

CURRICULUM VITAE

Maria L. Gini

Address: Department of Computer Science and Engineering, University of Minnesota
4-192 EE/CSci Building, 200 Union St SE, Minneapolis, MN 55455, phone (612) 625-5582.

Education

University of Milano (Italy), Doctor in Physics, April 1972.

Employment

- Associate Head, Department of Computer Science and Engineering, Univ. of Minnesota, 2005-2015.
- Visiting Professor (sabbatical), Delft University of Technology, Delft, the Netherlands, 2010-2011.
- Visiting Professor (sabbatical), Stanford University, Stanford, Ca, 1999-2000.
- Professor, Department of Computer Science, University of Minnesota, 1997-.
- Associate Professor, Department of Computer Science, University of Minnesota, 1988-1997.
- Visiting Professor (sabbatical), Stanford University, Stanford, Ca, July-Dec 1989.
- Visiting Professor (sabbatical), University of Salerno (Italy), Jan-June 1989.
- Assistant Professor, Department of Computer Science, University of Minnesota, 1982-1988.
- Research Associate, Department of Electronics, Politecnico of Milano, Italy, 1974-1979, Senior Research Associate, 1980-1982.
- Visiting Research Associate, Artificial Intelligence Laboratory, Stanford University, 1976-1977 and 1979-1980.

Awards and Honors

- ACM Fellow, 2019.
- A. Nico Haberman Award from CRA for increasing numbers and successes of underrepresented members in computing, 2019.
- President's Award for Outstanding Service, University of Minnesota, 2019.
- IEEE Fellow, 2018.
- NCWIT Harrold and Notkin Research and Graduate Mentoring Award, 2018.
- AAAI Distinguished Service Award, 2016 "for her outstanding contributions to the field of artificial intelligence through sustained service leading AI societies, journals, and conferences; mentoring colleagues; and working to increase participation of women in AI and computing."
- Graduate and Professional Distinguished Teaching Award, University of Minnesota, 2016.
- INFORMS Design Science Award for 2012, for work on economics regimes and related papers, with Wolf Ketter, John Collins, Alok Gupta, and Paul Schrater.
- Mullen-Spector-Truax Women's Leadership Award, University of Minnesota, 2011 (1 award/year).
- KNAW Visiting Professorship, Delft University of Technology, Sept-Dec 2010.
- AAAI Fellow, 2008.
- College of Science and Engineering Distinguished Professor, 2008-.
- Ada Comstock Distinguished Women Scholars Lecture, University of Minnesota, 2008 (2 awards/year).
- Distinguished Scientist, Association for Computing Machinery, 2006.
- Distinguished Woman Scholar Award, University of Minnesota, 2001 (2 awards/year).
- Member of the Academy of Distinguished Teachers, University of Minnesota, 1998-.
- Distinguished Teaching Award, Continuing Education and Extension, (one of the four awards given for all the U of M campuses), 1995.
- Morse-Alumni Distinguished Teaching Professor of Computer Science, University of Minnesota, 1987- (10 awards/year for the entire University).
- Named Outstanding Professor by the Student Board of the Institute of Technology, 1986 and 1993.

Contributions to Research

Publications

Refereed Journals

- J1 Erik Steinmetz and Maria Gini, “More Trees or Larger Trees: Parallelizing Monte Carlo Tree Search,” *IEEE Transactions on Games*, September, 2021, Issue 3, pp 315–320, 2021.
- J2 Julio Godoy, Stephen Guy, Maria Gini, and Ioannis Karamouzas, “C-Nav: Distributed Coordination in Crowded Multi-Agent Navigation,” *Robotics and Autonomous Systems*, to appear, 2020.
- J3 Bryan C. Runck, Steven Manson, Eric Shook, Maria Gini, Nicholas Jordan, “Using word embeddings to generate data-driven human agent decision-making from natural language,” *GeoInformatica*, April 2019, Volume 23, Issue 2, pp 221–242.
- J4 Hakim Mitiche, Dalila Boughaci, and Maria Gini, “Iterated Local Search for Time-extended Multi-robot Task Allocation with Spatio-temporal and Capacity Constraints,” *Journal of Intelligent Systems (JISYS)*, 28(2):347–360, 2019.
- J5 James Parker, Alessandro Farinelli, and Maria Gini “Max-sum for allocation of changing cost tasks,” *Robotics and Autonomous Systems*, vol. 110, pp 44–56, 2018.
- J6 Julio Godoy, Tiannan Chen, Stephen J. Guy, Ioannis Karamouzas, and Maria Gini, “ALAN: Adaptive Learning for Multi-Agent Navigation,” *Autonomous Robots*, 42:8, pp 1543–1562, December 2018.
- J7 Ernesto Nunes, Mitchell McIntire, and Maria Gini, “Decentralized Multi-Robot Allocation of Tasks with Temporal and Precedence Constraints,” *Advanced Robotics*, vol. 31, issue 22, pp 1193–1207, 2017.
- J8 Ernesto Nunes, Marie Manner, Hakim Mitiche, and Maria Gini, “A Taxonomy for Task Allocation Problems with Temporal and Ordering Constraints,” *Robotics and Autonomous Systems*, 90:55-70, April 2017.
- J9 James Parker, Ernesto Nunes, Julio Godoy, and Maria Gini. “Exploiting spatial locality and heterogeneity of agents for search and rescue teamwork,” *Journal of Field Robotics*, 33(7):877–900, October 2016.
- J10 Will Groves and Maria Gini, “On Optimizing Airline Ticket Purchase Timing,” *ACM Trans. on Intelligent Systems and Technology (TIST)*, 7(1):Article 3, October 2015.
- J11 Ernesto Nunes, Julio Godoy, and Maria Gini, “Multiagent Decision Making on Transportation Networks,” *Journal of Information Processing*, 22(2):307–318, 2014.
- J12 William Groves, John Collins, Maria Gini, and Wolfgang Ketter, “Agent-assisted supply chain management: analysis and lessons learned”, *Decision Support Systems*, 57:274–284, January 2014.
- J13 Wolfgang Ketter, John Collins, Maria Gini, Alok Gupta, and Paul Schrater, “Real-time Tactical and Strategic Sales Management for Intelligent Agents Guided By Economic Regimes,” *Information Systems Research*, Vol. 23, No. 4, pp 1263–1283, December 2012.
- J14 John Collins, Wolfgang Ketter, and Maria Gini, “Flexible decision support in dynamic interorganizational networks”, *European Journal of Information Systems*, 19(4), pp 436–444, August 2010.
- J15 Maitreyi Nanjanath and Maria Gini “Repeated auctions for robust task execution by a robot team,” *Robotics and Autonomous Systems*, Vol. 58, N. 7, July 2010, pp 900–909.
- J16 Mark Hoogendorn and Maria Gini, “Preferences of Agents in Decentralized Task Allocation,” *AI Communications*, Vol. 22, N. 3, 2009, pp 143–152.
- J17 John Collins, Wolfgang Ketter, and Maria Gini, “Flexible decision control in an autonomous trading agent,” *Electronic Commerce Research and Applications*, Vol. 8, N. 2, March-April 2009, pp 91-105.
- J18 Paul E. Rybski, Stergios Roumeliotis, Maria Gini, and Nikolaos Papanikolopoulos, “Appearance-Based Mapping using Minimalistic Sensor Models,” *Autonomous Robots*, Vol. 24, No. 3, 2008, pp 229–246.
- J19 Paul E. Rybski, Amy Larson, Harini Veeraraghavan, Monica LaPoint, and Maria Gini, “Performance Evaluation of a Multi-Robot Search & Retrieval System: Experiences with MinDART,” *Int. Journal of Intelligent and Robotic Systems*, Volume 52, Numbers 3-4, 2008, pp 363–387.
- J20 Wolfgang Ketter, John Collins, Maria Gini, Alok Gupta, and Paul Schrater, “Detecting and Forecasting Economic Regimes in Multi-Agent Automated Exchanges,” *Decision Support Systems*, 47(4):307-318, 2009.
- J21 G. K. Demir and M. Gini, “Winner Determination for Combinatorial Auctions for Tasks with Time and Precedence Constraints,” *Journal of Intelligent & Fuzzy Systems*, Vol. 18, No. 3, 2007, pp 267–280.

- J22 F. Amigoni, S. Gasparini, and M. Gini, "Building Segment-Based Maps without Pose Information," *Proceedings of the IEEE*, Vol. 94, No. 7, July 2006, pp 1340-1359.
- J23 A. Jaiswal, Y. Kim, and Maria Gini, "Design and Implementation of a Secure Multi-Agent Marketplace," *Electronic Commerce Research and Applications*, Vol. 3, No. 4, 2004, pp 355-368.
- J24 D. J. Challou, M. Gini, V. Kumar, and G. Karypis, "Predicting the Performance of Randomized Parallel Search: An Application to Robot Motion Planning," *Journal of Intelligent and Robotic Systems*, Vol. 38, No. 1, pp 31-53, September 2003.
- J25 C. McMillen, K. Stubbs, P. E. Rybski, S. A. Stoeter, M. Gini, and N. Papanikolopoulos, "Resource Scheduling and Load Balancing in Distributed Robotic Control Systems," *Robotics and Autonomous Systems*, Vol. 44, No. 3-4, pp 251-259, 2003.
- J26 A. Babanov, J. Collins, and M. Gini, "Asking the Right Question: Risk and Expectation in Multi-Agent Contracting," *Artificial Intelligence for Engineering Design, Analysis and Manufacturing*, Vol 17, N. 4, pp 173-186, September 2003.
- J27 P. E. Rybski, S. A. Stoeter, M. Gini, D. F. Hougen, and N. Papanikolopoulos, "Performance of a Distributed Robotic System Using Shared Communications Channels," *IEEE Trans. on Robotics and Automation* special issue on Multi-Robot systems, Vol 22, No. 5, pp 713-727, October 2002.
- J28 John Collins, Wolfgang Ketter, and Maria Gini, "A Multi-Agent Negotiation Testbed for Contracting Tasks with Temporal and Precedence Constraints," *Int'l Journal of Electronic Commerce*, Vol. 7, No. 1, pp 35-57, Fall 2002.
- J29 Sascha A. Stoeter, Paul E. Rybski, Kristen N. Stubbs, Colin P. McMillen, Maria Gini, Dean F. Hougen, and Nikolaos Papanikolopoulos, "A Robot Team for Surveillance Tasks: Design and Architecture," *Robotics and Autonomous Systems*, special issue on the best of IAS-6, Vol. 40, No. 2-3, pp 173-183, September 2002.
- J30 Dean F. Hougen, Paul E. Rybski, and Maria Gini, "Repeatability of Real World Training Experiments: A Case Study," *Autonomous Robots*, Vol. 6, No. 3, pp 281-292, 1999.
- J31 D. Boley, M. Gini, R. Gross, E-H (S) Han, K. Hastings, G. Karypis, V. Kumar, B. Mobasher, and J. Moore "Partitioning-Based Clustering for Web Document Categorization," *Decision Support Systems*, Vol 27, No. 3, pp 329-341, 1999.
- J32 D. Boley, M. Gini, R. Gross, E.-H. (Sam) Han, K. Hastings, G. Karypis, V. Kumar, B. Mobasher, J. Moore "Document Categorization and Query Generation on the World Wide Web Using WebACE," *AI Review*, Vol 13, No. 5-6, pp 365-391, September 1999.
- J33 D. Boley, M. Gini, K. Hastings, B. Mobasher, and J. Moore "A Client-Side Agent for Document Categorization and Exploration," *Journal of Internet Research*, Vol 8, No. 5, pp 387-399, 1998.
- J34 J. Budenske and M. Gini, "Sensor Explication: Knowledge-Based Robotic Plan Execution through Logical Objects," *IEEE Trans on SMC*, Vol. 27, Part B, No. 4, pp 611-625, August 1997.
- J35 M. Gini, "Designing and Building Autonomous Mini-robots," *Computer Science Education*, special issue on Robotics in Computer Science and Engineering Education, Vol. 7, No. 2, 1997, pp 223-237.
- J36 J. Budenske and M. Gini, "Logical Sensor/Actuator: Knowledge-Based Robotic Plan Execution," *Journal of Experimental and Theoretical Artificial Intelligence*, Vol. 9, No. 3, 1997, pp 361-374.
- J37 N. Reed, M. Gini, P. Johnson, J. Moller, "Diagnosing Congenital Heart Defects using the Fallot Computational Model," *Artificial Intelligence in Medicine*, special issue on Knowledge-Based Systems in Cardiovascular Medicine, Vol. 10, No. 1, pp 25-40, July 1997.
- J38 M. Tsvetovaty, M. Gini, B. Mobasher, Z. Wieckowski, "MAGMA: An Agent-Based Virtual Market for Electronic Commerce," *Applied Artificial Intelligence*, special issue on Intelligent Agents, No. 6, September 1997.
- J39 J. Shackleton and M. Gini, "Measuring the Effectiveness of Reinforcement Learning for Behavior-Based Robots," *Adaptive Behavior*, Vol. 5, No. 3-4, pp 365-390, July 1997.
- J40 Ashim Bose, Maria Gini, and Donald Riley "A Case-based Approach to Planar Linkage Design," *Artificial Intelligence in Engineering*, Vol 11, No. 2, pp 107-119, April 1997.
- J41 N. Reed, M. Gini, and P. Johnson, "Robust Strategies for Diagnosing Manufacturing Defects," *Applied Artificial Intelligence*, Vol. 10, pp 387-406, Fall 1996.
- J42 S. Ratering and M. Gini, "Robot Navigation in a Known Environment with Unknown Moving Obstacles," *Autonomous Robots*, Vol. 1, No. 2, pp 149-165, 1995.
- J43 R. Smith and M. Gini, "Error Management for Robot Programming," *Journal of Intelligent Manufac-*

- turing*, Vol. 3, pp 59-73, 1992.
- J44 J. Gil de Lamadrid and M. Gini, "Path Tracking through Uncharted Moving Obstacles," *IEEE Trans. Systems, Man, and Cybernetics*, Vol. 20, No. 6, pp 1408-1422, 1990.
- J45 P. Bison and M. Gini, "An Object-Oriented Approach to Robot Programming," *Computer-Integrated Manufacturing Systems*, Vol. 2, No. 1, pp 29-34, 1989.
- J46 G. Gini and M. Gini, "The Future of Robot Programming," *Robotica*, Vol. 5, No. 3, 1987, pp 235-246.
- J47 R. Smith and M. Gini, "Symbolic and Qualitative Reasoning for Error Recovery in Robot Programs," *IEEE Software*, Vol. 3, No. 2, pp 59-60, 1986.
- J48 R. Smith and M. Gini, "Reliable Real-time Robot Operation Employing Intelligent Forward Recovery," *Journal of Robotic Systems*, Vol. 3, No. 3, pp 281-300, 1986.
- J49 G. Gini and M. Gini, "From Goals to Manipulator Programs," *Computers in Industry*, Vol. 7, No. 3, pp 263-273, 1986.
- J50 G. Gini and M. Gini, "Dealing with World Model Based Languages," *ACM Trans on Programming Languages*, Vol. 7, No. 2, pp 334-347, 1985.
- J51 G. Gini and M. Gini, "Standardization Issues in Robot Languages," *Computers & Standards*, Vol. 4, No. 1, pp 13-20, 1985.
- J52 G. Gini and M. Gini, "A Software Laboratory for Visual Inspection and Recognition," *Pattern Recognition*, Vol. 18, No. 1, pp 43-51, 1985.
- J53 G. Gini and M. Gini, "Explicit Programming Languages in Industrial Robots," *Journal of Manufacturing Systems*, Vol. 2, No. 1, pp 53-60, 1983.
- J54 G. Gini and M. Gini, "The Integration of Manipulation and Vision for Assembly and Quality Control," *International Journal of Production Research*, Vol. 21, No. 2, pp 279-292, 1983.
- J55 G. Gini and M. Gini, "ADA: a Language for Robot Programming," *Computers in Industry*, Vol. 3, No. 4, pp 253-259, 1982.
- J56 G. Gini and M. Gini, "Interactive Development of Object Handling Programs," *Computer Languages*, Vol. 7, No. 1, pp 1-10, 1982.
- J57 G. Gini, M. Gini, and M. Somalvico, "Deterministic and non Deterministic Robot Programming," *Cybernetics and Systems*, Vol. 12, pp 345-362, 1981.
- J58 G. Gini and M. Gini, "Quasi Natural Language in Consultation Systems," *Information Sciences*, Vol. 21, No. 2, pp 159-177, 1980.
- J59 G. Gini and M. Gini, "A Serial Model for Computer Assisted Medical Diagnosis," *International Journal of Bio-medical Computing*, Vol. 11, No. 2, pp 99-113, 1980.
- J60 P. Corti, G. Gini, M. Gini, and M. Somalvico, "Problem Solving and Automatic Emergency Recovery: towards the Design of Intelligent Industrial Robots," *Cybernetica*, Vol. 23, No. 1, pp 37-45, 1980.
- J61 P. Corti, G. Gini, and M. Gini, "Software Features for Intelligent Industrial Robots," *Kybernetes*, Vol. 8, No. 2, pp 149-154, 1979.
- J62 G. Gini and M. Gini, "Object Description with a Manipulator," *The Industrial Robot*, Vol. 5, No. 1, pp 32-35, 1978.
- J63 P. Corti, G. Gini, M. Gini, and E. Pagello, "The Use of Mathematical Logic and Goal Oriented Languages in Plan Formation for Robots," *Alta Frequenza*, Vol. XVI, No. 1, pp 35-45, 1976.
- J64 G. Gini and M. Gini, "Control of Intelligent Robots and Goal Oriented Languages," *The Industrial robot*, Vol. 2, No. 2, pp 67-74, 1975.

Books Edited

- E1 Editor (with Takayuki Ito, Catholijn Jonker, and Onn Shehory), Proceedings of the 12th Int'l Conf. on Autonomous Agents and Multiagent Systems, AAMAS'13, May 6-10, 2013, St. Paul, MN, USA.
- E2 Editor (with Robert Kauffman, Chris Dellarocas, and Frank Dignum), Proc. of the 9th Int'l Conference on Electronic Commerce, ACM, 2007.
- E3 Editor (with Richard Voyles), Distributed Autonomous Robotic Systems 7, Springer, 2006.
- E4 Editor (with Wei-Min Shen, Carme Torras, and Hideo Yuasa), Proc. of Intelligent Autonomous Systems 7, IOS Press, 2002.
- E5 Editor (with Carles Sierra and Jeff Rosenschein), Proc. Int'l Conf. on Autonomous Agents, ACM Press, June 2000.

- E6 Editor, Special Issue of ICAE on Faults in Automated Manufacturing, Volume 3, Number 4, 1996.
 E7 Editor, Workshop Notes, AAAI Spring Symposium on “Detecting and Resolving Errors in Manufacturing Systems,” 1994, AAAI Press.

Special Issues of Journals Edited

- S1 Guest editor (with Enrico Pagello) of a special issue of Robotics and Autonomous Systems on “New Research Frontiers for Intelligent Autonomous Systems,” April 2017.
 S2 Guest editor (with Francesco Amigoni and Wolfgang Ketter) of a special issue of Integrated Computer Aided Engineering on “Multi-Agent Systems for Energy Management,” Vol. 17, N. 4, 2010.
 S3 Guest editor (with Kouhei Ohnishi and Enrico Pagello) of a special issue of Robotics and Autonomous Systems on “Advances in Autonomous Robots for service and Entertainment, Vol, 58, N. 7, July 2010.
 S4 Guest editor (with Wei-Min Shen and Carme Torras) of a special issue of Robotics and Autonomous Systems on the “Best of IAS-7”, Vol. 44, No. 3-4, 2003.
 S5 Guest editor (with Jeff Rosenschein) of a special issue of Autonomous Agents and Multi-Agent Systems on the “Best of Agents 2000”, Vol. 6, No. 3, May 2003.
 S6 Guest editor (with Brian Blake) of special issue of the International Journal of Electronic Commerce on “Agent-Based Technologies for B2B”, Vol. 7, No. 1, Fall 2002.
 S7 Guest editor (with Mark Boddy) of a special issue of Integrated Computer-Aided Engineering on “Agent-Based Manufacturing,” January 2001.
 S8 Guest editor of a special issue of Integrated Computer-Aided Engineering on “Faults in Automated Manufacturing,” Vol 3, No. 4, October 1996.

Refereed Magazines

- M1 K. Cannon, M. Anderson LaPoint, N. Bird, K. Panciera, H. Veeraraghavan, M. Gini, and N. Papanikolopoulos, “Using Robots to Raise Interest in Technology Among Underrepresented Groups,” *IEEE Robotics and Automation Magazine*, Volume 14, No. 2, June 2007, pp 73-81.
 M2 Paul E. Rybski, Sascha A. Stoeter, Nikolaos Papanikolopoulos, Ian Burt, Tom Dahlin, Maria Gini, Dean F. Hougen, Donald G. Krantz, and Florent Nageotte, “Sharing Control,” *Robotics and Automation Magazine*, Vol. 9, No. 4, pp 41-48, December 2002.
 M3 J. Collins, C. Bilot, M. Gini, and B. Mobasher, “Decision Processes in Agent-Based Automated Contracting,” *IEEE Internet Computing*, pp 61-72, March/April 2001.
 M4 Paul Rybski, N. Papanikolopoulos, S. Stoeter, D. Krantz, B. Yesin, M. Gini, R. Voyles, D. Hougen, D. Nelson, and M. Erickson, “Enlisting Rangers and Scouts for Reconnaissance and Surveillance,” *Robotics and Automation Magazine*, Vol. 7. No 4, pp 14-24, December 2000.

Other journals

- O1 Maria Gini, Noa Agmon, Fausto Giunchiglia, Sven Koenig, and Kevin Leyton-Brown. “Artificial Intelligence in 2027,” *AI Matters*, 4(1):10–20, 2018.
 O2 Maria Gini and Monica Anderson, Report of AAAI Workshop on “Increasing Diversity in AI,” *AI Magazine*, Vol. 38, No. 3, p 79, 2017.
 O3 Eric Eaton, Tom Dietterich, Maria Gini, Barbara J. Grosz, Charles L. Isbell, Subbarao Kambhampati, Michael Littman, Francesca Rossi, Stuart Russell, Peter Stone, Toby Walsh, and Michael Wooldridge, “Who Speaks for AI?,” *AI Matters*, 2(2), December 2015.
 O4 J. Fischer and M. Gini, “Vision-based Mini-robots,” *The Robotics Practitioner*, Vol. 2, No. 2, pp 40-46, Spring 1996.
 O5 M. Gini, Report on AAAI Spring Symposium 1994 on Detecting and Resolving Errors in Manufacturing systems, *AI Magazine*, Vol. 15, No. 3, p 25, 1994.

CCC Quad Papers

- Q1 Elisa Bertino, Finale Doshi-Velez, Maria Gini, Daniel Lopresti, and David Parkes. “Artificial Intelligence and Cooperation,” 2020 CCC Quadriennial Papers, <https://cra.org/cra-quadrennial-papers/>

- Q2 Henrik Christensen, Maria Gini, Odest Chadwicke Jenkins, and Holly Yanco, “Robotics Enabling the Workforce,” 2020 CCC Quadriennial Papers, <https://cra.org/cra-quadrennial-papers/>
- Q3 Raja Kushalnagar, Maria Gini and Patty Lopez, “New Pathways for Workforce Diversification,” 2020 CCC Quadriennial Papers, <https://cra.org/cra-quadrennial-papers/>

Chapters in books

- B1 William Groves and Maria Gini, “Improving Prediction in TAC SCM by Integrating Multivariate and Temporal Aspects via PLS Regression,” In *Agent-Mediated Electronic Commerce. Designing Trading Strategies and Mechanisms for Electronic Markets*, Lecture Notes in Business Information Processing, Volume 119, Springer, pp. 28–43, 2013.
- B2 Brett J. Borghetti and Maria Gini, “Weighted Prediction Divergence for Metareasoning,” In *Metareasoning*, MIT Press, pp. 249–264, 2011.
- B3 William Groves, John Collins, Wolfgang Ketter, and Maria Gini, “Analyzing Market Interactions in a Multi-Agent Supply Chain Environment,” in *Exploring the Grand Challenges for Next Generation E-Business*. 8th Workshop on E-Business, WEB 2009, Phoenix, AZ, USA, December 15, 2009, Revised Selected Papers, Sharman, Raj; Rao, H. Raghav; Raghu, T. S. (Eds.) LNBIP 52, Springer, pp 44–58, 2010. pp 44–58, 2010.
- B4 Mark Hoogendorn and Maria Gini, “Automated Analysis of Auction Traces,” in *Agent-Mediated Electronic Commerce. Designing Trading Strategies and Mechanisms for Electronic Markets*. AAMAS Workshop, AMEC 2009, Budapest, Hungary, May 12, 2009, and IJCAI Workshop, TADA 2009, Pasadena, CA, USA, July 13, 2009, Selected and Revised Papers, Esther David, Enrico Gerding, David Sarne, and Onn Shehory (eds), LNBIP 59, Springer, pp 58–73, 2010.
- B5 Wolf Ketter, John Collins, and Maria Gini, “Coordinating decisions in a supply-chain trading agent,” in *AMEC/TADA 2008*, W. Ketter et al (eds), LNBIP 44, Springer, pp 161–174, 2010.
- B6 Brett Borghetti and Maria Gini, “Weighted Prediction Divergence for metareasoning,” in *Metareasoning*, Cox and Raja (eds), MIT Press, pp. 249–264, 2010.
- B7 John Collins and Maria Gini, “Scheduling tasks using combinatorial auctions: the MAGNET approach,” in *Business Computing*, Gedas Adomavicius and Alok Gupta (eds), Handbooks in Information Systems Series, Volume 3, Elsevier, pp 263-294, 2009.
- B8 Brett Borghetti, Eric Sodomka, Maria Gini, and John Collins, “A Market-Pressure-Based Performance Evaluator for TAC-SCM,” in Maria Fasli and Onn Shehory, editors, *Agent-Mediated Electronic Commerce. Automated Negotiation and Strategy Design for Electronic Markets*, Lecture Notes in Computer Science 4452, Springer, pp 178-188, 2007.
- B9 W. Ketter, J. Collins, M. Gini, A. Gupta, and P. Schrater, “Strategic Sales Management Guided By Economic Regimes,” In Peter Vervest, Eric van Heck, Kenneth Preiss, and Louis-Francois Pau, editors, *Edited Volume of the 2nd Small Business Network Initiative Discovery Event*, Springer Verlag, 2007.
- B10 W. Ketter, J. Collins, M. Gini, A. Gupta, and P. Schrater, “Identifying and Forecasting Economic Regimes in TAC SCM,” In Han La Poutre, Norman Sadeh, and Sverker Janson, editors, *Edited Volume of the AMEC and TADA 2005 Workshops*, LNAI, Springer Verlag, 2006.
- B11 J. Collins and M. Gini, “MAGNET: A Multi-Agent System using Auctions with Temporal and Precedence Constraints,” In *Multiagent-based Supply Chain Management*, B. Chaib-draa and J. Müller (eds), Springer-Verlag, 2006.
- B12 P. Rybski, F. Zacharias, M. Gini, and N. Papanikolopoulos, “Using Visual Features for Building and Localizing within Topological Maps of Indoor Environments,” In *Innovations in Robot Mobility and Control*, Srikantha Patnaik, Lakhmi C. Jain, Spyros G. Tzafestas, Germano Resconi, and Amit Konar (eds), Volume 8, Studies in Computational Intelligence, Springer-Verlag, pp 251–271, 2006.
- B13 A. Babanov, W. Ketter, and M. Gini, “An Evolutionary Approach for Studying Heterogeneous Strategies in Electronic Markets,” In *Engineering Self-Organising Systems*, G. Di Marzo Serugendo, A. Karageorgos, O. F. Rana, F. Zambonelli (eds.), Lecture Notes in Artificial Intelligence, Volume 2977, Springer, pp 157–168, 2004.
- B14 M. Gini, “Are Many Robots Better Than One?,” In *Intelligent Robots: Vision, Learning and Interaction*, H. Cho, J. H. Kim, and J. J. Lee (eds.), pp 173-185, KAIST Press, Korea, 2003.
- B15 J. Collins, G. Demir, and M. Gini, “Bidtree ordering in IDA* combinatorial auction winner-determination

- with side constraints,” In J. Padget, O. Shehory, D. Parkes, N. Sadeh, and W. Walsh, editors, *Agent Mediated Electronic Commerce IV*, volume LNAI2531. Springer-Verlag, 2002. pp 17-33.
- B16 A. Babanov, W. Ketter, and M. Gini, “An Evolutionary Framework for Large-scale Experimentation in Multi-agent Systems,” In T. Wagner, editor, *An Application Science for Multi-Agent Systems*, Kluwer, 2004.
- B17 Paul E. Rybski, Sascha A. Stoeter, Maria Gini, and Nikolaos Papanikolopoulos, “Programming and Controlling the Operations of a Team of Miniature Robots,” *Multi-Robot Systems: from Swarms to Intelligent Automata*, pp 65-72, Washington, D.C., March 2002.
- B18 Paul Rybski, Sascha Stoeter, Maria Gini, Dean Hougen, and Nikolaos Papanikolopoulos, “Performance of a Distributed Robotic System Using Shared Communications Channels,” in *Plan-Based Robot Control*, (M. Beets, J. Hertzberg, M. Ghallab, and M. Pollack, eds) LNAI 2466, Springer-Verlag, pp 211-225, 2002.
- B19 John Collins and Maria Gini, “An integer programming formulation of the bid evaluation problem for coordinated tasks,” in *Mathematics of the Internet: E-Auction and Markets*, (B. Dietrich and R. Vohra, eds), The IMA Volumes, Vol 127, Springer-Verlag, pp 59-74, 2001.
- B20 J. Collins, R. Sundareswara, M. Gini, and B. Mobasher, “Bid Selection Strategies for Multi-Agent Contracting in the presence of Scheduling Constraints,” in *Agent-mediated Electronic Commerce II*, (Alexandros Moukas, Carles Sierra, and Frederik Ygge, eds), Lecture Notes in AI, Vol 1788, Springer-Verlag, 2000.
- B21 E. Steinmetz, J. Collins, M. Gini, and B. Mobasher “An Efficient Anytime Algorithm For Multiple-Component Bid Selection in Automated Contracting,” Springer-Verlag, LNAI1571, *Agent Mediated Electronic Trading*, pp 105-125, 1999.
- B22 D. Challou, D. Boley, M. Gini, V. Kumar, and C. Olson, “Parallel Search Algorithms for Robot Motion Planning,” in *Practical Motion Planning in Robotics: Current Approaches and Future Directions*, (K. Gupta and Angel del Pobil, eds.), pp 115-131, John Wiley & Sons, 1998.
- B23 J. Slagle and M. Gini, “List Processing Languages,” fourth edition of the *Encyclopedia of Computer Science*, 1998.
- B24 G. Gini and M. Gini, “Programming for Intelligent Robot Systems,” in *Intelligent Robotic Systems: Analysis, Design, and Programming*, (S. Tzafestas, ed.), M. Dekker, pp 165-208, 1991.
- B25 M. Gini, “Automatic Error Detection and Recovery,” in *Robot Technology and Applications*, (U. Rembold, ed.), M. Dekker, pp 445-483, 1990.
- B26 J. Slagle and M. Gini, “Pattern Matching,” *Encyclopedia of Artificial Intelligence*, John Wiley & Sons, 1987.
- B27 J. Slagle and M. Gini, “Problem Reduction,” *Encyclopedia of Artificial Intelligence*, John Wiley & Sons, 1987. Rewritten for the second edition, 1990.
- B28 G. Gini, M. Gini, M. Cividini, and G. Villa, “Programming of Robot Systems,” in U. Rembold and R. Dillmann eds, *Computer-Aided Design and Manufacturing* Springer-Verlag, pp 233-278, 1986.
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- C125 D. Challou, D. Boley, M. Gini, and V. Kumar, “A Parallel Formulation of Informed Randomized Search for Robot Motion Planning Problems,” *IEEE Int’l Conf. on Robotics and Automation 1995*, pp 709-714, Nagoya, Japan, May 1995.
- C126 D. Challou, M. Gini, and V. Kumar, “Very Fast Motion Planning for Highly Dexterous Articulated Robots,” *Int’l Symposium on Artificial Intelligence, Robotics, and Automation for Space (i-SAIRAS 94)*, pp 99-102, Pasadena, Ca, October 1994.
- C127 B. Camel, D. Challou, D. Boley, M. Gini, and V. Kumar, “Fast 3D Motion Planning for Articulated Robots,” *1994 IEEE Int’l Conf. on Systems, Man, and Cybernetics*, pp 1622-1627, San Antonio, Texas, October 1994.
- C128 J. Budenske and M. Gini, “Why Is It So Difficult For A Robot To Pass Through A Doorway Using Ultrasonic Sensors?,” *IEEE Int’l Conf. on Robotics and Automation 1994*, pp 3124-3129, May 1994.
- C129 M. Gini, D. Challou, V. Kumar, and Ben Camel, “Parallel Algorithms for Path Planning,” *Proc. of the Virtual Reality Systems ’93, Teleoperation ’93, and Beyond Speech Recognition ’93*, Sig-Advanced Applications, Inc., New York, October 1993.
- C130 D. Challou, M. Gini, and V. Kumar, “Toward Real-Time Motion Planning,” *Second Int’l Workshop on Parallel Processing for Artificial Intelligence (PPAI-93)*, Chambéry, France, September 1993. Also in *Parallel Processing for Artificial Intelligence 2*, H. Kitano, V. Kumar, and C.B. Suttner (eds), Elsevier Science Publ, pp 163-175, 1994.
- C131 S. Ratering and M. Gini, “Robot Navigation in a Known Environment with Unknown Moving Obstacles,” *IEEE Int’l Conf. on Robotics and Automation*, Vol. 3, pp 25-30, Atlanta, Georgia, May 1993.
- C132 D. Challou, M. Gini, and V. Kumar, “Parallel Search Algorithms for Robot Motion Planning,” *IEEE*

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- C133 J. Budenske and M. Gini, "Knowledge, Execution, and What Sufficiently Describes Sensors and Actuators," *SPIE OE/Technology '92*, Boston, November 1992.
- C134 A. Bose, M. Gini, D. Riley, and A. Esterline, "On Reusing Linkage Designs," *Tools for AI 1992*, pp 100-107, November 1992.
- C135 J. Budenske and M. Gini, "Achieving Goals through Interaction with Sensors and Actuators," *Int'l Conf. on Intelligent Robots and Systems (IROS)*, pp 903-908, July 1992.
- C136 K. Krebsbach, D. Olawsky, and M. Gini, "An Empirical Study of Sensing and Defaulting in Planning," *1st Int'l Conf. on AI Planning Systems*, pp 136-144, June 1992.
- C137 A. Bose and M. Gini, "Storage and Retrieval of Cases with Predominantly Geometric Properties," *Proc AID'92 Workshop on Case Based Design Systems*, pp 17-23, Pittsburg, PA, June 1992.
- C138 R. Doshi and M. Gini, "Spatial Deadlocks in Task Level Planning," *Proc. Int'l Conf. on Intelligent Robotics*, pp 505-516, Bangalore, India, January 1991.
- C139 D. Olawsky and M. Gini, "Deferred Planning and Sensor Use," in *Innovative Approaches to Planning, Scheduling and Control: Proc. 1990 DARPA Workshop*, pp 166-174, M. Kaufmann, San Mateo, Ca, 1990.
- C140 J. Budenske and M. Gini, "Determining Robot Actions for Tasks Requiring Sensor Interaction," *Conf. on Space Telerobotics*, Pasadena, Ca, January 1989.
- C141 M. Gini, "Integrating Planning and Execution for Sensor-based Robots," in B. Ravani ed., *CAD Based programming for Sensor Based Robots*, NATO ASI Series, Vol. F50, pp 255-274, Springer-Verlag, Berlin, Germany, 1988.
- C142 M. Gini, "Symbolic and Qualitative Reasoning for Error Recovery in Robot Programs," in U. Rembold and K. Hormann eds, *Languages for Sensor-Based Control in Robotics*, NATO ASI Series, Vol F29, pp 147-167, Springer-Verlag, Berlin, Germany, 1987.
- C143 R. Smith and M. Gini, "Monitoring Robot Actions for Error Detection and Recovery," *JPL Workshop on Space Telerobotics*, JPL Publication 87-13, G. Rodriguez (ed), Vol 3, pp 67-78, Pasadena, Ca, January 1987.
- C144 R. Smith and M. Gini, "Robot Tracking and Control Issues in an Intelligent Recovery System," *1986 IEEE Int'l Conf. on Robotics and Automation*, pp 1070-1075, San Francisco, Ca, April 1986.
- C145 R. Doshi, M. Gini, M. Gluch, R. Smith, I. Zualkernan, "The Role of Knowledge in the Architecture of a Robust Robot Control," *1985 IEEE Int'l Conf. on Robotics and Automation*, pp 561-567, St. Louis, Missouri, March 1985.
- C146 G. Gini and M. Gini, "Recovering from Failures: a New Challenge for Industrial Robotics," In M. Brady et al eds, *NATO ASI Series*, Vol. F11, pp 579-588, Springer-Verlag, 1984. Published also in *26th IEEE Computer Society Int'l Conf. (COMPCON 83 Fall)*, pp 220-227, Arlington, VA, 1983.
- C147 G. Gini, M. Gini, G. Cividini, and G. Villa, "A User Oriented Language for Image Processing and Object Recognition," *The Automation of Industrial Processes*, pp 239-244, Torino, Italy, December 1983. Also *IEEE Workshop on Computer Architecture for Pattern Analysis and Image Data Base Management*, Pasadena, Ca, 1983.
- C148 G. Gini and M. Gini, "Expert Systems for Industrial Automation," *The Automation of Industrial Processes*, pp 251-258, Torino, Italy, December 1983.
- C149 G. Gini and M. Gini, "Towards Automatic Error Recovery in Robot Programs," *Int'l Joint Conf. on Artificial Intelligence*, pp 821-823, Karlsruhe, Germany, 1983. Published also in *83 Int'l Conf. on Advanced Robotics*, pp 27-32, Tokyo, Japan, 1983.
- C150 G. Gini, M. Gini, G. Cividini, and G. Villa, "Programming a Vision System," *13th Int'l Symposium on Industrial Robots*, pp 14/67-78, Chicago, April 1983.
- C151 G. Gini and M. Gini, "Constructing Programs with a Plan Formation System," *IFIP-IFAC Int'l Symposium on Artificial Intelligence*, pp 231-238, Leningrad, USSR, 1983.
- C152 G. Gini and M. Gini, "Expert System Knowledge to Reason about Failures," *5th Int'l Conf. on Control Systems and Computer Science*, pp 118-125, Romania, June 1983.
- C153 G. Gini, M. Gini, and R. Morpurgo, "A Knowledge-based Consultation System for Automatic Maintenance and Repair," in *Advances in CAD/CAM* (T. Ellis and O. Semenkov, eds), North-Holland, 1983 (PROLAMAT'82, IFIP/IFAC, pp 495-505, Leningrad, USSR, May 1982).
- C154 G. Gini and M. Gini, "GYPSY: a General Purpose Vision Sensor," *SPIE (Soc. Photo-optical Instrum.*

- Engrs.*) *26th Annual Int'l Technical Symposium*, pp 127-134, San Diego, Ca, August 1982.
- C155 G. Gini, M. Gini, and R. Morpurgo, "CAMA: an Expert System Interacting with a Dynamic Environment," *Theory and practice of knowledge based systems*, pp 17-20. Runnymede, UK, September 1982.
- C156 G. Gini and M. Gini, "PRODEST: a Modular Approach to Expert Systems," *5th Int'l Conf. on Cybernetics and Systems (ICCS)*, Mexico City, Mexico, August 1981.
- C157 M. Gini, M. Bernasconi, and R. Delazer, "Accuracy of Measurements through Stereo Images," *5th Int'l Conference on Automated Inspection and Product Control*, pp 309-320, Stuttgart, Germany, June 1980.
- C158 G. Gini, M. Gini, and M. Somalvico, "Program Abstraction and Error Correction in Intelligent Robots," *10th Int'l Symposium on Industrial Robots*, pp 101-108, Milano, Italy, March 1980.
- C159 G. Gini, M. Gini, E. Pagello, and G. Trainito, "Distributed Robot Programming," *10th Int'l Symposium on Industrial Robots*, pp 67-72, Milano, Italy, March 1980.
- C160 M. Gini, M. Bernasconi, and R. Delazer, "Precision Measurements by a Stereo Vision System," *10th Int'l Symposium on Industrial Robots*, pp 349-360, Milano, Italy, March 1980.
- C161 G. Gini and M. Gini, "POINTY: a Philosophy in Robot Programming," in *Information Control Problems in Manufacturing Technology* (U. Rembold ed.), pp 173-181, Pergamon Press, 1979.
- C162 G. Gini and M. Gini, "POINTY: a System for Developing Manipulator Programs," in *Languages et Methodes de programmation des robots industriels*, pp 131-144, IRIA Press, France, 1979.
- C163 G. Gini, M. Gini, R. Gini, and D. Giuse, "MAL: a Multitask System for Mechanical Assembly," in *Languages et Methodes de programmation des robots industriels*, pp 145-156, IRIA Press, France, 1979.
- C164 G. Gini, M. Gini, R. Gini, and D. Giuse, "Introducing Software Systems in Industrial Robots," *9th Int'l Symposium on Industrial Robots*, pp 309-321, Washington, D.C., 1979.
- C165 G. Gini and M. Gini, "Using a Task Description Language for Assembly: the Generation of World Models," *8th Int'l Symposium on Industrial Robots*, pp 364-372, Stuttgart, Germany, June 1978.
- C166 G. Gini and M. Gini, "Cognitive Information Retrieval by Goal-oriented Languages," in *IIASA, CP-76-6*, pp 216-251, Laxenburg, Austria, 1976.
- C167 G. Gini, M. Gini, and M. Somalvico, "Emergency Recovery in Intelligent Robots," *5th Int'l Symposium on Industrial Robots*, pp 339-358, Chicago, Ill, September 1975.
- C168 G. Gini and M. Gini, "CONNIVER Programs by a Logical Point of View," in *Mathematical Foundations of Computer Science 1975*, (G. Goos and J. Hartmanis eds.), Lectures Notes in Computer Science, N. 32, pp 238-245, Springer-Verlag, 1975.
- C169 G. Gini and M. Gini, "Programming a Robot by Goal-oriented Languages," in *Modern trends in Cybernetics and Systems* (J. Rose and C. Bilciu eds.), Vol. III, pp 753-763, Springer-Verlag, 1975.

Refereed Workshops

- W1 Raymond Finzel, Esha Singh, Martin Michalowski, Maria Gini and Serguei Pakhomov. "Everyday Living Artificial Intelligence Hub," 2nd Workshop on Data Science with Human-in-the-loop: Language Advances (DaSH-LA) at NAACL 2021.
- W2 Nabil Khan and Maria Gini. "Learning to Cooperate using Deep Reinforcement Learning in a Multi-AgentSystem," In ARMS workshop at AAMAS, 2021.
- W3 Shreya Datar, Libby Ferland, Esther W Foo, Michael Kotlyar, Brad Holschuh, Maria Gini, Martin Michalowski, and Serguei Pakhomov. "Measuring Physiological Markers of Stress During Conversational Agent Interactions," In 5th International Workshop on Health Intelligence (W3PHIAI-21) at AAAI, 2021.
- W4 Aditya Gaydhani, Raymond Finzel, Sheena Dufresne, Maria Gini, and Serguei Pakhomov. "Conversational Agent for Daily Living Assessment Coaching,". In First Workshop on Artificial Intelligence for Function, Disability, and Health (AI4Function) at IJCAI 2020, 2020.
- W5 Libby Ferland, Jude Sauve, Michael Lucke, Rungpeng Nie, Malik Khadar, Serguei Pakhomov, and Maria Gini. "Tell Me About Your Day: Designing a Conversational Agent for Time and Stress Management," In International Workshop on Health Intelligence (W3PHIAI) at AAAI, 2020.
- W6 John Harwell and Maria Gini, "Robustness Analysis in Large Robot Swarms," in ARMS workshop at AAMAS, 2020.

- W7 Steven Damer, Maria Gini, and Jeffrey S. Rosenschein, “Discrete Gift Exchange Game: Effects of Limited Choices on Opponent Interaction,” In GAIW: Games, Agents and Incentives Workshop at AAMAS, 2019.
- W8 Anthony Chen, John Harwell, and Maria Gini, “Maximizing Energy Battery Efficiency in Swarm Robotics,” ARMS workshop at AAMAS, 2019.
- W9 Nathan White, John Harwell, and Maria Gini, “Socially Inspired Communication in Swarm Robotics,” ARMS workshop at AAMAS, 2019.
- W10 Libby Ferland, Thomas Huffstutler, Jacob Rice, Joan Zheng, Shi Ni, and Maria Gini, “Evaluating Older Users’ Experiences with Commercial Dialogue Systems: Implications for Future Design and Development,” AAAI Workshop on Reasoning and Learning for Human-Machine Dialogues (DEEP-DIAL), 2019.
- W11 Joan Zheng, Raymond Finzel, Serguei Pakhomov, and Maria Gini, “Spoken Dialogue Systems for Medication Management,” AAAI Workshop on Health Intelligence, 2019.
- W12 Marie Manner, Maria Gini and Jed Elison, “Characterizing autistic features among preschoolers interacting with social robots,” Federated AI for Robotics Workshop at AAMAS, 2018.
- W13 John Harwell and Maria Gini, “Generalizing Task Partitioning Approaches To Robot Swarm Foraging,” poster at IEEE ICRA, 2018.
- W14 Julio Godoy, Niclas Sommer, Ioannis Karamouzas, Stephen Guy, and Maria Gini, “Multi-Robot Cooperative Navigation”, poster at IEEE ICRA, 2018.
- W15 Marie Manner, Maria Gini and Jed Elison, “Graphically representing child-robot interaction proxemics,” Workshop on Health Intelligence at AAAI 2018.
- W16 Libby Ferland, Ziwei Li, Shridhar Sukhani, Joan Zheng, Luyang Zhao, and Maria Gini, “Assistive AI for Coping with Memory Loss,” Workshop on Health Intelligence at AAAI 2018.
- W17 Ernesto Nunes, Mitchell McIntire, and Maria Gini, “Modeling and Simulation for Multi-Robot Allocation and Execution of Tasks with Temporal and Precedence Constraints,” Workshop “The Role of Simulation in Robot Programming” at SIMPAR, 2016.
- W18 Steven Damer and Maria Gini, “Safe Exploitation of Predictions of Opponent Behaviour,” Workshop on Interactions with Mixed Agent Types at IJCAI 2016.
- W19 Julio Godoy, Ioannis Karamouzas, Stephen Guy, and Maria Gini, “C-Nav: Implicit Coordination in Crowded Multi-Agent Navigation,” Workshop on Multi-Agent Path Finding at IJCAI 2016.
- W20 Bilal Kartal, Ernesto Nunes, Julio Godoy, and Maria Gini, “Parallelized Monte Carlo Tree Search with Branch and Bound for Task Allocation,” Workshop on Autonomous Mobile Service Robots at IJCAI 2016.
- W21 Marie Manner, Jed Elison, and Maria Gini, “Leveraging Computer Vision and Humanoid Robots to Detect Autism in Toddlers,” Workshop on Knowledge Discovery in Healthcare Data at IJCAI 2016.
- W22 Ernesto Nunes, Mitchell McIntire, and Maria Gini, “Auctions for Allocation to Robot Teams of Tasks with Temporal and Precedence Constraints,” ARMS workshop at AAMAS 2016.
- W23 Mark Valovage and Maria Gini, “Automatic Label Correction and Appliance Prioritization in Single Household Electricity Disaggregation,” Int.l Workshop on Artificial Intelligence for Smart Grids and Smart Buildings at AAAI 2016.
- W24 Elizabeth A. Jensen and Maria Gini, “Small team exploration with communication restrictions,” Workshop “AI in Space” at IJCAI 2015.
- W25 James Parker, Alessandro Farinelli and Maria Gini “Decentralized allocation of tasks with costs changing over time,” Workshop on “Synergies between Multiagent Systems, Machine Learning and Complex Systems (TRI 2015)” at IJCAI 2015.
- W26 J. Godoy, I. Karamouzas, S. J. Guy and M. Gini, ϵ -UCB for Action Selection in Multi Agent Navigation,” Machine Learning in Planning and Control of Robot Motion Workshop, at IROS 2014.
- W27 Elizabeth A. Jensen, Ernesto Nunes, and Maria Gini, Communication-Restricted Exploration for Robot Teams,” Multiagent Interaction without Prior Coordination Workshop at AAAI 2014.
- W28 Ernesto Nunes and Maria Gini, “Multi-robot task allocation with spatial, temporal, and ordering constraints: a review,” New Research Frontiers for Intelligent Autonomous Systems at IAS 2014.
- W29 James Parker, Julio Godoy, William Groves, and Maria Gini, “Issues with Methods for Scoring Competitors in RoboCup Rescue,” ARMS workshop at AAMAS 2014.
- W30 William Groves, Ernesto Nunes, and Maria Gini, “Predicting Globally and Locally: A Comparison

- of Methods for Vehicle Trajectory Prediction,” Workshop on Ubiquitous Data Mining Workshop at IJCAI, 2013.
- W31 Elizabeth Jensen and Maria Gini, “Rolling Dispersion for Robot Teams,” ARMS workshop at AAMAS, 2013.
- W32 James Parker and Maria Gini, “Teams to exploit spatial locality among agents,” SCW Workshop at AAMAS, 2013.
- W33 Ernesto Nunes, Julio Godoy, and Maria Gini, “Speed Traps and Ticket Dodging: Multiagent Decision-Making on Transportation Networks,” MASS Workshop at AAMAS, 2013.
- W34 Julio Godoy, Ioannis Karamouzas, Stephen Guy, and Maria Gini, “Online Learning for Multi-Agent Local Navigation,” CAVE Workshop at AAMAS, 2013.
- W35 Mohamed Elidrisi, Nicholas Johnson, and Maria Gini, “Fast learning against adaptive adversarial opponents,” Workshop on Adaptive and Learning Agents at AAMAS, June 2012.
- W36 Marie Manner and Maria Gini, “Improving Agent Team Performance through Helper Agents,” Workshop on Cognitive Agents in Virtual Environments at AAMAS, June 2012.
- W37 Catholjin Jonker, Birna van Riemsdijk, Iris van de Kieft, and Maria Gini, “Towards measuring sharedness of team mental models by compositional means,” AAAI Fall 2011 Symposium on Robot-Human Team-Work in Dynamic Adverse Environment, 2011.
- W38 Steve Tousignant, Eric Van Wyk, and Maria Gini, “An Overview of XRobots: A Hierarchical State Machine Based Language,” Software development and Integration in Robotics Workshop at IEEE Int’l Conf. on Robotics and Automation, Shanghai, May 2011.
- W39 Steven Damer and Maria Gini, “Learning to Cooperate in Normal Form Games,” In Interactive Decision Theory and Game Theory (IDTGT) Workshop, AAAI 2010, July 2010.
- W40 William Groves, John Collins, Wolfgang Ketter, and Maria Gini, “Analyzing Market Interactions in a Multi-Agent Supply Chain Environment,” In Eighth Workshop on e-Business, AIS, December 2009.
- W41 Andrew Nelson, Dickens Nyabuti, John Collins, Wolfgang Ketter, and Maria Gini, “Human-Agent competition in TAC SCM,” Workshop on Trading Agent Design and Analysis (TADA) at IJCAI, 2009.
- W42 Maria Gini, “To compete or not compete? Ingredients for a successful competition,” Workshop on Competitions in Artificial Intelligence and robotics, at IJCAI, July 2009.
- W43 Mark Hoogendorn and Maria Gini, “Automated Analysis of Auction Traces,” AMEC workshop at AAMAS, pp 57-70, 2009 (acceptance rate 10/23).
- W44 Richard Barnes and Maria Gini “Developing a text-based MMORPG to motivate students in CS1”, AI Education Colloquium at AAAI, Technical Report WS08-02, AAAI Press, pp 7-11, July 2008.
- W45 Brett Borghetti and Maria Gini, “Weighted Prediction Divergence for Metareasoning,” AAAI Workshop on Metareasoning, Tech Report WS-08-07, pp 90-97, July 2008.
- W46 John Collins, Wolf Ketter, and Maria Gini, “A Survey of Agent Designs for TAC SCM”, AAAI TADA Workshop, Technical Report WS-08-12, pp 19-28, July 2008.
- W47 John Collins, Wolf Ketter, and Maria Gini, “Architectures for agents in TAC SCM,” AAAI Spring Symposium on Architectures for Intelligent Theory-Based Agents, pages 7-12, March 2008.
- W48 John Chilton and Maria Gini, “Using the AIBOs in a CS1 course,” AAAI Spring Symposium “Robots and Robot Venues: resources for AI education”, Tech. Report SS-07-09, AAAI Press, pp 24-28, 2007.
- W49 Wolfgang Ketter, John Collins, Maria Gini, Alok Gupta, and Paul Schrater, “Pricing and resource allocation for intelligent trading agents using economic regimes,” 2nd International Symposium of Information Systems (ISIS-07), Hyderabad, India, December 21-23, 2007.
- W50 Maitreyi Nanjanath and Maria Gini, “Auctions for robust task execution in multi-robot teams.” AAAI-06 Workshop on Auction Mechanisms for Robot Coordination, July 2006.
- W51 Brett Borghetti, Eric Sodomka, Maria Gini, and John Collins, “Performance Evaluation Methods for the Trading Agent Competition,” TADA Workshop at AAMAS, May 2006.
- W52 A. Babanov and M. Gini, “Deciding Task Schedules for Temporal Planning via Auctions,” AAAI Spring Symposium on Distributed Plan and Schedule Management, March 2006.
- W53 W. Ketter, J. Collins, M. Gini, A. Gupta, and P. Schrater, “Identifying and Forecasting Economic Regimes in TAC SCM,” Trading Agent Design and Analysis at Nineteenth International Joint Conference on Artificial Intelligence, pp. 53-60, Edinburgh, Scotland, August 2005.
- W54 S. Watters, B. McInnes, D. McKoskey, T. Miller, D. Boley, M. Gini, W. Schuler, A. Polukeyeva, J. Gundel, S. Pakhomov, G. Savova “Using Volunteers to Annotate Biomedical Corpora for Anaphora

- Resolution,” Workshop on Knowledge Collection from Volunteer Contributors, AAAI 2005 Spring Symposium.
- W55 W. Ketter, E. Kryzhnyaya, S. Damer, C. McMillen, A. Agovic, J. Collins, and M. Gini, “Analysis and Design of Supply-Driven Strategies in TAC SCM,” Workshop on Trading Agent Design and Analysis at AAMAS 2004, July 2004.
- W56 S. Botman, M. Hoogendoorn, V. Bud, A. Jaiswal, S. Hawkins, Y. Kryzhnyaya, J. Pearce, A. Schoolcraft, E. Sigvartsen, J. Collins, and M. Gini, “Design of supplier agents for an auction-based market”, AAMAS-02 Workshop on Agent-Oriented Information Systems, Bologna, Italy, CEUR, Vol-59, July 2002.
- W57 P. E. Rybski and M. Gini, “Research Directions for Building Topological Maps with Mobile Robots,” ICML 2000 Workshop on Machine Learning of Spatial Knowledge, Stanford, 2 July 2000.
- W58 J. Collins, R. Sundareswara, M. Tsvetovat, M. Gini, and B. Mobasher, “Search Strategies for Bid Selection in Multi-Agent Contracting,” Agent-mediated Electronic Commerce (AmEC-99), at IJCAI’99, Stockholm, Sweden, August 1999.
- W59 D. Boley, V. Borst, and M. Gini “An Unsupervised Clustering Tool for Unstructured Data,” Workshop on Machine Learning for Information Filtering, at IJCAI’99, Stockholm, Sweden, August 1999.
- W60 J. Collins, M. Tsvetovat, C. Bilot, R. Sundareswara, T. Lee, M. Gini, and B. Mobasher, “A Framework For Mixed Initiative Agent-Based Contracting,” First IAC Workshop on Internet Based Negotiation Technologies, IBM T.J. Watson Research Center, Yorktown Heights, March 1999.
- W61 J. Collins, C. Bilot, M. Tsvetovat, M. Gini, and B. Mobasher “Plan Execution by Contracting in a Multi-Agent Environment,” Workshop on Agents for Electronic Commerce and Managing the Internet-Enabled Supply Chain, Agents’99, Seattle, May 1999.
- W62 D. Boley, M. Gini, K. Hastings, B. Mobasher, and J. Moore “A Client-Side Agent for Document Categorization and Exploration,” Workshop on Innovative Internet Information Systems, pp 23-36, June 1998.
- W63 E. Steinmetz, J. Collins, M. Gini, and B. Mobasher “An Efficient Anytime Algorithm For Multiple-Component Bid Selection in Automated Contracting,” Workshop on Agent Mediated Electronic Trading (AMET’98), Minneapolis, MN, May 1998.
- W64 D. F. Hougen, P. Rybski, and M. Gini, “Repeatability of Real World Training Experiments: a Case Study,” AAAI Spring Symposium on Integrating Robotics Research: Taking the Next Leap, March 1998
- W65 M. Gini, “The Role of Learning in Mobile Robotics,” position paper for AAAI Spring Symposium on Integrating Robotics Research: Taking the Next Leap, March 1998
- W66 J. Collins, S. Jamison, M. Gini, B. Mobasher, “Temporal Strategies in a Multi-Agent Contracting Protocol,” AAAI-97 Workshop on AI in Electronic Commerce, July 1997.
- W67 N. E. Reed, M. Gini, and P. E. Johnson, “Diagnosing Multiple Interacting Defects with Examples in Pediatric Cardiology,” AAAI Spring Symposium, AI in Medicine, March 1996.
- W68 K. Krebsbach and M. Gini, “Dynamic Sensor Policies,” AAAI Spring Symposium on Detecting and Resolving Errors in Manufacturing Systems, pp 74-80, March 1994.
- W69 L. Monsen and M. Gini, “Collision Free Navigation of Multiple Autonomous Vehicles,” Fifth Annual Transportation Research Conference, Minneapolis, May 1994.
- W70 D. Challou, M. Gini, and V. Kumar, “Parallel Search Algorithms for Robot Motion Planning,” AAAI Spring Symposium on Innovative Applications of Massive Parallelism, March 1993.
- W71 S. Ratering and M. Gini, “Robot Navigation in a Known Environment with Unknown Moving Obstacles,” AAAI Fall Symposium on Applications of AI to Real-World Autonomous Mobile Robots, November 1992.
- W72 J. Budenske and M. Gini, “Becoming Knowingly Interactive with Sensors and Actuators,” AAAI Fall Symposium on Applications of AI to Real-World Autonomous Mobile Robots, November 1992.
- W73 J. Budenske and M. Gini, “Execution, Knowledge and the Selective Use of Sensors and Actuators,” AAAI Spring Symposium on Control of Selective Perception, March 1992.
- W74 K. Krebsbach, D. Olawsky, and M. Gini, “Sensing and Deferral in Planning: Empirical Results,” AAAI Spring Symposium on Control of Selective Perception, March 1992.
- W75 J. Budenske and M. Gini, “Determining mobile robot actions which require sensor interaction,” AAAI Fall Symposium on Sensory Aspects of Robotics Intelligence, November 1991.

Recent Invited Plenary, Keynote, and Distinguished Speaker Talks

- Keynote at IJCAI-SAIA, July 2021. “What would you do if you had 10 robots, 1,000 robots, or 10,000 robots?,” July 2021.
- Rackham Faculty Allies Speaker Series, University of Michigan, “AI for Good: Computer Science Helping the World,” Jan 24, 2020.
- Keynote speaker, Interdisciplinary Workshop “Brain-based and Artificial Intelligence: Socio-ethical Conversations in Computing and Neurotechnology” Illinois Institute of Technology’s Center for the Study of Ethics in the Professions, May 10, 2018.
- Keynote speaker, the Midwest Instruction and Computing Symposium, Duluth, April 7, 2018, “Robots everywhere! Artificial Intelligence everywhere! What will the future be?”
- Keynote speaker, Embedded Systems Conference, Minneapolis, November 2017.
- Distinguished speaker, University of Nebraska, Lincoln, March 2015.
- Distinguished speaker, Baptist University, Hong Kong, February 2015.

Panels

- Panel chair at IJCAI 2021 on “Women in CS: where are we? what to do next?”. Panelists: Maja Mataric, Ming Zhang, Ece Kamar, Sarit Kraus.
- Panel on “Future of the profession,” for National Meeting of the Association of Research Libraries, Atlanta, April 2018.
- Panel chair at IJCAI 2017 on “AI in 2027.” Panelists: Noa Agmon, Fausto Giunchiglia, Sven Koenig, and Kevin Leyton-Brown.
- Panel chair at IJCAI 2016 on “Diversity in AI.” Panelists: Carla Brodley, Amy Greenwald, Ramon Lopez de Mantara, and Julie Shah.
- Panel member at IJCAI 2015 on “Who speaks for AI?” Chair: Michael Wooldridge; Panelists: Maria Gini, Barbara Grosz, Subbarao Kambhampati, Francesca Rossi, Stuart Russell, and Manuela Veloso.

Recent Invited Talks at Workshops and Summer Programs

- Invited Speaker, AI4Good Summer program, Montreal, May 2021, May 2020, and May 2019.
- Invited speaker, Robot Learning Workshop, October 2019, Lehigh University.
- Invited speaker, PAIRS 2018 (Workshop on Plan, Activity, and Intent Recognition), AAI, 2018.
- Invited speaker, TEAMAS 2017 (1st Int’l Workshop on Teams in Multiagent Systems), AAMAS, 2017.
- Invited speaker, ARMS 2017 (Workshop on Autonomous Robots and Multirobot Systems), AAMAS, 2017.
- Invited Speaker, AAMAS Summer School, Singapore, May 2016.
- Invited speaker, MIT Media Lab Artificial Intelligence & Governance Symposium, April 28-29, 2016.

Recent Professional Contributions

Leadership in Professional Societies

- President, Board of Directors, International Foundation on Autonomous Agents and Multi-Agent systems, 2015–2017, 2017–2019. Elected member 2006–2012, 2014–2020.
- Chair, AAI Committee for Diversity and Inclusion, 2019–.
- Chair, ACM Special Interest Group on Artificial Intelligence (SIGART), 2003–2010.
- Member of the CRA Computing Community Consortium (CCC), 2019–.
- Member of the Board of CRA-W – Computing Research Association’s Committee on the Status of Women in Computing Research, 2007–. Co-director of Distributed Research Experiences for Undergraduates (DREU), 2007–2017; Co-director of Grad Cohort program, 2018–.
- Member of Steering committee for Autonomous Agents Conference, 1998-2006.
Steering committee for International Conference on Electronic Commerce, 2007–2009.
Steering committee for Intelligent Autonomous Systems, 2004–.

Recent Editorial Boards

- Editor in Chief, “Robotics and Autonomous Systems, 2016–, Associate Editor, 2011-2015.
- Associate Editor, “Artificial Intelligence,” 2013–2020.
- Associate Editor, “Autonomous Agents and Multi-Agent Systems,” 2007-.
- Section Editor, “Current Robotics Reports”, 2020–.

Recent Conference Chair

- General Chair, IJCAI, 2021.
- Co-Program Chair, Int’l Conf. on Intelligent Robots and Systems (IROS), 2017.
- General Co-Chair and Local Organizer, Autonomous Agents and Multi-Agent Systems (AAMAS), St. Paul, MN, 2013.

Recent Leadership Roles in Program Committees

- 2022: Conference on Artificial Intelligence (AAAI) [Area Chair]
2022: Int’l Conf on Autonomous Agents and Multi-Agent Systems (AAMAS) [Track Chair].
- 2020: Conference on Artificial Intelligence (AAAI) [SPC]
- 2020: Int’l Joint Conference on Artificial Intelligence (IJCAI) [Area Chair]
2020: Conference on Artificial Intelligence (AAAI) [SPC]
- 2019: Conference on Artificial Intelligence (AAAI) [SPC]
Int’l Conf on Autonomous Agents and Multi-Agent Systems (AAMAS) [SPC],
Int’l Joint Conference on Artificial Intelligence (IJCAI) [Area Chair]

Other Professional Service

- Reviewer of proposals for NSF, NASA, the Army Research Office, Canada NSERC, European Union, Finland, Israel, Italy, the Netherlands, Switzerland.
- Member, external committee to review the Computer Science Department at University of New Mexico, March 2019.
- Member, external committee to review proposal for a Robotics undergraduate degree at SUNY Plattsburg, June 2017.
- External Academic Advisor for the Department of Computer Science at Hong Kong Baptist University to advise on undergraduate programs and research, 2015–2018.
- Member, external committee to review the Computer Science Department, Simon Fraser University, Vancouver, Canada, 2013.
- Chair, external committee to review the Computer Science Department, Hunter College, New York, 2012.
- Chair, external committee to review NSF Expeditions in Computing grant at Harvard, 2011.

Recent Activities to Broaden Participation in Computing

- General co-chair, Grace Hopper Celebration of Women in Computing, 2016.
Program co-chair, Grace Hopper Celebration of Women in Computing, October 2015.
- Member of the board of Computing Research Association Committee on the Status of Women in Computing Research (CRA-W) and Co-director of Distributed Research Experiences for Undergraduates, (DREU) 2007–2017. Co-director of Grad Cohort, 2018–.
- Chair, Workshop on “Diversity in AI,” at AAAI 2017.
Chair, Workshop on “Broadening Participation in AI ,” at IJCAI 2016.
Co-Chair, Workshop on “Women in AI and Computer Science,” at IJCAI 2015.
- Organizer and co-organizer of Graduate Doctoral Mentoring Consortia and fundraiser for scholarships multiple times for AAMAS and IJCAI conferences.