

Ladislau Bölöni

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- Education
- ◇ **Purdue University**, West Lafayette
May 2000, Ph.D. in Computer Science
Dissertation: *Contributions to distributed object systems and network agents*
Advisor: *Dan C. Marinescu*
 - ◇ **Purdue University**, West Lafayette
May 1999, M.Sc. in Computer Science
Thesis title: *Meta-programming environment*
 - ◇ **Technical University of Cluj-Napoca**, Romania
June 1993, Diploma Engineer in Computer Engineering
Graduation project: *A small-vocabulary speech recognition system*
- Research interests
- ◇ **Robotics:** deep reinforcement learning, deep learning from demonstration, vision-based end-to-end learning, human-robot interaction
 - ◇ **Artificial intelligence:** deep learning, autonomous agents, human-agent-robot teamwork
 - ◇ **Social behavior modeling:** Modeling social and cultural behavior
 - ◇ **Networking and distributed systems:** sensor networks, cloud computing, task scheduling and resource allocation.
 - ◇ **Artificial General Intelligence:** cognitive architectures, narrative reasoning
- Professional societies
- ◇ Senior Member of the Institute of Electrical and Electronics Engineers (IEEE) since 2005, member since 1998.
 - ◇ Member of the IEEE Computer Society.
 - ◇ Member of the Technical Committee on Distributed Intelligent Systems of the IEEE Systems, Man and Cybernetics Society.
 - ◇ Member of the Association of Computing Machinery (ACM).
 - ◇ Member of the American Association for Artificial Intelligence (AAAI).
- Awards
- ◇ University of Central Florida Research Incentive Award, 2019.
 - ◇ Kurzweil Best AGI Idea Prize 2014 for the paper “Autobiography based prediction in a situated AGI agent”, by L. Bölöni at the Seventh Conf. of Artificial General Intelligence (AGI-2014).
 - ◇ Best Paper Award for the paper “IVE: improving the value of information in energy-constrained intruder tracking sensor networks”, by D. Turgut and L. Bölöni at the IEEE Int. Conf. on Communications (ICC-2013).
 - ◇ NASA Software Award, August 2006 for the NASA Engineering Shuttle Telemetry Agent - NESTA.
 - ◇ AAI Deployed Application Award for the paper “NESTA: NASA Engineering Shuttle Telemetry Agent” by G.S. Semmel, S.R. Davis, K.W. Leucht, D.A. Rowe, K.E. Smith, and L. Bölöni at the AAI-2005 conference, July 2005.

- ◇ Member of the Upsilon Pi Epsilon Computer Sciences Honor Society, Beta Chapter of Indiana.
- ◇ Scholarship offered by Lucent Technologies for the university year 1998-99.
- ◇ Scholarship of the Hungarian Academy of Science the university year 1994-95, spent at the Analogical and Neural Computing Laboratory at the Computers and Automation Institute of Hungarian Academy of Science, working in the domain of cellular neural networks.
- ◇ Romanian Republican Scholarship in university year 1992-93 (awarded for one student in the department).
- ◇ Won the first prize at the Romanian National Programming Contest of the students in 1990 (individual competition) and the third prize in 1991 and 1992 (with the team of the university).

Work
experience

- ◇ **August 2017 - present** Professor, Dept. of Computer Science, University of Central Florida.
- ◇ **June 2019** Visiting Researcher, Université de Toulouse / ENSEEIHT, Toulouse, France.
- ◇ **August 2018 - June 2019** Visiting Researcher, KTH Royal Institute of Technology, Stockholm, Sweden.
- ◇ **August 2008 - August 2017** Associate Professor, Dept. of Computer Science, University of Central Florida.
- ◇ **February 2015 - December 2017** Consulting Position, Chief Software Architect Composure.AI (formerly MosaixSoft) Inc., Los Altos, CA.
- ◇ **April 2012 - July 2012** Visiting Researcher, University of Rome "La Sapienza", Rome, Italy.
- ◇ **August 2011 - December 2011** Visiting Researcher, Imperial College, London, England.
- ◇ **August 2002 - August 2008** Assistant Professor, School of Electrical Engineering and Computer Science, University of Central Florida.
- ◇ **May 2000 - June 2002** CPlane Inc. Sunnyvale, Group manager, Architect for Infrastructure, Product Designer for Traffic Engineering
 - Designed and implemented the XML based messaging framework of the CPlane product (relying on CORBA communication).
 - Designed and implemented the Traffic Conditioning component.
 - Lead the development team in the implementation of the information manager component, and service scheduling component.
 - Designed the Traffic Engineering product (to support MPLS and optical network based transport).
- ◇ **May-August 1999** Internship at AT&T Labs, San Jose.
 - Working on a remote management system of a group of network routers.
 - Participated in a specification of an API for runtime reconfiguration of multiple network elements (continuing my work from the previous year), implemented the interface in CORBA and then ported it to four CORBA implementations (Visibroker, Orbix, MICO and OmniORB) as a project to evaluate their suitability for the specific task. One side result of this work was a document describing methodologies for writing implementation independent CORBA code.

- ◇ **May-July 1998** Internship at AT&T Labs, San Jose.
 - Working on the network management team of the Geoplex system. I have started the development of an interface for generic control of network elements (routers, ATM switches, traffic shaping/QoS devices) over the network.
- ◇ **1997-99** Research assistant at the Bond Lab, Purdue University, Computer Science Department
 - Research in distributed systems and autonomous agents.
- ◇ **1996-97** Teaching assistant at Purdue University, Computer Science Department
 - Assisting at the teaching of the classes of Computer Architectures in the Fall and Cryptography in the Spring semester.
- ◇ **1993-2000** Assistant Professor, Computer Engineering Department, Technical University of Cluj-Napoca, Romania (from 1996-2000 on leave).
 - Teaching classes in Computer Architecture and Networking.
- ◇ **1991-1996** Founder and administrator of Avantgarde Software LLC, Cluj-Napoca, Romania.
 - Managing a team of programmers implementing customized accounting, inventory management and employee management programs.

Teaching
experience

- ◇ **Fall 2017**
CAP 5636 - Advanced Artificial Intelligence
CDA 5106 - Computer Architecture
- ◇ **Fall 2016**
CAP 5636 - Advanced Artificial Intelligence
CDA 5106 - Computer Architecture
- ◇ **Fall 2015**
COP 4600 - Operating Systems
- ◇ **Fall 2014**
COP 4600 - Operating Systems
- ◇ **Spring 2014**
COP 4600 - Operating Systems
- ◇ **Fall 2013**
COP 4600 - Operating Systems
- ◇ **Spring 2013**
COP 4600 - Operating Systems
- ◇ **Fall 2012**
COP 4600 - Operating Systems
- ◇ **Spring 2011**
EEL 4781 - Computer Communication Networks
- ◇ **Fall 2010**
EEL 4781 - Computer Communication Networks
EEL 6785 - Computer Network Design
- ◇ **Spring 2010**
EEL 6788 - Advanced topics in wireless networks (focus on urban computing)
- ◇ **Fall 2009**
EEL 4781: Computer Communication Networks

- ◇ **Spring 2009**
COP 4600: Operating systems
- ◇ **Fall 2008**
EEL 4781: Computer Communication Networks
- ◇ **Spring 2008**
EEL 6788 - Advanced topics in wireless networks - Wireless sensor networks, a multi-agent perspective
- ◇ **Spring 2008**
COP 5611 - Operating systems
- ◇ **Fall 2007**
EEL 6897 - Software Development for Real-Time Engineering Systems
- ◇ **Spring 2007**
EEL 4851 - Data Structures
EEL 6938 - Engineering applications of autonomous agents
- ◇ **Fall 2006**
EEL 5708 - High Performance Computer Architectures
- ◇ **Summer 2006**
EEL 3801C - Introduction to Computer Engineering
- ◇ **Spring 2006**
EEL 5937 - ST: Multi agent systems
- ◇ **Fall 2005**
EEL 4851 - Data Structures
- ◇ **Fall 2005**
EEL 5708 - High Performance Computer Architectures
- ◇ **Summer 2005**
EEL 4882 - Engineering Systems Software
- ◇ **Spring 2005**
EEL 6938 - Engineering Applications of Autonomous Agents
- ◇ **Fall 2004**
EEL 5708 - High Performance Computer Architectures
- ◇ **Summer 2004**
EEL 3801C - Introduction to Computer Engineering
EEL 4882 - Engineering Systems Software
- ◇ **Spring 2004**
EEL 3801C - Introduction to Computer Engineering
- ◇ **Fall 2003**
EEL 5708 - High Performance Computer Architectures
- ◇ **Spring 2003**
EEL 5937 Special topics: Multi agent systems
- ◇ **Fall 2002**
EEL 5708 - High Performance Computer Architectures

Publications ◇ **Books**

- [1] L. Bölöni and S. Kinebuchi. *Programming KDE 3.0 (in Japanese)*. SE Shoeisha, 2002.

[2] L. Bölöni. *Programming KDE 2.0*. CMP Books, 2000.

◇ **Book chapters**

- [1] T.S. Bhatia, S.A. Khan, and L. Bölöni. Modeling the propagation of public perception across repeated social interactions. In *Multi-Agent-Based Simulation XIII, LNCS 7838*, pages 13–26. 2013.
- [2] L.J. Luotsinen, J.N. Ekblad, T.R. Fitz-Gibbon, C. Houchin, J. Key, M.A. Khan, J. Lyu, J. Nguyen, R. Oleson, G. Stein, S. Vander Weide, V. Trinh, and L. Bölöni. *Comparing apples with oranges: evaluating twelve paradigms of agency*, pages 93–112. Springer LNAI, 2007.
- [3] L. Bölöni. Foreword. In Hong Lin, editor, *Architectural Design of Multi-Agent Systems: Technologies and Techniques*. Idea Group, 2006.
- [4] G. S. Semmel, K. E. Smith, and L. Bölöni. Nasa engineering shuttle telemetry agent. In *John F. Kennedy Space Center 2005 Annual Report*. National Aeronautics and Space Administration, 2006.
- [5] G.S. Semmel, S.R. Davis, K.W. Leucht, D.A. Rowe, K.E. Smith, and L. Bölöni. Monitoring agents for assisting NASA engineers with shuttle ground processing. In *Integrated Intelligent Systems for Engineering Design*, pages 305–324. IOS Press, 2006.
- [6] G. Wang, Y. Ji, D.C. Marinescu, D. Turgut, and L. Bölöni. Location- and power-aware protocols for wireless networks with asymmetric links. In E. Gelenbe, editor, *Computer System Performance Modeling in Perspective: A Tribute to the Work of Prof. Kenneth C. Sevcik (Advances in Computer Science and Engineering: Texts)*. Imperial College Press, 2006.
- [7] S. Ali, T.D. Braun, H.J. Siegel, A.A. Maciejewski, N. Beck, L. Bölöni, M. Maheswaran, A.I. Reuther, J.P. Robertson, M.D. Theys, and B. Yao. Characterizing resource allocation heuristics for heterogeneous computing systems. In *Advances in Computers: Volume 63: Parallel, Distributed, and Pervasive Computing*, pages 93–129. Elsevier, 2005.
- [8] X. Bai, H. Yu, G. Wang, Y. Ji, D.C. Marinescu, and L. Bölöni. Intelligent grids. In *Grid Computing: Software Environments and Tools*, pages 45–74. Springer, 2005.
- [9] L. Bölöni and D.C. Marinescu. Adaptation and mutation in multi-agent systems and beyond. In *Design of Intelligent Multi-Agent Systems - Human Centeredness, Architectures, Learning and Adaptation*, pages 315–354. Springer, December 2004.
- [10] L. Bölöni, M.A. Khan, X. Bai, G. Wang, Y. Ji, and D.C. Marinescu. Software engineering challenges for mutable agent systems. In *Software Engineering for Multi-Agent Systems II, Lecture Notes in Computer Science Vol 2940*, pages 149–167. Springer, 2004.
- [11] D.C. Marinescu and L. Bölöni. A component-based architecture for problem solving environments. In R.F. Boisvert and E.N. Houstis, editors, *Computational science, mathematics and software*. Purdue University Press, West Lafayette, IN, USA, 2002.
- [12] L. Bölöni, K.K. Jun, K. Palacz, R. Sion, and D.C. Marinescu. The Bond agent system and applications. In D. Kotz and F. Mattern, editors, *Agent Systems, Mobile Agents, and Applications, Lecture Notes on Computer Science, vol. 1882*, pages 99–112. Springer Verlag, 2000.

- [13] L. Bölöni and D. C. Marinescu. An object-oriented framework for building collaborative network agents. In H.N. Teodorescu, D. Mlynek, A. Kandel, and H.-J. Zimmerman, editors, *Intelligent Systems and Interfaces*, International Series in Intelligent Technologies, chapter 3, pages 31–64. Kluwer Publishing House, 2000.

◇ **Journal articles**

- [1] F. Khan, S. Butt, S. Khan, D. Turgut, and L. Bölöni. Value of information based data retrieval in UWSNs. *Sensors*, October 2018.
- [2] J. Xu, R. Rahmatizadeh, L. Bölöni, and D. Turgut. Real-time prediction of taxi demand using recurrent neural networks. *IEEE Transactions on Intelligent Transportation Systems*, 19:2572–2581, August 2018.
- [3] P. Gjanci, C. Petrioli, S. Basagni, C.A. Phillips, L. Bölöni, and D. Turgut. Path finding for maximum the value of sensed information in multi-modal underwater wireless sensor networks. *IEEE Transactions on Mobile Computing*, 17:404–418, February 2018.
- [4] L. Bölöni, T. S. Bhatia, S. A. Khan, J. Streater, and S. M. Fiore. Towards a computational model of social norms. *PLOS ONE*, 13(4):e0195331, 2018.
- [5] L. Bölöni and D. Turgut. Value of information based scheduling of cloud computing resources. *Future Generation Computer Systems*, 71:212–220, June 2017.
- [6] J. C Bricout, B. B Sharma, P. M.A. Baker, A. Behal, and L. Bölöni. Learning futures with mixed sentience. *Futures*, 87:91–105, 2017.
- [7] D. Turgut and L. Bölöni. Value of information and cost of privacy in the internet of things. *IEEE Communications Magazine*, 55:62–66, 2017.
- [8] G. Bulumelle and L. Bölöni. Reducing side-sweep accidents with vehicle-to-vehicle communication. *Journal of Sensor and Actuator Networks*, 5(4), 2016.
- [9] S. A. Khan, D. Turgut, and L. Bölöni. Bridge protection algorithms - a technique for fault-tolerance in sensor networks. *Ad Hoc Networks*, 24:186–199, January 2015.
- [10] Y. Luo, D. Turgut, and L. Bölöni. Modeling the strategic behavior of drivers for multi-lane highway driving. *Journal of Intelligent Transportation Systems*, 19(1):45–62, 2015.
- [11] L. Bölöni. Integrating perception, narrative, premonition and confabulatory continuation. *Biologically Inspired Cognitive Architectures*, 8:118–129, April 2014.
- [12] S.A. Khan, V. Thakore, A. Behal, L. Bölöni, and J. J. Hickman. Comparative analysis of system identification techniques for nonlinear modeling of the neuron-microelectrode junction. *Journal of Computational and Theoretical Nanoscience*, 10(3):573–580, March 2013.
- [13] A. Boukerche, B. Turgut, N. Aydin, M.Z. Ahmad, L. Bölöni, and D. Turgut. Routing protocols in ad hoc networks: a survey. *Computer Networks*, 55(13):3032–3080, September 2011.
- [14] D. Turgut and L. Bölöni. Heuristic approaches for transmission scheduling in sensor networks with multiple mobile sinks. *The Computer Journal*, 54(3):332–344, March 2011.

- [15] M. A. Khan, D. Turgut, and L. Bölöni. Optimizing coalition formation for tasks with dynamically evolving rewards and nondeterministic action effects. *Journal of Autonomous Agents and Multi-Agent Systems*, 22(3):415–438, 2011.
- [16] Y. Luo and L. Bölöni. Analyzing and exploiting the competitiveness of scenarios for negotiating convoy formation under time constraints. *Multi-agent and Grid Systems - an International Journal*, 6(5,6):415–435, December 2010. Special Issue of Advances in Agent-mediated Automated Negotiations.
- [17] V. Pryyma, L. Bölöni, and D. Turgut. Active time scheduling for rechargeable sensor networks. *Computer Networks (Elsevier)*, 54(4):631–640, March 2010.
- [18] J. Secretan, M. Lawson, and L. Bölöni. Efficient allocation and composition of distributed storage. *Journal of Supercomputing*, 47(3):286–310, March 2009.
- [19] G. Wang, L. Bölöni, D. Turgut, and D. Marinescu. Time-parallel simulation of wireless ad hoc networks with compressed history. *Journal of Parallel and Distributed Computing (JPDC)*, 69(2):168–179, February 2009.
- [20] G. Wang, D. Turgut, L. Bölöni, and D.C. Marinescu. Time-parallel simulation of wireless ad hoc networks. *ACM/Springer Journal of Wireless Networks (WINET)*, 15(4):463–480, 2009.
- [21] G. Wang, D. Turgut, L. Bölöni, Y. Ji, and D.C. Marinescu. A MAC layer protocol for wireless networks with asymmetric links. *Ad Hoc Networks*, 6(3):424–440, May 2008.
- [22] X. Bai, L. Bölöni, D. C. Marinescu, H. J. Siegel, R. A. Daley, and I-J. Wang. Utility and price based resource allocation models for large-scale distributed systems. *Journal of Parallel and Distributed Computing*, 68(2):182–199, 2008.
- [23] L. Bölöni, L. J. Luotsinen, J. N. Ekblad, T. R. Fitz-Gibbon, C. Houchin, J. Key, M. A. Khan, J. Lyu, J. Nguyen, R. Oleson, G. Stein, S. Vander Weide, and V. Trinh. A comparison study of 12 paradigms for developing embodied agents. *Software: Practice and Experience*, 38(3):259–305, 2008.
- [24] L. Bölöni and D. Turgut. Should I send now or send later? A decision-theoretic approach to transmission scheduling in sensor networks with mobile sinks. *Wireless Communications and Mobile Computing Journal (WCMC)*, 8(3):385–403, 2008.
- [25] G. Wang, D. Turgut, L. Bölöni, Y. Ji, and D. Marinescu. Improving routing performance through m-limited forwarding in power-constrained wireless networks. *Journal of Parallel and Distributed Computing (JPDC)*, 68:501–514, 2008.
- [26] L. Bölöni, M.A. Khan, and D. Turgut. Agent-based coalition formation in disaster response applications. *International Journal of Intelligent Control and Systems*, 12(2):107–117, 2007.
- [27] G.S. Semmel, S.R. Davis, K.W. Leucht, D.A. Rowe, K.E. Smith, and L. Bölöni. Space shuttle ground processing with monitoring agents. *IEEE Intelligent Systems*, 21(1):68–73, Jan/Feb 2006.
- [28] X. Bai, K. Sivoncik, D. Turgut, and L. Bölöni. Grid coordination with marketmaker agents. *International Journal of Computational Intelligence*, 3(2):153–160, 2006.

- [29] L. Bölöni, D. Turgut, and D. C. Marinescu. Task distribution with a random overlay network. *Future Generation Computer Systems (Elsevier)*, 22(6):676–687, 2006.
- [30] G.S. Semmel, S.R. Davis, K.W. Leucht, D.A. Rowe, K.E. Smith, and L. Bölöni. NESTA: NASA engineering shuttle telemetry agent. *AI Magazine*, 27(3):25–35, 2006.
- [31] X. Bai, G. Wang, Y. Ji, G.M. Marinescu, D.C. Marinescu, and L. Bölöni. Coordination in intelligent grid environments. *Proceedings of the IEEE*, 93(3):613–630, 2005.
- [32] M.A. Khan, S.K. Vaithianathan, K. Sivoncik, and L. Bölöni. Towards an agent framework for grid computing. *International Scientific Journal of Computing*, 2(3), 2003.
- [33] L. Bölöni and D.C. Marinescu. Robust scheduling of metaprograms. *Journal of Scheduling*, 5(5):395–412, September 2002.
- [34] T.D. Braun, H.J. Siegel, N. Beck, L. Bölöni, M. Maheswaran, A.I. Reuther, J.P. Robertson, M.D. Theys, B. Yao, D.A. Hensgen, and R.F. Freund. A comparison of eleven static heuristics for mapping a class of independent tasks onto heterogeneous distributed computing systems. *Journal of Parallel and Distributed Computing*, 6(61):810–837, June 2001.
- [35] D.C. Marinescu and L. Bölöni. Biological metaphors in the design of complex software systems. *Journal of Future Generation Computer Systems*, 17(4):345–360, 2001.
- [36] D.C. Marinescu and L. Bölöni. A component-based architecture for problem solving environments. *Mathematics and Computers in Simulation*, 54:279–293, 2000.
- [37] D.C. Marinescu, L. Bölöni, J.R. Rice, P. Tsompanopoulou, and E.A. Vavalis. Agent-based scientific simulation and modeling. *Concurrency Practice and Experience*, 12(9):845–861, 2000.
- [38] K. Lotz, L. Bölöni, T. Roska, and J. Hámori. Hyperacuity in time: A CNN model of a time-coding pathway of sound localization. *IEEE Transactions on Circuits and Systems*, 46(8):994–1002, August 1999.
- [39] L. Kék, Gy. Liszka, Á. Petrányi, Á. Zarándy, and L. Bölöni. Data handling on an analogic mammography diagnostic workstation. *Hungarian Oncology (Magyar Onkológia)*, 42:109–120, 1998.
- [40] L. Bölöni. Neural dynamics of the Kohonen feature map applied in speech recognition. *Journal of Automation, Computers and Applied Mathematics*, 3(1), 1994.

◇ **Refereed conference and symposium papers**

- [1] H. Sheikh, M. Razghandi, and L. Bölöni. Learning distributed cooperative policies for security games via deep reinforcement learning. In *to be presented at Conference on Computers, Software and Applications (COMPSAC-2019)*, July 2019.
- [2] H. Sheikh and L. Bölöni. Emergence of scenario-appropriate collaborative behaviors for teams of robotic bodyguards. In *to be presented at Int. Conf. on Autonomous Agents and Multiagent Systems (AAMAS-2019)*, Jun 2019.

- [3] C. Feltner, J. Guilbe, S. Zehtabian, S. Khodadadeh, L. Bölöni, and D. Turgut. Smart walker for the visually impaired. In *Accepted for publication at IEEE ICC 2019*, May 2019.
- [4] S. Khodadadeh, S. Zehtabian, J. Guilbe, R. Pearlman, B. Willenberg, B. Kim, E. A. Ross, L. Bölöni, and D. Turgut. Detecting unsafe use of a four-legged walker using iot and deep learning. In *Accepted for publication at IEEE ICC 2019*, May 2019.
- [5] P. Abolghasemi, A. Mazaheri, M. Shah, and L. Bölöni. Pay attention!-robustifying a deep visuomotor policy through task-focused attention. In *to be presented at Conference on Computer Vision and Pattern Recognition (CVPR-2019)*, 2019.
- [6] J. Xu, G. Solmaz, R. Rahmatizadeh, L. Bölöni, and D. Turgut. Providing distribution estimation for animal tracking with unmanned aerial vehicles. In *Proc of IEEE Global Communications Conference (GLOBECOM-18)*, pages 1–6, December 2018.
- [7] J. Xu, R. Rahmatizadeh, L. Bölöni, and D. Turgut. Taxi dispatch planning via demand and destination modeling. In *Proc. of 43rd IEEE Conference on Local Computer Networks (LCN-2018)*, October 2018.
- [8] H. U. Sheikh and L. Bölöni. The emergence of complex bodyguard behavior through multi-agent reinforcement learning. In *Proc. of Autonomy in Teams (AIT-2018) workshop at IJCAI-2018*, July 2018.
- [9] S. Zehtabian, S. Khodadadeh, R. Pearlman, B. Willenberg, B. Kim, D. Turgut, L. Bölöni, and E. A. Ross. Supporting rehabilitation prescription compliance with an IoT-augmented four-legged walker. In *Proc. of 2nd Workshop on AI for Aging, Rehabilitation and Independent Assisted Living (ARIAL-2018) at IJCAI-2018*, July 2018.
- [10] R. Rahmatizadeh, P. Abolghasemi, L. Bölöni, and S. Levine. Vision-based multi-task manipulation for inexpensive robots using end-to-end learning from demonstration. In *Proc. of International Conference on Robotics and Automation (ICRA-2018)*, pages 3758 – 3765, May 2018.
- [11] R. Rahmatizadeh, P. Abolghasemi, A. Behal, and L. Bölöni. Learning real manipulation tasks from virtual demonstrations using lstm and mdn. In *Proc. of Thirty-Second AAAI Conf. on Artificial Intelligence (AAAI-2018)*, February 2018.
- [12] A. Mayle, N. Hajiakhoond Bidoki, S. Masnadi, L. Bölöni, and D. Turgut. Investigating the value of privacy within the internet of things. In *Prof. of IEEE Global Communications Conference (Globecom 2017)*, December 2017.
- [13] J. Xu, R. Rahmatizadeh, L. Bölöni, and D. Turgut. A sequence learning model with recurrent neural networks for taxi demand prediction. In *Proc. of IEEE Local Computer Networks (LCN 2017)*, October 2017.
- [14] F. A. Khan, S. A. Khan, D. Turgut, and L. Bölöni. Optimizing resurfacing schedules to maximize value of information in UWSNs. In *Proc. of IEEE Global Communications Conference (GLOBECOM 2016)*, December 2016.
- [15] R. Rahmatizadeh, P. Abolghasemi, A. Behal, and L. Bölöni. Real-time placement of a wheelchair-mounted robotic arm. In *IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN-2016)*, pages 1032–1037, August 2016.

- [16] T.S. Bhatia, G. Solmaz, D. Turgut, and L. Bölöni. Controlling the movement of robotic bodyguards for maximal physical protection. In *Proc of the 29th International FLAIRS Conference*, pages 380–385, May 2016.
- [17] R. Rahmatizadeh, P. Abolghasemi, A. Jabalameli, A. Behal, and L. Bölöni. Trajectory adaptation of robot arms for head-pose dependent assistive tasks. In *Proc. of the 29th International FLAIRS Conference*, pages 410–413, May 2016.
- [18] G. Bulumulle and L. Bölöni. A study of the automobile blind-spots' spatial dimensions and angle of orientation on side-sweep accidents. In *Symposium on Theory of Modeling and Simulation: DEVS Integrative MS Symposium (TMS/DEVS-16)*, pages 18:1–18:6, April 2016.
- [19] P. Abolghasemi, R. Rahmatizadeh, A. Behal, and L. Bölöni. A real-time technique for positioning a wheelchair-mounted robotic arm for household manipulation tasks. In *Workshop on Artificial Intelligence Applied to Assistive Technologies and Smart Environments (ATSE-16) at AAI-2016*, February 2016.
- [20] R. Rahmatizadeh, S. Khan, A.P. Jayasumana, D. Turgut, and L. Bölöni. Circular update directional virtual coordinate routing protocol in sensor networks. In *IEEE GLOBECOM'15*, pages 1–6, December 2015.
- [21] F. Khan, S. Khan, D. Turgut, and L. Bölöni. Scheduling multiple mobile sinks in underwater sensor networks. In *Proceedings of IEEE LCN'15*, pages 358–365, October 2015.
- [22] J. Xu, G. Solmaz, R. Rahmatizadeh, D. Turgut, and L. Bölöni. Animal monitoring with unmanned aerial vehicle-aided wireless sensor networks. In *Proc. of the 40th IEEE Conf. on Local Computer Networks (LCN-2015)*, pages 334–341, October 2015.
- [23] G. Bulumulle and L. Bölöni. Simulating the impact of blind-spots on the frequency of side-sweep accidents. In *Proc. of the Symposium on Theory of Modeling and Simulation: DEVS Integrative M&S Symposium (DEVS-15)*, pages 235–241, April 2015.
- [24] T.S. Bhatia, G. Solmaz, D. Turgut, and L. Bölöni. Two algorithms for the movements of robotic bodyguard teams. In *Proc. of Workshop on Knowledge, Skill, and Behavior Transfer in Autonomous Robots*, pages 2–8, January 2015.
- [25] F. A. Khan, S. A. Khan, D. Turgut, and L. Bölöni. Greedy path planning for maximizing value of information in underwater sensor networks. In *Proc. the 10th IEEE International Workshop on Performance and Management of Wireless and Mobile Networks (P2MNET-2014)*, September 2014.
- [26] L. Bölöni. Autobiography based prediction in a situated AGI agent. In *Seventh Conf. of Artificial General Intelligence (AGI-2014)*, pages 11–21, August 2014. [ib&Kurzweil Best AGI Idea Prize 2014i/b&](#).
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- Citations
- ◇ **Total number of citations: 5033** (according to Google Scholar)
 - ◇ **h-index: 26, i10-index: 64**
- Talks
- ◇ **Invited talks, panels**
 - Guest seminar: “Deep learning without big data”, Université de Toulouse / ENSEIHT, Toulouse, France, June 14, 2019
 - Guest seminar: “Deep learning without big data”, FOI Swedish Defense Institute, Stockholm, Sweden, April 23, 2019
 - Guest seminar: “Apply AI in your field of choice for fun and profit”, University of Darmstadt, Germany, March 22, 2019
 - Guest seminar: “Apply AI in your field of choice for fun and profit”, NEC Labs, Heidelberg, Germany, March 22, 2019
 - Guest seminar: “End-to-end learning in robotics”, ETH Zürich, Switzerland, March 1, 2019.
 - Guest seminar: “Apply AI in your field of choice for fun and profit”, University of Bern, Switzerland, February 27, 2019.
 - Guest seminar: “Apply AI in your field of choice for fun and profit”, IMDEA Networks Research Institute, Madrid, Spain, November 30, 2018.
 - Guest seminar: “Apply AI in your field of choice for fun and profit”, KTH Royal Institute of Technology, Stockholm, Sweden, October 4, 2018.
 - Guest seminar: “Apply AI in your field of choice for fun and profit”, “University of New South Wales, Sydney, Australia, May 28, 2018.
 - IEEE I2CE/IoTDI 2018 Joint Panel with the theme “Implications of AI on IoT and Cloud Systems”, Wednesday, April 18, 2018.
 - Guest seminar: “Autobiographical reasoning, the Xapagy cognitive architecture and implications for the Global Brain”, Oct 24, 2014, Vrije Universiteit Brussel, Global Brain Institute (part 1: <https://www.youtube.com/watch?v=h0dAEM0DkjQ>, part 2: <https://www.youtube.com/watch?v=uBp1iq0i62U>).
 - Panel participant at the Conference of Artificial General Intelligence AGI-2014 - https://www.youtube.com/watch?v=kVE4sIsIP_s
 - Guest seminar: “A pragmatic value of information approach to intruder tracking sensor networks”, May 16, 2012, University of Perugia, Italy.
 - Guest seminar: “Try and bounce: a stealthy dissemination protocol for intruder tracking sensor networks”, May 22, 2012 University of Bologna, Italy.
 - Guest seminar: “ A pragmatic value-of-information approach for intruder tracking sensor networks”, May 23, 2012, University of Rome Tor Vergata, Italy.
 - Guest seminar: “ Making in-network data processing decisions based on pragmatic value of information”, June 11, 2012, GENESI consortium, Catania, Italy.
 - Guest seminar: “Xapagy: a cognitive architecture for narrative reasoning”, University of East London, England, November 2011.
 - Guest seminar: “Xapagy: a cognitive architecture for narrative reasoning”, King’s College, London, England, November 2011.

- Guest seminar: “Xapagy: a cognitive architecture for narrative reasoning”, Imperial College, London, England, October 2011.
- Guest seminar: “Agent-based modeling of a complex social interactions”, FOI Swedish Institute of Defense, Stockholm, Sweden, September 2011.
- Guest seminar: “The utility perspective on wireless sensor networks”, at Naval Research Laboratory (NRL), Washington DC, October 2008.
- Guest seminar: “Role-Based Teamwork Activity Recognition in Observations of Embodied Agent Actions,” at Kadir Has University, Turkey, June 2008.
- Guest seminar: “Role-Based Teamwork Activity Recognition in Observations of Embodied Agent Actions,” at Technical University of Cluj-Napoca, Romania, June 2008.
- Invited presentation: “Creating a set of sample documents for the Open-Document specification”, aKademy-2006 - Shaping the future of the free desktop, Trinity College Dublin, September 2006.
- The present and future of multi-agent architectures. Panel Discussion - Software Engineering for Large-Scale Multi-Agent Systems (SELMAS-2005).

Service

◇ **Journal editorial activity**

- Member of the editorial board, International Journal of Ad Hoc and Ubiquitous Computing (IJAHUC), Inderscience Publishers.
- Member of the editorial board, EAI Endorsed Transactions on Collaborative Computing (TCC).
- Associate editor, International Journal of Parallel, Emergent and Distributed Systems (IJPEDS), Taylor and Francis (2006-2015)
- Senior Editor, ACM Transactions on Human-Robot Interaction (THRI), prior name Journal of Human-Robot Interaction (2010-2014)

◇ **Journal reviewer**

- IEEE Transactions on Parallel and Distributed Systems (2006, 2007, 2008, 2010, 2013).
- Journal of Parallel and Distributed Computing - JPDC (2005, 2007).
- IEEE Transactions on Systems, Man and Cybernetics, Part A (2004, 2006, 2007, 2008, 2009, 2011, 2013).
- IEEE Transactions on Systems, Man and Cybernetics, Part B (2006, 2007).
- IEEE Transactions on Computers (2009, 2010, 2013, 2016)
- IEEE Transactions on Sustainable Computing (2018)
- Ad Hoc Networks Journal, Elsevier (2007).
- Pervasive and Mobile Computing, Elsevier (2009)
- Distributed and Parallel Databases Journal (2006).
- Software Practice and Experience (2005).
- The Computer Journal (2016)
- Journal of Computers and Electrical Engineering (2005).
- International Journal of Knowledge-Based & Intelligent Engineering Systems (KES Journal) (2005, 2008, 2009, 2012).
- Future Generation Computer Systems Journal (2008, 2009, 2010).

- International Journal of Agent Oriented Software Engineering (IJAOSE) (2009)
- International Journal of Computer Communications (2012)
- International Journal of Communication Systems (2012, 2013)
- International Journal of Ad Hoc and Ubiquitous Computing (IJAHUC) (2012)
- SENSORS Journal (MDPI) (2009, 2018)
- Mobile Networks and Applications (2011)
- Computer Communications (2012)
- Journal of Artificial Societies and Social Simulation (2012)
- Marine Technology Society (MTS) Journal (2013)
- Security and Communication Networks (SCN) Journal (Wiley) (2013)
- Computers and Security (Elsevier) (2013)
- Journal of Zhejiang University Science C (Computers & Electronics) (2014)
- AEÜ International Journal of Electronics and Communications (Elsevier) (2014)
- Computational & Mathematical Organization Theory (CMOT) (Elsevier) (2014)
- Electronics and Telecommunications Research Institute (ETRI) Journal of South Korea (2014)
- Entropy Journal (2015).
- International Journal of Artificial Intelligence Tools (2018)
- Accident Analysis and Prevention (2018)
- IEEE Internet of Things Journal (2018)

◇ **Conferences**

All service activities are memberships in Program Committee, unless otherwise noted.

- Local arrangements chair, First International Conference on Multimedia Services Access Networks, Orlando FL, June 13-15, 2005.
- Third International Workshop on Software Engineering for Large-scale Multi-agent Systems (SELMAS-2004) included in the International Conference on Software Engineering (ICSE-2004), Edinburgh, Scotland, May 23-28, 2004.
- Workshop co-chair: Special Session: Knowledge Management for the Intelligent Grid KES'2004 8th International Conference on Knowledge-Based Intelligent Information & Engineering Systems
- 3rd Workshop on Ambient intelligence at the Fourth International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2005) Utrecht, The Netherlands, July 25-26, 2005
- Applied Computing 2006 conference.
- Workshop co-chair: Special Session: Knowledge Management for the Intelligent Grid 10th International Conference on Knowledge-Based Intelligent Information & Engineering Systems (KES-2006), Bournemouth, United Kingdom, October 9-11, 2006.
- 2nd International Conference on Intelligent Computer Communication and Processing (ICCP-2006), Cluj-Napoca, Romania, September 1-2, 2006.

- IADIS International Conference of Wireless Applications and Computing 2007 Lisbon, Portugal, July 6-8, 2007.
- Special track on Contextual Reasoning at the 2007 FLAIRS Conference, Key West, Florida, May 7-9, 2007.
- 3rd International Conference on Intelligent Computer Communication and Processing (ICCP-2007), Cluj-Napoca, Romania, September 6-8, 2007.
- First International Workshop on Mobile and Ubiquitous Context Aware Systems and Applications (MUBICA 2007), In conjunction with the 4th Annual Int. Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services, Philadelphia, August 6, 2007.
- International Conference on Complex Open Distributed Systems (CODS-2007).
- IEEE SMC International Conference on Distributed Human-Machine Systems (DHMS-2008).
- 2nd International Conference on Bio-Inspired Models of Network, Information, and Computing Systems (BIONETICS-2007), Budapest, Hungary, December 10-12, 2007.
- International Joint Conference on Biomedical Engineering Systems and Technologies (BIOSTEC-2008).
- International Instrumentation & Measurement Technology Conference (I2MTC-2008), May 12-15, 2008, Victoria, BC, Canada.
- 4-th International Workshop on Sensor Networks and Systems for Pervasive Computing, in conjunction with IEEE Percom 2008, March 17-21, 2008, Hong Kong.
- 2008 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2008), Oct. 2008, Singapore.
- 4th International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom2008), November 13 - 16, 2008, Orlando, Florida, USA.
- Local Arrangements Chair of the 4th International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom2008), November 13 - 16, 2008, Orlando, Florida, USA.
- Third International Conference on Bio-Inspired Models of Network, Information, and Computing Systems (BIONETICS 2008), Nov 25-28th, 2008, Awaji Island, Japan.
- 2008 IEEE International Conference on Intelligent Computer Communication and Processing (ICCP'08), August 28-30, 2008, Cluj-Napoca, Romania.
- 5-th International Workshop on Sensor Networks and Systems for Pervasive Computing (PerSens'2009) in conjunction with PERCOM 2009 March 9-13, 2009 Galveston, Texas.
- International Instrumentation and Measurement Technology Conference (I2MTC 2009).
- 2nd International Workshop on Agent-mediated, Complex Automated Negotiation (ACAN'09), part of AAMAS'09, Budapest, May 2009.
- 30th IEEE Real-Time Systems Symposium (RTSS 2009), December 1 - 4, 2009 Washington, D.C., USA
- The 5th International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom 2009), Crystal City, Washington D.C., USA, November 11-14, 2009

- 2009 International Conference on Intelligent Computer Communication and Processing (ICCP-2009), Cluj-Napoca, Romania, August 27-29, 2009.
- Sixth IEEE International Workshop on Sensor Networks and Systems for Pervasive Computing (PerSeNS 2010), Mannheim, Germany, March 29-April 2, 2010.
- 12th International Conference on Principles of Practice in Multi-Agent Systems, Nagoya, Japan, Dec 13 - 16, 2009.
- 8th ACS/IEEE International Conference on Computer Systems and Applications (AICCSA), Hammamet, Tunisia, May 16-19th, 2010.
- International Instrumentation and Measurement Technology Conference (I2MTC 2010).
- 7th International Symposium "From Agent Theory to Agent Implementation" (AT2AI-7).
- 2010 Wireless Applications and Computing (WAC 2010) Conference.
- 2010 Workshop on Optimization in Multi-Agent Systems (OptMAS-10)
- 2010 International Conference on Intelligent Computer Communication and Processing (ICCP-2010), Cluj-Napoca, Romania, August 26 - 28, 2010.
- IEEE International Workshop on Sensor Networks and Systems for Pervasive Computing (PerSeNS 2011), Seattle, March 21-25, 2011.
- IEEE International Conference on Systems, Man and Cybernetics - SMC-2011, Anchorage, Alaska, Oct 9-12, 2011.
- Wireless Sensor Networks: theory and practice - WSN-2011, Paris - France, February 7-10, 2011.
- Workshop on Challenges in Resource Constrained Systems, in conjunction with the CTS 2011 Conference (Philadelphia, May 23-27, 2011).
- Program Committee member and workshop co-chair, 7th International Conference on Collaborative Computing: Networking, Applications and Worksharing - CollaborateCom 2011 (Orlando, October 2011).
- Fourth International Workshop on Optimisation in Multi-Agent Systems (OptMas-2011).
- Local arrangements chair, The 14th ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWIM 2011), October 31- November 4, 2011 Miami Beach, FL, USA.
- 2011 International Conference on Intelligent Computer Communication and Processing (ICCP-2011), Cluj-Napoca, Romania, August 25 - 27, 2011.
- 17th IEEE International Conference on Networks (ICON-2011), Singapore, December 14-16, 2011.
- 8th IEEE International Workshop on Sensor Networks and Systems for Pervasive Computing (PerSeNS 2012), Lugano, Switzerland, March 19-23, 2012.
- 5th Agent-based Complex Automated Negotiations Workshop (ACAN 2012), Valencia, Spain, June 2012.
- Workshop on Wireless Sensor Networks: Architectures, Deployments, and Trends (WSN-ADT), as part of NTMS-2012, Istanbul, Turkey, May 7-10, 2012.
- IEEE Globecom 2012, Ad Hoc and Sensor Networking Symposium (AHSN-2012), Anaheim, California, December 2012.

- Local Computer Networks Conference (LCN-2012), Clearwater Beach, Florida, December 2012.
- 8th International Conference on Collaborative Computing: Networking, Applications and Worksharing - CollaborateCom 2012 (Pittsburgh, October 2012).
- 18th IEEE International Conference on Networks (ICON-12), (Singapore, December 2012).
- Reviewer Committee member, 2012 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2012), Seoul, Korea, October 2012.
- IEEE ICC 2013 - Ad-hoc and Sensor Networking Symposium, Budapest, Hungary, June 2013.
- Reviewer, 8th Annual Cyber Security and Information Intelligence Research Workshop, Oak Ridge National Laboratory, October 2013
- IEEE CCNC Smart Spaces and Sensor Networks, Las Vegas, January 2013.
- IEEE Globecom 2013, Ad Hoc and Sensor Networking Symposium (AHSN-2013), December 9-13, 2013, in Atlanta, Georgia, USA.
- BRIMS 2013, 22-nd International Conference in Behavior Representation in Modeling Simulation, March 11-14, San Antonio, Texas.
- The Tenth IEEE International Conference on Mobile Ad-hoc and Sensor Systems (IEEE MASS 2013), Hangzhou, China, during October 14-16, 2013.
- The Sixth International Workshop on Agent-based Complex Automated Negotiations (ACAN2013), May 5-6, 2013, Saint Paul, Minnesota.
- The twenty-seventh AAI conference, Bellevue, Washington, July 2013, AAI-2013.
- 9th International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom2013), in Austin, TX, on Oct 13 - 16, 2013. USA.
- IEEE 38th IEEE Conference on Local Computer Networks (LCN-2013), Oct 21-24, 2013, Sydney, Australia.
- 2013 International Conference on Intelligent Computer Communication and Processing (ICCP-2013), Cluj-Napoca, Romania, September 5 - 7, 2013.
- IEEE International Conference on Systems, Man and Cybernetics (SMC-2013), Manchester UK, October 13-16, 2013.
- 9th IEEE International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob 2013), Lyon, France, October 7-9, 2013.
- NTMS Workshop on Wireless Sensor Networks: Architectures, Deployments, and Trends (WSN-ADT), Dubai, United Emirates, March 30 - April 2, 2013.
- 2013 International Conference on Connected Vehicles & Expo (ICCVE 2013), Las Vegas, December 2013.
- Thirteenth International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS-2014).
- IEEE CCNC Smart Spaces and Sensor Networks, Las Vegas, January 2014.
- 2014 International Conference on Selected Topics in Mobile and Wireless Networking (MoWNet-2014).

- Eight International Workshop on Agents in Traffic and Transportation (ATT-2014) at AAMAS-2014.
- 7th International Workshop on Agent-based Complex Automated Negotiations (ACAN-2014) at AAMAS-2014.
- 23rd Annual Conference on Behavior Representation in Modeling & Simulation (BRIMS-2014), Washington DC, 2014.
- 2014 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2014), Oct. 5-8, 2014, San Diego, California.
- Senior TPC member, IEEE 39th IEEE Conference on Local Computer Networks (LCN-2014), Sep. 8-11, 2014, Edmonton, Canada.
- 10th IEEE International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom-2014), Miami, Florida, United States, October 20-22, 2014.
- 10th IEEE International Conference on Intelligent Computer Communication and Processing (ICCP-2014), Cluj-Napoca, Romania, October 2014.
- 15th IEEE International Conference on Information Reuse and Integration (IRI-2014), August 13-15, 2014, San Francisco.
- 2015 IEEE International Conference on Communications (ICC-2015)
- Fourteenth International Conference on Autonomous Agents and Multiagent Systems (AAMAS-2015)
- Senior TPC member, IEEE 40th IEEE Conference on Local Computer Networks (LCN-2015), October 26-29, 2015, Clearwater Beach, Florida.
- Fourth International Workshop on Human-Agent Interaction Design and Models (HAIDM 2015), Istanbul, May 4-8, 2015.
- Eighth International Workshop on Agent-based Complex Automated Negotiation (ACAN 2015), Istanbul, May 4-8, 2015.
- IEEE International Conference on Information Reuse and Integration (IRI 2015), San Francisco, CA, August 13-15, 2015.
- IEEE Local Computer Networks Conference (LCN 2015), Clearwater Beach, FL, October 26-29, 2015.
- IEEE Global Communications Conference (GlobeCom 2015), San Diego CA, December 6-10, 2015
- 11th IEEE International Conference on Intelligent Computer Communication and Processing (ICCP-2015), Cluj-Napoca, Romania, September 2015.
- 1st IEEE International Conference on Collaboration and Internet Computing, Hangzhou, China, October 27 - October 30, 2015.
- IEEE ICC 2016 Ad-hoc and Sensor Networking Symposium, Kuala Lumpur, Malaysia, May 23-27, 2016.
- IEEE ICC 2016 Mobile and Wireless Networking Symposium, Kuala Lumpur, Malaysia, May 23-27, 2016.
- Ninth International Workshop on Agents in Traffic and Transportation (ATT-2016), held at the 25th International Joint Conference on Artificial Intelligence, New York, July 9-11, 2016.
- 17th IEEE International Conference on Information Reuse and Integration (IRI-2016), Pittsburgh, Pennsylvania, USA, July 28-30, 2016.
- 2016 IEEE Global Communications Conference: Communications Software, Services and Multimedia Apps (Globecom CSSMA-16), Dec 4-8, 2016, Washington DC, USA.

- ACAN 2016 : The Ninth International Workshop on Agent-based Complex Automated Negotiations (ACAN-2016).
- IEEE 2nd International Conference on Collaboration and Internet Computing (CIC-2016).
- Global Communications Conference: Mobile and Wireless Networks (Globecom-2016), December 4-8, 2016, Washington, DC.
- Fifth International Workshop on Human-Agent Interaction Design and Models (HAIDM-16) co-located with IJCAI 2016, July 9-11 2016.
- IEEE ICC 2017 Ad-Hoc and Sensor Networking Symposium, Paris, France, May 21-25, 2017.
- IEEE ICC 2017 Mobile and Wireless Networking Symposium, Paris, France, May 21-25, 2017.
- 2016 IEEE International Conference on Intelligent Computer Communication and Processing (ICCP-2016), Cluj-Napoca, Romania, September 8 - 10, 2016.
- The Tenth International Workshop on Agent-based Complex Automated Negotiations, held at AAMAS-2017, May 8-9, 2017.
- International Joint Conference on Artificial Intelligence 2017, Melbourne Australia, August 2017.
- Senior TPC member, IEEE Local Computer Networks Conference (LCN 2017), 42nd IEEE Conference on Local Computer Networks (LCN), October 9-12, 2017, Singapore
- 2017 IEEE Global Communications Conference: Ad Hoc and Sensor Networks, December 4-8, 2017, Singapore.
- 13th IEEE International Conference on Intelligent Computer Communication and Processing (ICCP-2017), Cluj-Napoca, Romania, September 7-9, 2017.
- IEEE ICC-2018 Ad-Hoc and Sensor Networking Symposium, May 20-24, 2018, Kansas City.
- Seventeenth International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2018).
- International Workshop on Agents in Traffic and Transportation 2018 (ATT-2018).
- 2019 IEEE Global Communications Conference: Ad Hoc and Sensor Networks, December 8-12, 2019, Waikoloa, Hawaii.
- 2018 IEEE 14th International Conference on Intelligent Computer Communication and Processing (ICCP-2018) - Cluj-Napoca, Romania Sept 6-8, 2018.
- IEEE ICC-2019 Ad-Hoc and Sensor Networking Symposium, May 20-24, 2019, Shanghai, China.
- Eighteenth International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2019), May 13-17, 2019, Montreal, Canada.
- 28th International Joint Conference on Artificial Intelligence (IJCAI-2019), Macao, China.
- IEEE Conference on Computers, Software and Applications (COMPSAC-2019), ASYS: Autonomous Systems symposium.
- 3rd Workshop on AI for Aging, Rehabilitation and Independent Assisted Living (ARIAL@IJCAI 2019)

- 2019 IEEE 15th International Conference on Intelligent Computer Communication and Processing (ICCP 2019)
- ◇ **Panel discussions**
 - SELMAS-2005 panel on the present and future of multi-agent architectures.
 - AGI-2014, panel 6 - https://www.youtube.com/watch?v=kVE4s1sIP_s
 - IEEE I2CE/IoTDI 2018 Joint Panel with the theme “Implications of AI on IoT and Cloud Systems”, Wednesday, April 18
- ◇ **Research proposal review panels**
 - Panelist for NSF SBIR/STTR programs 2010-2019
 - Reviewer for U. S. National Institute of Standards and Technology (NIST) for the US-Israel Binational Industrial Research and Development (BIRD) - 2019
 - Reviewer for Interregional Project Networks (IPN) of the European Region Tyrol South / Tyrol / Trentino (EGTC), 2016.
 - Subject Matter Expert, NIH SBIR Robotics applications, March 2011.
 - Panelist for NSF Computer Research Infrastructure, November 2005.
 - Reviewer for the NASA Intelligent Systems - phase II, 2003.
- ◇ **Department and college level committees**
 - Member, teaching incentive (TIP) award committee, College of Engineering and Computer Science, 2002-2003.
 - Member, graduate committee, Electrical and Computer Engineering Dept., University of Central Florida, 2002-2003 and 2003-2004.
 - Member, faculty search committee, Electrical and Computer Engineering Dept, University of Central Florida, 2004-2005.
 - Member, faculty search committee, School of Electrical Engineering and Computer Science, University of Central Florida, 2006-2007.
 - Member, Curriculum Oversight and Review Committee (CORC) for the EE program.
 - Chair, Technical Reports Committee, School of Electrical Engineering and Computer Science, University of Central Florida, 2009-2010.
 - Member, Strategic Planning Committee, School of Electrical Engineering and Computer Science, University of Central Florida, 2009-2010.
 - Member, Dept of EECS Computer Science Curriculum Oversight and Review Committee, 2010-2014.
 - Member, Lecturer Promotion Committee, 2013-2014.
 - Member, Visiting Lecturer / Instructor Search Committee, 2013-2014.
 - Chair, Faculty Search Committee for the positions of Information Technology, Digital Forensics, Security and Human-Computer Interaction, 2014-2015.
 - Member, Faculty Search Committee, 2015-2016.
- ◇ **University level committees**
 - Member, UCF Faculty Senate, from 2014.
 - Faculty Senate’s Graduate Program Review and Awards Committee (2014-2016)

- Member, search committee at Institute for Simulation and Training for a Robotics Research Assistant Professor. (2015)
- Member, UCF doctoral fellowships committee (2015-2017)
- Member, Faculty Search Committee for Disability, Aging, and Technology cluster (2018-2019)

◇ **Advisory boards**

- Member of the advisory board, SUNRISE project, an international project between University La Sapienza Rome, The Centre for Maritime Research and Experimentation, University of Porto, Evologics, Suasis Underwater Systems and University of Twente. The project aims to set up permanent testbeds remotely accessible for experimenting in heterogeneous underwater domains (2012-2016)

Funding

◇ **Total funding as PI or Co-PI: \$2,524,904, out of which my expenditures were \$1,252,021.**

- Google Cloud Platform Education Grant, August 2016 (4 allocations of cloud computing credits of \$100 each for Faculty / TA, and 154 allocations of \$50 each for students), total value \$8100 (computing credits granted directly).
- PI, FY2016: H8-4 Robotics Collaborative Technology Alliance (RCTA), April 7, 2016 - Jan 20, 2017, total \$60,000, my share 95%, \$57,000.
- PI, Investigating the configuration and visualization of a private cloud, Mo-saixsoft Inc., Feb 1, 2016 - Jan 31, 2017, \$37,882.
- PI, FY2015: H8-4 Robotics Collaborative Technology Alliance (RCTA), Jan 21, 2015 - June 30, 2016, total \$60,000, my share 95%, \$57,000.
- Co-PI, CHS: Medium: Collaborative Research: Social Learning in Mixed Human-Robot Groups for People with Disabilities, Sep 1, 2014 - Aug 31, 2017, total \$375,778, my share 40%, \$150,311. (Grant total for the 3 years: \$1,062,043)
- Co-PI, RCTA FY2014 Task H8: Social Dynamics Modeling and Simulation, US Army Research Laboratory / General Dynamics, Apr 16, 2014 - Apr 16, 2015, total \$193,116, my share 35.0%, \$67,590.
- Co-PI, RCTA FY2013 Task H8: Social Dynamics Modeling and Simulation, US Army Research Laboratory / General Dynamics, Jun 3, 2013 - Apr 15, 2014, total \$211,950, my share 30%, \$63,585.
- Co-PI, RCTA FY2012 Task H8: Social Dynamics Modeling and Simulation, US Army Research Laboratory / General Dynamics, May 16, 2012 - Jun 19, 2013, total \$164,590, my share 35%, \$57,606.
- PI, RCTA - FY 2011 H10 Dynamics of Operating within Social Environments (PO Task 034), US Army Research Laboratory / General Dynamics, Apr 28, 2011 - Jun 15, 2012, total \$113,153.00, my share 100%, \$113,153.00.
- PI, RCTA - H10 Dynamics of Operating within Social Environments (PO Task 034), US Army Research Laboratory / General Dynamics, Jul 1, 2010 - Apr 30, 2011, total \$62,020.00, my share 100%, \$62,020.00.
- Co-PI, RCTA: Robotics Collaborative Technology Alliance Planning Phase, US Army Research Laboratory / General Dynamics, May 17, 2010 - Sep 30, 2010, total \$67,290.00, my share 9%, \$6,056.
- PI, Team Performance in Human-Agent Collaboration, US Army Research Laboratory, Sep 7, 2007 - Dec 31, 2008, total \$75,000, my share 100%, \$75,000.

- PI, HCC: Learning Teamwork from Observation, National Science Foundation, Aug 1, 2007 - Jul 31, 2011, total \$375,097.00, my share 50%, \$187,548.50.
- PI, Learning Teamwork from Observation, US Army Research Laboratory, Aug 1, 2006 - Dec 31, 2007, total \$94,783.00, my share 100%, \$94,783.00.
- PI, Oasis OpenDocument Sample Suite Development, Intel Corporation, Sep 15, 2005 - Dec 1, 2006, \$10,000, my share 100%, \$10,000.

- Students
- ◇ **Pooya Abolghasemi**
PhD CS, joined Fall 2014.
Topic: *Social learning for robots.*
 - ◇ **Hassam Ullah Sheikh**
PhD CS, joined Fall 2016.
 - ◇ **Siavash Khodadadeh**
PhD CS, joined January 2017.
 - ◇ **Sharare Zehtabian**
PhD CS, joining January 2017.
- Graduated PhD students
- ◇ **Rouhollah Rahmatizadeh**
PhD CS, Fall 2017
Title: *Learning robotic manipulation from user demonstrations.*
 - ◇ **Gamini Bulumulle**
PhD CpE, Spring 2017
Title: *Reducing side-sweep accidents with vehicle-to-vehicle communications.*
 - ◇ **Taranjeet Singh**
PhD, Summer 2016
Title: *A Quantitative Framework For Social Cultural Interactions.*
 - ◇ **Saad Ahmad Khan**
PhD, Spring 2016.
Title: *Towards Improving Human-Robot Interaction For Social Robots*
 - ◇ **Yi Luo**
PhD, May 2011.
Title: *Spatio-temporal negotiation in multi-agent systems*
Currently at: Advanced Micro Devices.
 - ◇ **Majid Ali Khan**
PhD, December 2007.
Title: *Coalition formation and teamwork in embodied agents*
Currently at: assistant professor, Prince Mohammad Bin Fahd University, Saudi Arabia.
 - ◇ **Linus Luotsinen**
PhD, December 2007.
Title: *Learning teamwork in embodied agents*
Currently at: Research Scientist at the Swedish Defense Research Agency (FOI)
- Graduated MSc students
- ◇ **Rouhollah Rahmatizadeh**
MSc., August 2014
Title: *Energy efficient routing towards a mobile sink using virtual coordinates in a wireless sensor network*
Currently: continuing for PhD.
 - ◇ **Scott Vander Welde**
MSc., August 2008
Title: *Dynamic task allocation in mobile robot systems using utility functions*

- ◇ **Linus Luotsinen**
MSc., June 2004
- ◇ **Paul DeJung**
MSc., January 2005
- ◇ **Xin Bai**
PhD., May 2006, coadvised with Dan C. Marinescu.
Title: *Coordination, matchmaking, and resource allocation for large-scale distributed systems*
- PhD dissertation committee member ◇ **Han Yu**
PhD., November 2005, advisor Dan C. Marinescu.
- ◇ **Guoqiang Wang**
PhD., June 2007, advisors Damla Turgut and Dan C. Marinescu.
- ◇ **Victor Hung**
PhD., May 2009, advisor Avelino Gonzalez.
- ◇ **Jimmy Secretan**
PhD., Fall 2009, advisor Michael Georgiopoulos.
- ◇ **Cynthia Johnson**
PhD., Spring 2011, advisor Avelino Gonzalez.
- ◇ **Kennard Laviers**
PhD, June 2011, advisor Gita Sukthankar
- ◇ **Mike Curtis - (Applied Experimental & Human Factors Psychology)**
PhD, October 2011, advisor Florian Jentsch
- ◇ **Zhao Wang**
PhD, December 2011, advisor Aman Behal
- ◇ **Ghaith Haddad**
PhD, Fall 2013, advisor Gary T. Leavens
- ◇ **Brent Horine**
PhD, Fall 2013, advisor Damla Turgut
- ◇ **Keith Brawner**
PhD, Summer 2013, advisor Avelino Gonzalez
- ◇ **Mustafa Ilhan Akbas**
PhD, Fall 2013, advisor Damla Turgut
- ◇ **Bennie Lewis**
PhD, Spring 2014, advisor Gita Sukthankar
- ◇ **Mahsa Maghami**
PhD, Spring 2014, Dissertation title: "Identifying influential agents in social systems", advisor Gita Sukthankar
- ◇ **Rahmatollah Beheshti**
PhD, Spring 2015, Dissertation title: "Modeling social norms in real-world agent-based simulations", advisor Gita Sukthankar
- ◇ **Guang Shu**
PhD, Fall 2014, Dissertation title: "Human detection and tracking in surveillance video", Computer Engineering, advisor Mubarak Shah
- ◇ **Kun Zhang**
PhD, Spring 2015, Dissertation title: "Lyapunov-based robust and adaptive control design for nonlinear uncertain systems", Electrical Engineering, advisor Aman Behal

- Master's thesis committee member
- ◇ **Nicolas Paperno**
PhD, Summer 2016, Dissertation title: "Modeling and compensation for efficient human robot interaction", Electrical Engineering, advisor Aman Behal
 - ◇ **Amir Jabalameli**
Topic: Autonomous grasping, advisor Aman Behal
 - ◇ **Astrid Jackson**
Topic: Robotics, reinforcement learning, learning from demonstration, advisor Gita Sukthankar
 - ◇ **Navid Kardan**
Topic: Reliable neural networks, advisor Ken Stanley
 - ◇ **Zhangchi Ding**
Topic: Adaptive control for 1-click gripping, advisor Aman Behal
 - ◇ **Vera Kazakova**
Topic: Decentralized multiagent collaboration through nature-inspired approaches, advisor Annie S. Wu and Gita Sukthankar
 - ◇ **Reamonn Norat**
Decentralized adaptive genetic algorithms, advisor Annie S. Wu
 - ◇ **Juncheng Pan**
Statistical relationship prediction in social network analysis, advisor Gita Sukthankar.
 - ◇ **Awrad Mohammed Ali**
Social modeling in multi-agent systems
 - ◇ **Md. Shahriar Iqbal**
MSc., Fall 2014, Thesis title: "Learning to Grasp Unknown Objects Using Weighted Random Forest Algorithm From Selective Image and Point Cloud Feature", advisor Aman Behal.
 - ◇ **Nicholas Paperno**
MSc, Spring 2015, Thesis title: "Modified system design and implementation of an intelligent assistive robotic manipulator", advisor Aman Behal
 - ◇ **Kiran Prakash**
MSc, Spring 2016, Thesis title: "Smart Grasping using Laser and Tactile Array Sensors for UCF MANUS - An Intelligent Assistive Robotic Manipulator", advisor Aman Behal
 - ◇ **Zhangchi Ding**
Adaptive control-based grasping with novel objects, advisor Aman Behal
 - ◇ **Saif Mohammed**
Human-guided quadcopter photography, advisor Gita Sukthankar
 - ◇ **Samaneh Saadat**
Agent-based modelling, advisor Gita Sukthankar