

ALESSANDRO FARINELLI

CURRICULUM VITAE

PERSONAL DATA

Date of Birth: 18 June, 1976

Current Position: Associate Professor, SSD: INF/01

Institution: Università degli Studi di Verona, Dipartimento di Informatica
(Computer Science Department)

Memberships to professional associations and research centers:

– Institute of Electrical and Electronics Engineers (IEEE)

– Center for BioMedical Computing (CBMC)

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ABSTRACT

Alessandro Farinelli is an associate professor at University of Verona, Department of Computer Science, since December 2014. His research interests comprise theoretical and practical issues related to the development of Artificial Intelligent Systems applied to robotics. In particular, he focuses on coordination, decentralized optimization and information integration for Multi-Agent and Multi-Robot systems, control and evaluation of autonomous mobile robots and sensor networks.

He participated in several national and international research projects in the broad area of Artificial Intelligence for robotic systems. In particular, in 2003 he was a research visitor of the TEAMWORK research group headed by prof. Milind Tambe at the University of Southern California, and from 2007 to 2009 he was a research fellow in the agents group headed by Prof. Nick Jennings at the University of Southampton.

Alessandro Farinelli co-authored 60 plus peer-reviewed scientific contributions and presented his work in several international conferences (among which ICRA, AAMAS, and AAI). He was invited to give seminars in several research institutes such as: Italian Institute of Technology (IIT); University of Southern California (USC) and the Institute for Systems and Robotics, ISR-Lisbon.

He is member of program committees for top international conferences in AI, such as: AAMAS (2008, 2009, 2010,2011,2012), AAI (2010,2012, 2013, 2014);

associate editor for IROS (2012; 2013) and senior PC member for AAMAS (2014). He served as a reviewer for several top journal in AI and robotics (e.g., IEEE TRO, AIJ, JAAMAS).

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EDUCATION AND CAREER

Career

2014–present	Associate Professor at Dipartimento di Informatica (Computer Science Deptment), Università degli Studi di Verona, SSD INF/01.
2008–2014	Assistant Professor at Dipartimento di Informatica (Computer Science Deptment), Università degli Studi di 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 (EP-SRC), Principal Investigator Prof. N. R. Jennings; Period: April 2007–July 2008.

2005–2007 two year post-doc at Dipartimento di Informatica e Sistemistica, Università 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 Aprile 2006–April 2007.

Education

2005 PhD in Computer Science at Dipartimento di Informatica e Sistemistica (DIS), Università di Roma *La Sapienza*. Thesis title: Distributed Task Assignment for Real World Environments.

2001–2004 Phd student with scholarship 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 Università di Roma *La Sapienza*. Thesis title: Tecniche di pianificazione delle traiettorie in ambiente dinamico.

RESEARCH ACTIVITY

Awards

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” W. T. L. Teacy, A. Farinelli, N. J. Grabham, P. Padhy, A. Rogers, N. R. Jennings.

2007 winner of the RoboCup Rescue Infrastructure competition with the Aladdin Rescue team, University of Southampton UK. Team Members: Alessandro Farinelli, Sarvapali Ramchurn, Perukrishnen Vytelingum, Ioannis Vetsikas

2004 Best paper at the second International Workshop on: Theory and Practice of Open Computational System (TAPOCS) [C.38].

Research Projects

Principal Investigator

External founding bodies

- FSE13 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); Project duration: 12 months (2 Research contracts of 12 months each) Role: Principal Investigator, €71000.
- ROBOCUP 2012 Title: RMAStBench: Benchmarking Dynamic Multi-Agent Coordination in Urban Search and Rescue; Together with Linköping University and University of Southampton; funded by: RoboCup Federation; Project duration: 12 months Role: Principal Investigator for the Research Unit of Verona, US\$ 3900.
- EOARD 2005 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); Project duration: 24 months Role: Co-PI, US\$ 74000.

Internal Founding Bodies

- PRIN 2012 **INCENTIVE** Title: “DRUMS: Distributed Robotic Urban Multisensor Surveying” (Prot. 2012MWRA5L); Role: Principal Investigator for the research unit of Verona; Evaluation: accepted to the second phase; incentive funded by Dipartimento di Informatica dell’Università di Verona for projects that were positively evaluated but not funded.
- FIRB 2010 **INCENTIVE** Title: “TEMODYCE - Tecnologie abilitanti e modelli innovativi per l’analisi di video distribuiti in ambienti dinamici e affollati” (TEMODYCE - enabling TEchnologies and innovative MOdels for distributed video analysis in DYnamic and Crowded Environments) (Prot. RBFR101DKL); Role: Principal Investigator for the Research Unit of Verona; Evaluation: 55/60; incentive funded by Dipartimento di Informatica dell’Università di Verona for projects that were positively evaluated but not funded.
- 2010–2011 Title: “Coordinamento multi-agente per reti di sensori intelligenti” (Agent-Based coordinated solutions for intelligent sensor networks) Role: Funded by Dipartimento di Informatica dell’Università di Verona (one year research contract per 1 anno).

PRIN 2009 **INCENTIVO** Title: “Navigazione e Coordinamento per robot mobili integrati con reti di sensori” (Navigation and coordination of mobile robots integrated with sensor networks.) (Prot. 2009WY3Y8E);
Role: Principal Investigator for the Research Unit of Verona
Valutazione: 57/60, incentive funded by Dipartimento di Informatica dell’Università di Verona for projects that were positively evaluated but not funded.

Research Collaborator

SEAS-DTC 2008 Title: Control and Management of Autonomous Mobile Sensors Funded by: SEAS DTC (Systems Engineering for Autonomous Systems Defence Technology Centre, UK, Contract No. C/WPE/N03751) Project duration: 30 months.

EPSRC 2007 Title: Market Based Control of Complex Computational Systems Funded by: EPSRC (Engineering and Physical Sciences Research Council - EPSRC Reference GR/T10664/01) Project Duration: 60 months.

MIUR 2003 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) Project duration: 24 months.

MIUR 2003 Title: RoboCare Funded by: MIUR (2002) 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

Barcelona, Spain IIIA-CSIC, Main collaborators: Dr. Juan-Antonio Rodriguez Aguilar, Dr. Jesus Cerquides Bueno, Dr. Pedro Meseguer.

Bar Ilan, Israele 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 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 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

PUBLICATION LIST

International Journals

- [J.1] 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*, 28(3): pp. 337-380, ISSN: 1387-2532, 2014; doi:10.1007/s10458-013-9225-1.
- [J.2] 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*, 57(6): pp. 856-874, ISSN: 0010-4620, 2014; doi: 10.1093/comjnl/bxt140.
- [J.3] J. Cerquides, A. Farinelli, P. Meseguer, S. D. Ramchurn. A Tutorial on Optimization for Multi-Agent Systems. *The Computer Journal*, 57(6): pp. 799-824, ISSN: 0010-4620, 2014; doi: 10.1093/comjnl/bxt146
- [J.4] A. Farinelli, D. Nardi, R. Pigliacampo, M. Rossi, and G. P. Settembre. Cooperative situation assessment in a maritime scenario. *International Journal of Intelligent Systems*, 27(5): pp. 477-501, ISSN: 0884-8173, 2012; doi:10.1002/int.21532.
- [J.5] A. Rogers, A. Farinelli, R. Stranderson, N. R. Jennings. Bounded approximate decentralised coordination via the max-sum algorithm. *Artificial Intelligence*, 175(2):pp. 730-759, ISSN: 0004-3702, 2011;

DOI:10.1016/j.artint.2010.11.001.

- [J.6] S. D. Ramchurn, A. Farinelli, K. S. Macarthur, N. R. Jennings. Decentralized Coordination in RoboCup Rescue. *Computer Journal* 53(9): pp. 1447-1461, ISSN: 0010-4620, 2010; doi:10.1093/comjnl/bxq022.
- [J.7] A. Farinelli, H. Fujii, N. Tomoyasu, M. Takahashi, A. D'Angelo, E. Pagello. Cooperative control through objective achievement. *Robotics and Autonomous Systems* 58(7): pp. 910-920, ISSN: 0921-8890, 2010; doi:10.1016/j.robot.2010.03.012.
- [J.8] D. Calisi, A. Farinelli, L. Iocchi, D. Nardi. Multi-Objective Exploration and Search for Autonomous Rescue Robots. *Journal of Field Robotics, special issue on Quantitative Performance Evaluation of Robotic and Intelligent Systems*, 24(8-9): pp. 763-777, ISSN:1556-4959, 2007; doi:10.1002/rob.20216.
- [J.9] A. Farinelli, L. Iocchi, D. Nardi, and V. A. Ziparo. Assignment of Dynamically Perceived Tasks by Token Passing in Multirobot systems. *Proceedings of the IEEE, Special issue on Multi-Robot Systems*, 94(7): pp. 1271-1288, ISSN:0018-9219, 2006; doi:10.1109/JPROC.2006.876937.
- [J.10] A. Farinelli, G. Grisetti, and L. Iocchi. Design and implementation of modular software for programming mobile robots. *International Journal of Advanced Robotic Systems, special issue on Software Development and Integration in Robotics*, 3(1):pp. 37-42, ISSN 1729-8806, March 2006; doi: 10.5772/5760.
- [J.11] A. Farinelli, L. Iocchi, and D. Nardi. Multirobot systems: A Classification Focused on Coordination. *IEEE Transactions on System Man and Cybernetics, part B*, 34(5): pp. 2015-2028, ISSN:1083-4419, 2004; doi:10.1109/TSMCB.2004.832155.

Book Chapters

- [B.1] A. Farinelli, M. Vinyals, A. Rogers, N. R. Jennings. Chapter 12: Distributed Constraint Handling and Optimization. In *Multiagent Systems*, MIT press, 2013.
- [B.2] A. Rogers, A. Farinelli, N. R. Jennings. Self-organising Sensors for Wide Area Surveillance Using the Max-sum Algorithm. In *n: LNCS 6090 Lecture Notes in Computer Science. Self-Organizing Architectures*, pp. 84-100, Springer, 2010.
- [B.3] A. Farinelli, L. Iocchi, D. Nardi. Monitoring Search and Rescue Operations in Large-Scale Disasters. In *Data Fusion for Situation Monitoring Incident*

Detection Alert and Response Management; Shahbazian E., Ragova G., Valin P. editors. pp. 659-670. ISBN: 1-58603-536-3. Amsterdam: IOS Press (Netherlands), 2005.

- [B.4] A. Farinelli, L. Iocchi, D. Nardi, and F. Patrizi. Task assignment with dynamic token generation. In *Monitoring, Security, and Rescue Techniques in Multiagent Systems, 2004*. Dunin-Keplicz B., Jankowski A., Skowron, A., Szczuka M. editors. pp. 467–478. ISBN: 3-540-23245-1. Springer Berlin, Heidelberg, 2005.
- [B.5] P. Scerri, D. V. Pynadath, N. Schurr, A. Farinelli, S. Gandhe, M. Tambe. Team Oriented Programming and Proxy Agents: The Next Generation. In *Programming Multi-Agent Systems*. Dastani, M. and Dix, J. and El Fallah-Seghrouchni, A. editors. pp. 131–148. ISBN: 978-3-540-22180-7. Springer Berlin, Heidelberg, 2004.

PhD Thesis

- [T.1] A. Farinelli. *Distributed Task Assignment for Real World Environments*. PhD thesis, Università degli Studi di Roma “La Sapienza” Dipartimento di Informatica e Sistemistica “Antonio Ruberti”, 2004.

International Conferences

- [C.1] F. Bistaffa, A. Farinelli, Sarvapali D. Ramchurn. Sharing rides with friends: a coalition formation algorithm for ridesharing. In, AAAI Conference on Artificial Intelligence 2015, Austin, US, 25 - 29 Jan 2015. 7pp. (Accepted).
- [C.2] M. Tamassia, A. Del Bue, V. Murino, A. Farinelli. A Directional Visual Descriptor for Large-Scale Coverage Problems. In Proceedings of International Conference on Intelligent Robots and Systems (IROS2014), pp 1038–1045, 2014.
- [C.3] M. Bicego, F. Recchia, A. Farinelli, S. D. Ramchurn, E. Grosso. Behavioural biometrics using electricity load profiles. In Proceedings of the 22nd International Conference on Pattern Recognition (ICPR 2014), (accepted).
- [C.4] M. Denitto, A. Farinelli, G. Franco, and M. Bicego. A binary Factor Graph model for biclustering. In Proceedings of International Workshop on Statistical Techniques in Pattern Recognition (S+SSPR), 8621 LNCS, pp. 393–403, 2014.
- [C.5] F. Bistaffa, A. Farinelli, J. Cerquides, J. Antonio Rodriguez-Aguilar, S. Ramchurn. Anytime Coalition Structure Generation on Synergy Graphs. In Proceedings of the 2014 international conference on Autonomous agents and multi-agent systems (AAMAS 2014), pp 13–20, ISBN: 978-1-4503-2738-1, 2014.

- [C.6] H. Yedidsion, R. Zivan, A. Farinelli. Explorative Max-sum for Teams of Mobile Sensing Agents. In Proceedings of the 2014 international conference on Autonomous agents and multi-agent systems (AAMAS2014), pp 549–556, ISBN: 978-1-4503-2738-1, 2014.
- [C.7] A. Del Bue, Marco Tamassia, Fabio Signorini, Vittorio Murino, A. Farinelli. Visual Coverage Using Autonomous Mobile Robots for Search and Rescue Applications. In *Proc. of IEEE International Symposium on Safety, Security and Rescue Robotics (SSRR 2013)*, Linkoping, Sweden, October 2013.
- [C.8] F. Bistaffa, A. Farinelli. A fast approach to form core-stable coalitions based on a dynamic model. In: Proceedings of the International Conference on Intelligent Agent Technology (IAT 2013) (November 2013).
- [C.9] A. Farinelli, M. Bicego, R. Sarvapali, and M. Zucchelli. C-Link: a hierarchical clustering approach to large-scale near-optimal coalition formation. In *Proceedings of the 23rd International Joint Conference on Artificial Intelligence (IJCAI)*, pp. 106-112, ISBN: 978-1-57735-633-2, 2013.
- [C.10] A. Kleiner, A. Farinelli, S. Ramchurn, B. Shi, F. Maffioletti, R. Reffato. RMAStBench: benchmarking dynamic multi-agent coordination in urban search and rescue (Extended Abstract). In Proceedings of the 2013 international conference on Autonomous agents and multi-agent systems (AAMAS 2013). International Foundation for Autonomous Agents and Multiagent Systems, pp. 1195-1196, 2013.
- [C.11] F. Maffioletti, R. Reffato, A. Farinelli, A. Kleiner, S. Ramchurn, B. Shi. RMAStBench: a benchmarking system for multi-agent coordination in urban search and rescue (Demonstration Paper). Proceedings of the 2013 international conference on Autonomous agents and multi-agent systems (AAMAS 2013), pp. 1383–1384, 2013
- [C.12] N. Boscolo, Nicolás, R. De Battisti, M. Munaro, A. Farinelli, E. Pagello. A Distributed Kinodynamic Collision Avoidance System under ROS. In *Intelligent Autonomous Systems 12 (IAS)*, pp. 511-521, 2013.
- [C.13] F. Bistaffa, A. Farinelli, M. Vinyals, and A. Rogers. Decentralised stable coalition formation among energy consumers in the smart grid (demonstration). In Proceedings of the 2012 international conference on Autonomous agents and multi-agent systems (AAMAS Demos), 2012, pp. 1461-1462.
- [C.14] F. M. Delle Fave, A. Farinelli, A. Rogers, and N. R. Jennings. A Methodology for Deploying the Max-Sum Algorithm and a Case Study on Unmanned Aerial Vehicles. In Proceedings of the 24th Innovative Applications of Artificial Intelligence Conference (IAAI), Toronto, CA, 2275-2280, 2012.
- [C.15] M. Vinyals, F. Bistaffa, A. Farinelli, and A. Rogers. Coalitional energy purchasing in the smart grid. In Energy Conference and Exhibition (ENERGYCON), 2012 IEEE International, Sep. 2012, pp. 848 -853.

- [C.16] L. Teacy, G. Chalkiadakis, A. Farinelli, A. Rogers, N. Jennings, G. Parr, S. McClean. Decentralized Bayesian Reinforcement Learning for Online Agent Collaboration. In Proceedings of the 2012 international conference on Autonomous agents and multi-agent systems (AAMAS 2012), pp. 417-424, ISBN: 0-9817381-1-7, 2012.
- [C.17] A. Farinelli, M. Denitto, M. Bicego. Biclustering of expression microarray data using Affinity Propagation. In: *Proc. of The 6th IAPR Int. Conf. on Pattern Recognition in Bioinformatics (PRIB 2011)*, 2-4 Nov 2011, Delft The Netherlands.
- [C.18] N. Stefanovitch, A. Farinelli, A. Rogers, N. R. Jennings. Resource-Aware Junction Trees for Efficient Multi-Agent Coordination. In *Proc. of The Tenth International Conference on Autonomous Agents and Multi-agent Systems (AAMAS 2011)*, pp. 363-370, 2-6 May 2011, Taipei, Taiwan.
- [C.19] M. Vinyals, J. Cerquides, A. Farinelli, J. A. Rodríguez-Aguilar. Worst-case bounds on the quality of max-product fixed-points. In *Lafferty, J., Advances in Neural Information Processing Systems 23: 24th Annual Conference on Neural Information Processing Systems (NIPS)*, pp. 2325-2333, ISBN: 9781617823800, 2010.
- [C.20] S. D. Ramchurn, M. Polukarov, A. Farinelli, K. S. Macarthur, N. R. Jennings. Coalition Formation with Spatial and Temporal Constraints. In *Proc. of The Ninth International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2010)*, pp. 1181-1188, May 2010, Toronto, Canada.
- [C.21] N. Stefanovitch, A. Farinelli, A. Rogers, N. R. Jennings. Efficient Multi-Agent Coordination Using Resource-Aware Junction Trees. In *Proc. of The Ninth International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2010)*, pp. 1413-1414, May 2010, Toronto Canada. [Short paper]
- [C.22] A. Chapman, A. Farinelli, J. E. Munoz De Cote Flores Luna, A. Rogers and N. R. Jennings. A Distributed Algorithm for Optimising over Pure Strategy Nash Equilibria. In *Proc. of Twenty-Fourth AAAI Conference on Artificial Intelligence (AAAI 2010)*, pp. 749-755, July, 2010, Atlanta, Georgia, USA.
- [C.23] R. Stranders, A. Farinelli, A. Rogers, N. R. Jennings. Decentralised Coordination of Mobile Sensors Using the Max-Sum Algorithm. In *Proceedings of the 21st International Joint Conference on Artificial Intelligence (IJCAI)*, pp. 299-304, ISBN: 9781577354260, 2009.
- [C.24] R. Stranders, A. Farinelli, A. Rogers, N. R. Jennings. Decentralised Control of Continuously Valued Control Parameters using the Max-Sum Algorithm. In *Proceedings of 8th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2009)*, pp. 601-608, May 2009, Budapest.

- [C.25] G. P., Settembre, A. Farinelli, D. Nardi, R. Pigliacampo, M. Rossi. Solving disagreements in a Multi-Agent System performing Situation Assessment. In: *Proceedings of The International Conference on Information Fusion (IF-09)*, pp. 717-724, July, Seattle, WA, USA.
- [C.26] A. Farinelli, A. Rogers, A. Petcu, N. R. Jennings. Decentralised Coordination of Low-Power Embedded Devices Using the Max-Sum Algorithm. In *Proceedings of the 7th International Conferences on Autonomous and Agents and Multi Agent Systems (AAMAS)*, pp. 639-646, ISBN: 97809817381162008, 2008.
- [C.27] G. Settembre, P. Scerri, A. Farinelli, K. Sycara, D. Nardi. A Decentralized Approach to Cooperative Situation Assessment in Multi-Robot Systems. In *Proceedings of 7th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2008)*, Estoril, Portugal, pp 31-38, 2008.
- [C.28] A. Farinelli, P. Scerri, A. Ingenito, D. Nardi. Dealing with Perception Errors in Multi-Robot System Coordination. In *Proceedings of the Joint International Conference on Artificial Intelligence (IJCAI 2007)*, Hyderabad, India, pp 2091-2096, 2007.
- [C.29] A. Farinelli, A. Finzi, T. Lukasiewicz. Team Programming in Golog under Partial Observability. In *Proceedings of the Joint International Conference on Artificial Intelligence (IJCAI 2007)*, Hyderabad, India, pp 2097-2102, 2007.
- [C.30] G. D. Tipaldi, A. Farinelli, L. Iocchi, D. Nardi. Heterogeneous Feature State Estimation with Rao-Blackwellized Particle Filters. In *Proceedings of IEEE International Conference on Robotics and Automation (ICRA 2007)*, pp 3850-3855, Rome, Italy, ISBN 1-4244-0601-3, 2007.
- [C.31] S. La Cesa, A. Farinelli, L. Iocchi, D. Nardi, M. Sbarigia, M. Zaratti. Semi-Autonomous Coordinated Exploration in Rescue Scenarios. In *RoboCup 2007: Robot Soccer World Cup XI*, pp. 286-293, 2008.
- [C.32] L. Fanelli, A. Farinelli, L. Iocchi, D. Nardi, G. P. Settembre. Ontology-based Coalition Formation in Heterogeneous MRS. In *Proceedings of International Symposium on Practical Cognitive Agents and Robots*, pp 105-116, Perth, Australia, 2007.
- [C.33] V. A. Ziparo, A. Kleiner, L. Marchetti, A. Farinelli, D. Nardi. Cooperative Exploration for USAR Robots with Indirect Communication. In *Proceedings of the 6th IFAC Symposium on Intelligent Autonomous Vehicles*, Toulouse, France, September 2007.
- [C.34] A. Farinelli, L. Iocchi, D. Nardi. Conflict Resolution with Minimal Communication Bandwidth. In *Proc. of IEEE Workshop on Distributed Intelligent Systems*, Prague. pp. 7-12, Los Alamitos California (USA), ISBN: 0-7695-2589-X 2006.
- [C.35] A. Farinelli, L. Iocchi, D. Nardi, and V. A. Ziparo. Task assignment with Dynamic Perception and Constrained Tasks in a Multi-Robot System. In

Proc. of the IEEE Int. Conf. on Robotics and Automation (ICRA 2005), pp. 1535–1540, Barcelona, Spain, ISBN:0-7803-8915-8 2005.

- [C.36] 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.37] 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.38] 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, Los Alamitos California (USA) ISBN: 0-7695-2183-5 2004.
- [C.39] 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.40] 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 Systems (AAMAS 2004)*, pp. 1500–1501, New York, USA, 2004.
- [C.41] 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.42] 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.43] 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.44] 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.45] 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.46] 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] 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.2] 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.3] 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.4] 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.5] 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.6] 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.7] 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.8] 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 conjunction with DCOSS 2008, Santorini Island, Greece, June 2008.

- [W.9] 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.10] 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.11] 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.12] 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.13] 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] 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.2] 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.3] Team Coordination in Multiagent Systems one lesson, two hours, offered for the workshop: Austrian Robotics Workshop. Tutor: Alessandro Farinelli. May 2012, Graz, Austria.
- [T.4] Optimization in Multi Agent Systems Full day tutorial offered at IJCAI 11 (four sessions, two hours each). Tutors: Alessandro Farinelli, Jesús Cerquides, Sarvapali D. Ramchurn, Pedro Meseguer, Juan A. Rodríguez-Aguilar. July 2011, Barcelona, Spain.

Seminars

- [S.1] Recent advances on optimization approaches for joint decision making in Multi-Agent Systems, Università degli Studi di Padova, Padova, Italy, 2014.
- [S.2] A Graphical Model Approach to Decentralized Coordination for Robotic Agents, Institute for Systems and Robotics (ISR) Lisbon, Portugal, 2012.
- [S.3] Agent Coordination Using the Max-Sum Algorithm, Istituto Italiano di Tecnologia (IIT), Genova, Italy, 2011.
- [S.4] Agent Coordination Using the Max-Sum Algorithm, Università degli Studi di Padova, Padova, Italy, 2011.
- [S.5] Factored Decentralised Coordination of embedded Agents, Università degli studi di Sevilla, Sevilla, Spain, 2010.
- [S.6] Decentralised Coordination Using the Max-Sum Algorithm, University of Southern California (USC), Los Angeles, U.S., 2009.
- [S.7] Decentralised Coordination of Low-Power Embedded Devices Using the Max-Sum Algorithm, Southampton University, Science and Engineering of Natural Systems, Southampton, 2008.
- [S.8] Distributed Coordination for Robotic Agents, University of Birmingham, Artificial Intelligence and Natural Computation Seminar, Birmingham, 2008.
- [S.9] Cooperative Behaviors Using Local Interactions, Università La Sapienza di Roma, Dipartimento di Informatica e Sistemistica, Roma, 2007.
- [S.10] Token Passing approach to Task Assignment, Southampton University, Intelligence, Agents and Multimedia group, Agent seminars, Southampton, 2007.
- [S.11] Design, Development and Evaluation of Coordinated Multi-Robot Systems, Università Federico II, Dipartimento di Scienze Matematiche Fisiche e Naturali, Napoli, 2007.
- [S.12] Tool per il coordinamento di sistemi multi-agente, Selex Sistemi Integrati, Roma, 2007.
- [S.13] Distributed Task Assignment for Real World Environment, Dagstuhl Seminars, Multi-Robot Systems: Perception, Behaviors, Learning, and Action, Dagstuhl, N. 06251,19.06.-23.06.06, 2006.

Presentations to Conferences and Workshops

- [P.1] Distributed On-Line Coordination for Multi-Robot Patrolling *AAMAS workshop: International Workshop on Autonomous Robots and Multirobot Systems (ARMS 14)*, May 6, 2014, Paris, France. (Oral Presentation).

- [P.2] A. Farinelli, M. Bicego, R. Sarvapali, and M. Zucchelli. C-Link: a hierarchical clustering approach to large-scale near-optimal coalition formation International Joint Conference on Artificial Intelligence (IJCAI), Beijing, CN, 03 - 09 Aug 2013, (Poster presentation).
- [P.3] Visual Coverage Using Autonomous Mobile Robots for Search and Rescue Applications. IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR 2013), Linkoping, Sweden, 2013, (Oral presentation).
- [P.4] RMAStBench: a Benchmarking System for Multi-Agent Coordination in Urban Search and Rescue (Demonstration). Demo session presso International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 13), St. Paul, Minneapolis, USA, (Demonstration and Poster Presentation).
- [P.5] Coalitional energy purchasing in the smart grid. In Energy Conference and Exhibition (ENERGYCON), 2012 IEEE International, Sep. 2012, (Oral Presentation).
- [P.6] Max-Sum Decentralised Coordination for Sensor Systems (Demonstration). *Workshop su Distributed Constraint Reasoning (DCR 10)* presso International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 10), Toronto, Canada, (Oral Presentation).
- [P.7] Bounded Approximate Decentralised Coordination using the Max-Sum Algorithm. *Workshop su Distributed Constraint Reasoning (DCR 09)* presso International Joint Conference on Artificial Intelligence (IJCAI 09), Pasadena, U.S, (Oral Presentation).
- [P.8] Maximising Sensor Network Efficiency Through Agent-Based Coordination of Sense/Sleep Schedules. *WEWSN 2008 Workshop on Energy in Wireless Sensor Networks* Santorini Island, Greece, June, 2008, (Oral Presentation).
- [P.9] Decentralised Coordination of Low-Power Embedded Devices Using the Max-Sum Algorithm. In *In Proc. of AAMAS 08*, Estoril, Portugal, 2008 (Oral Presentation).
- [P.10] Dealing with Perception Errors in Multi-Robot System Coordination *Joint Int. Conf. on Artificial Intelligence (IJCAI-07)*, Hyderabad, India, 2007 (Poster Presentation).
- [P.11] Conflict Resolution with Minimal Communication Bandwidth *IEEE Workshop on Distributed Intelligent Systems*, Prague, 2006, (Oral Presentation).
- [P.12] Autonomous navigation and exploration in a rescue environment. *IEEE International Workshop on Safety, Security and Rescue Robotics (SSRR)*, Kobe, Japan, June 2005, (Oral Presentation).
- [P.13] Low-overhead cooperative detection of false sensor readings. *AAMAS workshop: Challenges in the Coordination of Large Scale Multi-Agent Systems (LSMAS)*, Utrecht, The Netherlands, July 2005, (Oral Presentation).

- [P.14] Task assignment with Dynamic Perception and Constrained Tasks in a Multi-Robot System. *IEEE Int. Conf. on Robotics and Automation (ICRA)*, Barcelona, Spain, 2005, (Oral Presentation).
- [P.15] Token Approach for Role Allocation in Extreme Teams: analysis and experimental evaluation. *IEEE International Workshops on Enabling Technologies: Infrastructures for Collaborative Enterprises (WETICE-2004)*., Modena, 2004, (Oral Presentation).
- [P.16] Dynamic token generation for constrained tasks in a Multi-Robot System. *International Conference on Systems, Man and Cybernetics*, pp. 911–917, The Hague, The Netherlands, 2004, (Oral Presentation).
- [P.17] An Analysis of Coordination in Multi-Robot Systems. *IEEE Int. Conf. on Systems, Man and Cybernetics*, Washington D. C., (USA), 2003, (Oral Presentation).
- [P.18] Planning trajectories in dynamic environments using a gradient method. *International RoboCup Symposium*, Padova, Italy, 2003, (Oral Presentation).
- [P.19] Allocating and reallocating roles in very large scale teams. *First Int. Workshop on Synthetic Simulation and Robotics to Mitigate Earthquake Disaster*, Padua, Italy, July 2003, (Oral Presentation).
- [P.20] Planning trajectories in domestic dynamic environment. *First RoboCare Workshop*, Rome, Italy, 2003, (Oral Presentation).
- [P.21] Coordination in dynamic environments with constraint on resources. *IROS Workshop on Cooperative Robotics*, Lausanne, Switzerland, October 2002, (Oral Presentation).
- [P.22] Planning trajectories in dynamic environments using a gradient method. *AIIA Workshop on Robotics*, Milan, Italy, 2001, (Oral Presentation).

Software and Prototype development

- 2013 Development of a benchmark for coordination algorithms based on the RoboCup Rescue simulator. The benchmark provides Abstract Programming Interface (API) for developing coordination algorithms based on the Distributed Constraint Optimization Problem (DCOP) framework and provides the implementation of a number of state-of-the-art coordination approaches (e.g., DSA, Max-Sum). The framework was used for the RoboCup competitions as well as a tool for teaching and research. Main developers: Marc Pujol, Fabio Maffioletti, Riccardo Reffato. Supervisor: Alessandro Farinelli. Code available on github (<https://github.com/RMASBench/RMASBench>)
- 2011 Development of a java library for the max-sum algorithm. The library provides the main functionalities to implement the max-sum algorithm on factor graphs and is designed to

be easily extended for the implementation of other Generalized Distributive Law approaches (e.g., max-product, min-max, etc.). Main developer: Michele Roncalli, Supervisor: Alessandro Farinelli. Code available on google code (<http://code.google.com/p/jmaxsum/>)

- 2008 Development of the demonstrator “Max-Sum Decentralised Coordination for Sensor Systems”, main developers: W. T. L. Teacy, A. Farinelli, N. J. Grabham, P. Padhy, A. Rogers, N. R. Jennings, Presented at AAMAS 2008 in the Industrial Software Demo session. Development of the max-sum algorithm on a Chipcon CC24310 computational board.
- 2008 Development of the demonstrator: “Agent-Based Coordination Technologies in Disaster Management”, main developers: Sarvapali D. Ramchurn, Alex Rogers, Kathryn Macarthur, Alessandro Farinelli, Perukrishnen Vytelingum, Ioannis Vetsikas, Nicholas. R. Jennings, Presented at AAMAS 2008 in the Academic Software Demo session. Framework for simulating emergency scenarios based on the RoboCup Rescue simulator.
- 2006 Teacher and organizer of the hands-on lab: “Communication, Coordination, and Sensor Models in USARSim” held at the Rescue Robotic Camp
URL: <http://net143-184.mclink.it/camp06/>. Teachers and organizers: Stephen Balakirsky, Stefano Carpin, Alessandro Farinelli. Development of a framework for coordinated exploration with a multi-robot system. The framework allows coordination between real and simulated robots in the UsarSim environment. The framework was used by students to build a coordinated exploration strategy that has been used and evaluated in a standard environment developed by NIST¹.
- 2006 Team Leader for the Rescue Virtual Team SPQR. Participation to the RoboCup competitions in Brema, Germany. Development of a virtual multi-robot system, for semi-autonomous exploration of dangerous environments. Team members: Daniele Calisi, Luigi Fanelli, Stefano LaCesa, Gian Diego Tipaldi, Marco Zaratti.
- 2005 Teacher and organizer of the hands-on lab on Multi-Robot System held at the Rescue Robotic Camp
URL: <http://net143-184.mclink.it/camp05/>. Lab organizers: Alessandro Farinelli, Alberto Ingenito. Development of a framework for coordinated exploration in a simulated environment. The framework is based on Player/Stage, and it was used by the students to build a coordinated exploration strategy.

¹National Institute of Standards and Technologies

2002-2006	Design and development of the Robot Development tooKit (RDK) main developers: Giorgio Grisetti, Alessandro Farinelli, Luca Iocchi. Software framework for programming mobile robots. The framework was used in several activities and research projects of the SIED lab.
2003	Developer of the Machinetta framework, main developer: Paul Scerri. Machinetta is a generic coordination framework for intelligent agents. It was used as a basic building block in several research project and demos.
2002	Development of a simulation environment to test and evaluate role assignment in robotic soccer. The simulator was used in the lab sessions for the summer school on Cooperative Robotics, Lisbon.
2001	Development of a path-planner system for mobile robots. The path-planner was used by the SPQR middel-size robot team during the RoboCup competition in Seattle, Washington. Team leader: Luca iocchi.

ACTIVITY AS EDITOR AND REVIEWER

Editor

Guest Editor	Special issue of the International Journal of Autonomous Agents and Multi-Agent Systems (Vol. 22(3) - 2011), special issue title: Optimization in Multi-Agent Systems.
Editorial Board	International Journal of Advanced Robotic Systems.

Organization of Workshops and Scientific events

May 2014	Mentor for the Doctoral Symposium at AAMAS 2014
May 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.
June 2013	Exhibition Chair for the International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2013).
June 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.

June 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.
June 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.
June 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.
May 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.
May 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.
May 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 <i>URL:</i> http://www.robocuprescue.org/rescuerobots.html

Programme Committee and Reviewing

- Senior Programme Committee for the International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2014).
- Associate Editor for the International Conference IEEE/RSJ Intelligent Robots and Systems (IROS 2012, 2013).
- Programme Committee for international conferences:
 - Autonomous Agent and Multi Agent Systems (AAMAS 2008, 2009, 2010, 2011, 2012, 2013);

- International Joint Conference on artificial Intelligence (IJCAI, 2011, 2013);
- National Conference on Artificial Intelligence (AAAI 2010, 2012, 2013,2014);
- International Conference on Agents and Artificial Intelligence (ICAART 2011,2012,2013);
- IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR 2008, 2009, 2010, 2011, 2012, 2013).
- European Conference on Artificial Intelligence (2014)
- Intelligent Autonomous Systems (2013, 2014)
- 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.
- Reviewer for several international conferences and workshops (e.g., AAMAS, IJCAI, AAI, IROS, ICRA).

Expert evaluator for research projects

- Netherlands Organisation for Scientific Research (NWO)
- Israel Science Foundation