini, Daniele Nardi, Pedro Lima, Erol Sahin.
2015	Co-chair of the robotics track at the International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2015); Co-chair: Gal Kaminka.
2014	Mentor for the Doctoral Symposium at the International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2014)
2014	Co-organizer for the workshop ARMS14: Autonomous Robots and Multi-Robot Systems co-located with the International Conference on Autonomous Agents and Multi-Agent systems (AAMAS 14). Co-organizers: G. Kaminka, K. Hindriks, N. Agmon, Manuela Veloso, Maria Gini, Daniele Nardi, Pedro Lima, Erol Sahin.
2013	Associate Editor for the International Conference IEEE/RSJ Intelligent Robots and Systems (IROS 2013).
2013	Exhibition Chair for the International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2013).
2013	Co-organizer for the workshop OPTMAS13: Optimisation in Multi-Agent Systems co-located with the International Conference on Autonomous Agents and Multi-Agent systems (AAMAS 13). Co-organizers: J.C. Bueno, J.A. Aguilar-Rodriguez, A. Chapman, S. Ramchurn, M. Vinyals.
2013	Co-organizer for the workshop ARMS13: Autonomous Robots and Multi-Robot Systems co-located with the International Conference on Autonomous Agents and Multi-Agent systems (AAMAS 13). Co-organizers: G. Kaminka, K. Hindriks, J. Boerkoel, N. Agmon.
2013	Associate Editor for the International Conference IEEE/RSJ Intelligent Robots and Systems (IROS 2013).
2012	Co-organizer for the workshop OPTMAS12: Optimisation in Multi-Agent Systems co-located with the International Conference on Autonomous Agents and Multi-Agent systems (AAMAS 12). Co-organizers: J.C. Bueno, J.A. Aguilar-Rodriguez, S. Ramchurn, M. Vinyals.
2011	Co-organizer for the workshop OPTMAS11: Optimisation in Multi-Agent Systems co-located with the International Conference on Autonomous Agents and Multi-Agent systems (AAMAS 11). Co-organizers: J.C. Bueno, J.A. Aguilar-Rodriguez, S. Ramchurn.
2010	Co-organizer for the workshop OPTMAS10: Optimisation in Multi-Agent Systems co-located with the International Conference on Autonomous Agents and Multi-Agent systems

(AAMAS 10). Co-organizers: J.C. Bueno, J.A. Aguilar-Rodriguez, S. Ramchurn.

2009   Co-organizer for the workshop OPTMAS09: Optimisation in Multi-Agent Systems co-located with the International Conference on Autonomous Agents and Multi-Agent systems (AAMAS 09). Co-organizers: J.C. Bueno, J.A. Aguilar-Rodriguez, S. Ramchurn.

2009   Co-organizer for the workshop ADAPT: Agent Design: Advancing from Theory to Practice co-located with the International Conference on Autonomous Agents and Multi-Agent systems (AAMAS 09). Co-organizers: N. Schurr, R. Maheswaran,

2006–2007   Member of the technical committee for the organization of the RoboCup Rescue Virtual Robot competitions

Programme committee and reviewer

- **Programme Committee member for several editions of the following international conferences**

  - Autonomous Agent and Multi Agent Systems (AAMAS);
  - International Joint Conference on artificial Intelligence (ICAI);
  - AAAI conference on Artificial Intelligence (Association for the Advancement of Artificial Intelligence)
  - International Conference of Machine Learning (ICML)
  - IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR)
  - Neural Information Processing Systems (NeurIPS)
  - Uncertainty in AI (UAI)
  - European Conference on Artificial Intelligence (ECAI)
  - Intelligent Autonomous Systems (IAS 2013, 2014, 2018)
  - ACM Symposium on Applied Computing (ACM-SAC 2018, 2019, 2020)

- **Reviewer for international journals**

  - Artificial Intelligence Journal;
  - International Journal of Artificial Intelligence Research;
  - International Journal of Autonomous Agents and Multi-Agent Systems;
  - IEEE transaction on System, Man and Cybernetics (part A,C);
  - International Journal on Multi-Sensor, Multi-Source Information Fusion;
  - AI Communications;

- Expert Systems;

- Advances in Complex Systems;

- IEEE Transactions on Robotics;

- Computer Journal.

Expert evaluator for research projects

- Netherlands Organisation for Scientific Research (NWO)

- Israel Science Foundation

3 June 2024
Alessandro Farinelli