Dr. Levent Yilmaz

CONTACT INFORMATION

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Dr. Yilmaz is the Alumni Distinguished Professor of **Computer Science and Software Engineering** in the Samuel Ginn College of Engineering at Auburn University.

EDUCATION

Ph.D.	Computer Science	Virginia Tech
M.S.	Computer Science	Virginia Tech
B.S.	Computer Engineering	Bilkent University (Ankara, Turkey)

EXPERIENCE

- 2014 - present: Professor, Computer Science & Software Engineering
- 2008 - 2014: Associate Professor, Computer Science & Software Engineering
- 2003 - 2008: Assistant Professor, Computer Science & Software Engineering
- 1999 - 2003: Senior Research Engineer, Trident Systems Incorporated.
- 1994 - 1999: Graduate Teaching /Research Assistant, Virginia Tech.

HONORS, AWARDS, AND EDITORIAL POSITIONS

- **Fellow**, Society for Modeling and Simulation International.
- **Alumni Distinguished Professor Award**, Auburn University (2020 - 2025).
- **US Fulbright Scholar**, (2022 - 2023). Fulbright France – Visiting Professor at the University of Lille.
- **Editor-in-Chief** of the Simulation: Transactions of the Society for Modeling and Simulation International (2008-2016).
- **Associate Editor**
  - Simulation & Gaming: An Interdisciplinary Journal of Theory, Practice and Research (2008 - 2016)
  - Simulation: Transactions of the Society for Modeling and Simulation International (2016 - present).
  - Frontiers in Complex Systems: Control and Engineering of Complex Systems (2022 - present)
  - International Journal of Simulation and Process Modeling (2004 - present)
  - International Journal of Engineering Education (2003 - present)
  - Journal of Computer Science Applications and Information Technology (2016 - present)
  - Journal of Simulation (2020 - 2022)
- **Editorial Advisory Board Member**
  - Journal of Simulation (2022 - present)

- Journal of Simulation Engineering (2019 - present)
- SCS M&S Magazine (2011 - present)
- SCS M&S Newsletter (2011 - present)

- Elected **Member of the Board of Directors** of the Society for Modeling & Simulation International (2006-2008, 2008-2011, 2011-2013).

- **Distinguished Service Award**. Society for Modeling and Simulation International (SCS). 2012, 2016.

- **Distinguished Professional Achievement Award**. Society for Modeling and Simulation International (SCS). 2011.

- **2010 Auburn University External Consulting Award**.

- **2011 Auburn University Professional Improvement (Sabbatical) Leave Grant and Award**

- **Visiting Scientist Fellowship Award**. An award for the visiting professor and scholar position granted by the Science Fellowships and Grants program of the *Scientific and Technological Research Council of Turkey* (July-December, 2011).

- Appointed as **Advisor** to **Work Force Development Committee** of the Alabama Modeling & Simulation Council (2006-present).

- Inducted to **Upsilon Pi Epsilon** — Honor Society of Computer Science.

- Received **Certificate of Achievement** (awarded as the ACM Programming Team Coach at the 2007 ACM Programming Contest).

- Received 2007 **Appreciation and Recognition of Service** Award — The Society for Modeling & Simulation International.

RESEARCH
INTERESTS

- Modeling and Computer Simulation

  - Agent-Directed Simulation – Agent Simulation, Agent-Monitored Simulation, Agent-Supported Simulation
  - Model-Driven Engineering and Science

- Multi-Agent Systems

- Self-Organizing and Complex Adaptive Systems – Dynamics of socio-technical, cognitive, cultural systems.

- Autonomy and Cognitive Computing

PUBLICATIONS

1. Books

1. Topçu, O., U. Durak, H. Oğuztüzün, and **L. Yilmaz** (2016). *Distributed Simulation: A Model-Driven Engineering Approach*. Springer Series in Simulation Foundations, Methods, and Applications Series. Springer.

2. **Yilmaz L.** (Ed.) (2015). *Concepts and Methodologies for Modeling and Simulation*. Springer Series in Simulation Foundations, Methods, and Applications Series. Springer.

3. **Yilmaz L.** and T. Ören (Eds.) (2009). *Agent-Directed Simulation and Systems Engineering*, Wiley Series in Systems Engineering and Management. Wiley.

2. Edited Journal Special Issues and Conference Proceedings

1. **Yilmaz L.**, W. K V. Chan, I. Moon, T. M. K. Roeder, C. Macal, and M. D. Rossetti (Eds.) (2015). The Proceedings of the *2015 Winter Simulation Conference*. December 6-9, 2015. Huntington Beach, CA.

2. Tolk A., S. D. Diallo, I. O. Ryzhov, **L. Yilmaz**, S. Buckley, and J. A. Miller (Eds.) (2014). The Proceedings of the *2014 Winter Simulation Conference*. December 7-10, 2014. Savannah, Georgia.

3. Zhang Y., **L. Yilmaz**, T. Ören, G. Madey, and M. Sierhuis (Eds.) (2014 – in preparation). Special Issue on Agent-Directed Simulation – Selected best papers from the 2013 ADS symposium, *The Journal of Artificial Societies and Social Simulation*. `http://jasss.soc.surrey.ac.uk/JASSS.html`.

4. **Yilmaz L.**, T. Ören, G. Madey, M. Sierhuis, and Y. Zhang (Eds.) (2013). The Proceedings of the *2013 Agent-Directed Simulation Symposium*. 2013 Spring Simulation Multiconference, SpringSim'13. April 7-10, 2013. San Diego, California. SCS/ACM 2013.

5. **Yilmaz L.** and T. Ören (Eds.) (2012). The Proceedings of the *2012 Agent Directed Simulation Symposium*. 2012 Spring Simulation Multiconference, SpringSim'12. March 26-29, 2012. Orlando, Florida. SCS/ACM 2012.

6. **Yilmaz L.** (Ed.) (2012). Special Issue on 60th Anniversary of SCS, *Simulation: Transactions of the Society for Modeling and Simulation International*, vol. 88, no. 9, September 2012.

7. Zhang Y., **L. Yilmaz**, T. Ören, G. Madey, and M. Sierhuis (Eds.) (2012). Special Issue on Agent-Directed Simulation – Selected best papers from the 2011 ADS conference, *Computational and Mathematical Organization Theory*, vol. 18, no. 4, December 2012.

8. **Yilmaz L.** and T. Ören (Eds.) (2011). The Proceedings of the *Agent-Directed Simulation Symposium*. 2011 Spring Simulation Multiconference (SpringSim'11). April, 2011. Boston, Massachusetts.

9. **Yilmaz L.**, G. Madey, T. Ören, M. Sierhus, and Y. Zhang (Eds.) (**2010, 2009**). The Proceedings of the *Agent-Directed Simulation Symposium*. Part of the Proceedings of the 2010, 2009 International Spring Simulation Multiconference (SpringSim).

10. Zhang Y., **L. Yilmaz**, T. Ören, G. Madey, and M. Sierhuis (Eds.) (2010). Special Issue on Agent-Directed Simulation, *The International Journal of Agent Technologies and Systems*, vol. 2, no. 3, July-September 2010.

11. Zhang Y., T. Ören, **L. Yilmaz**, G. Madey, and M. Sierhuis (Eds.) (2009). Special Issue on Agent-Directed Simulation, *The International Journal of Intelligent Control and Systems*, vol. 14, no. 1, March 2009.

12. Balci O., X. Hu, M. Sierhuis, and **L. Yilmaz** (Eds). (2009). The Proceedings of the *2009 Summer Computer Simulation Conference* of the 2009 International Simulation Multiconference, July, 2009. Istanbul, Turkey. SCS Press.

13. **Yilmaz L.** and S. Edwards (Eds.) (2008). Trends in Software Engineering Education, Special Issue of the *International Journal of Engineering Education*, vol. 24. no. 4, August 2008.

14. **Yilmaz L.**, T. Ören, and P. Thavikulwat (Eds.) (2008). Intelligent Agents, Artificial Intelligence, and Simulation Gaming, Special Issue of the *Simulation & Gaming: An Interdisciplinary Journal of Theory, Practice, and Research*, vol. 39, no. 1, March 2008.

15. Wainer G., A. Tolk, H. Vakilzadian, and **L. Yilmaz** (Eds.) (2007). The Proceedings of the 2007 Summer Computer Simulation Conference. Sponsored by SCS – The Society for Modeling and Simulation International. July 15-18, 2007. San Diego, California.

16. **Yilmaz L.**, G. Madey, T. Ören, and M. Sierhus (Eds.) (**2008, 2007, 2006**). The Proceedings of the *Agent-Directed Simulation Symposium*. Part of the Proceedings of the 2008, 2007, 2006 International Spring Simulation Multiconference (SpringSim). Sponsored by SCS –The Society for Modeling and Simulation International. Co-sponsored by ACM, M&SNet – McLeod Modeling and Simulation Network of the SCS, SCS Press.

17. **Yilmaz L.** (Ed.) (2005). The Proceedings of the *Agent-Directed Simulation Symposium* of the 2005 Spring Simulation Multiconference, vol. 37, no. 2. SCS Press, Simulation Series. San Diego, CA.

18. **Yilmaz L.** and T. Ören (Eds.) (2005). Agent-Directed Simulation, Special Issue of the *Simulation: Transactions of the Society for Computer Simulation International*. vol. 81, no. 7, July 2005.

ARTICLE
LENGTH
PUBLICATIONS

1. Book Chapters

1. Lyu D., F. Yang, H. Kwon, B. Liu, W. Dong, and **L. Yilmaz**. (2021). Explainable Neuro-Symbolic Hierarchical Reinforcement Learning. In *Neuro-Symbolic Artificial Intelligence: The State of the Art*, pp. 235-252. IOS Press.

2. Angela O'Mahony, Paul K. Davis, Scott Appling, Matthew E. Brashears, Erica Briscoe, Kathleen M. Carley, Joshua M. Epstein, Luke J. Matthews, Theodore P. Pavlic, William Rand Scott, Neal Reilly, William B. Rouse, Samarth Swarup, Andreas Tolk, Raffaele Vardavas, and **Levent Yilmaz** (2019). "Panel Discussion: Moving Social-Behavioral Modeling Forward," chapter 33 in *Social-Behavioral Modeling for Complex Systems*, pp. 753-787. Wiley.

3. **Yilmaz L.** (2019). "Toward Self-Aware Models as Cognitive Adaptive Instruments for Social and Behavioral Modeling," chapter 24 in *Social-Behavioral Modeling for Complex Systems*, pp. 569-586. Wiley.

4. **Yilmaz L.** (2018). "Generative Parallax Simulation: Creative Cognition Models of Emergence for Simulation-Driven Model Discovery," in *Emergent Behavior in Complex Systems Engineering: A Modeling & Simulation Approach*, pp. 59-76. Wiley.

5. **Yilmaz L.** (2017). "A Complexity and Creative Innovation Dynamics Perspective to Sustaining the Growth and Vitality of the M&S Profession," chapter 11 in *The Profession of Modeling and Simulation: Discipline, Ethics, Education, Vocation, Societies, and Economics*, pp. 211-222. Wiley.

6. **Yilmaz L.** (2017). "Simulation-Based Science: Toward Cognitive Generative Architectures for Simulation-Driven Discovery," in *Guide to Simulation-Based Disciplines: Advancing Our Computational Future*, pp. 185-208. Springer Series in Simulation Foundations, Methods, and Applications Series. Springer.

7. Ören T. and **L. Yilmaz** (2017). "The Age of the Connected World of Intelligent Computational Entities: Reliability Issues including Ethics, Autonomy, and Cooperation of Agents," in *Current and Future Developments in Artificial Intelligence: Intelligent Computational Systems: A Multi-Disciplinary Perspective Volume 1*, pp. 184-213.

8. Ghasem-Aghaee N., T. Ören and **L. Yilmaz** (2017). "Simulation, Intelligence and Agents: Exploring the Synergy," in *Current and Future Developments in Artificial Intelligence: Intelligent Computational Systems: A Multi-Disciplinary Perspective Volume 1*, pp. 1-58.

9. **Yilmaz L.** (2015). "Toward Agent-Supported and Agent-Monitored Model-Driven Simulation Engineering," chapter 1 in *Concepts and Methodologies for Modeling and Simulation: A Tribute to Tuncer Ören*, pp. 3-18. Springer Series in Simulation Foundations, Methods, and Applications Series. Springer.

10. Ören T. and **L. Yilmaz** (2012). "Philosophical Aspects of Modeling and Simulation," in *Ontology, Epistemology, and Teleology for Modeling and Simulation*, pp 157-172. Springer-Verlag, Berlin Heidelberg.

11. **Yilmaz L.** and T. Ören (2012). "Toward Replicability-Aware Modeling and Simulation: Changing the Conduct of M&S in the Information Age," in *Ontology, Epistemology, and Teleology for Modeling and Simulation*, pp. 207-226. Springer-Verlag, Berlin Heidelberg.

12. Bharathy G., **L. Yilmaz**, and A. Tolk (2012). "Agent-Directed Simulation for Combat Modeling and Distributed Simulation," in *Engineering Principles of Combat Modeling and Distributed Simulation*, pp. 669-714. Wiley.

13. **Yilmaz L.** (2011). "Simulation-based Study of Community Governance and Conflict Management in Emerging Global Participatory Science Communities," chapter 11 in *Multi-Disciplinary Advancement in Open Source Software and Processes*, pp. 167-194. [**this article is the extended version of the manuscript published in volume 1, issue 4, of JOSSP and has been selected by the Editorial Board of the journal for inclusion in this book**].

14. Ören T. and **Yilmaz L.** (2011). "Understanding, Misunderstanding, Multi – Understanding, and Switchable Understanding by Agents," chapter 13 in *Semantic Agent Systems: Foundations and Applications* (Elci A., M. T. Kone, and M. Orgun Eds.), Springer Series: Studies in Computational Intelligence, vol. 344, pp. 295-313. Springer.

15. **Yilmaz L.** and C. A. Hunt (2011). "Advanced Concepts and Generative Simulation Formalisms for Creative Discovery Systems Engineering," chapter 9 in *Handbook on Intelligence-Based Approaches for Systems Engineering* (Tolk A. and L. Jain Eds.), pp. 233-258. Intelligent Systems Reference Library of Springer.

16. Zeigler B., A. Muzy, and **L. Yilmaz** (2009). "Artificial Intelligence in Modeling and Simulation," *Encyclopedia of Complexity and System Science*, pp. 344-368. Editor-in-Chief, Robert A. Meyers, Springer, Springer-Verlag, Heidelberg, Germany.

17. **Yilmaz L.** and B. Mitchell* (2009). "Autonomic Introspective Simulation Systems," chapter 2 in *Agent-Directed Simulation and Systems Engineering* (Yilmaz L. and T. Ören Eds.), pp. 37-72. Wiley Series in Systems Engineering and Management. Wiley.

18. **Yilmaz L.** and T. Ören (2009). "Agent-directed Simulation," chapter 4 in *Agent-Directed Simulation and Systems Engineering* (Yilmaz L. and T. Ören Eds.), pp. 111-144. Wiley Series in Systems Engineering and Management. Wiley.

19. Balci O., W. F. Ormsby and **L. Yilmaz** (2009). "Quality Assurance Simulation Studies of Complex Networked Agent Systems," chapter 6 in *Agent-Directed Simulation and Systems Engineering* (Yilmaz L. and T. Ören Eds.), pp. 173-188. Wiley Series in Systems Engineering and Management. Wiley.

20. Ören T. and **L. Yilmaz** (2009). "Failure Avoidance in Agent-directed Simulation," chapter 7 in *Agent-Directed Simulation and Systems Engineering* (Yilmaz L. and T. Ören Eds.), pp. 189-218. Wiley Series in Systems Engineering and Management. Wiley.

21. **Yilmaz L.** (2009). "Toward Systems Engineering for Agent-directed Simulation," chapter 8 in *Agent-Directed Simulation and Systems Engineering* (Yilmaz L. and T. Ören Eds.), pp. 219-236. Wiley Series in Systems Engineering and Management. Wiley.

22. **Yilmaz L.** and J. Phillips* (2009). "Agent Simulation for Software Process Performance Analysis," chapter 15 in *Agent-Directed Simulation and Systems Engineering* (Yilmaz L. and T. Ören Eds.), pp. 433-450. Wiley Series in Systems Engineering and Management. Wiley.

23. Smith J., E. Sahin*, and **L. Yilmaz** (2009). "Agent-Directed Simulation for Manufacturing System Engineering," chapter 16 in *Agent-Directed Simulation and Systems Engineering* (Yilmaz L. and T. Ören Eds.), pp. 451-474. Wiley Series in Systems Engineering and Management. Wiley.

24. **Yilmaz L.** (2008). "Collaborative Technology: Improving Team Cooperation and Awareness in Distance Learning for IT Education," chapter 8 in *Handbook of Distance Learning for Real-time and Asynchronous Information Technology* (Negash S., M. Whitman, A. Woszczynski, K. Hoganson, and H. Mattord Eds.), pp. 157-169.

25. **Yilmaz L.** and A. Tolk (2008). "A Unifying Multimodel Taxonomy and Agent-Supported Multisimulation Strategy for Decision-Support," in *Intelligent Decision Making: An AI-based Approach – Studies in Computational Intelligence (SCI)* (Phillips-Wren I. and L. Jain Eds.), vol. 97, pp. 189-222.

26. **Yilmaz L.** and V. Üstün* (2004). "Toward Federated Simulation on the Semantic Web: Exploring the Physiology of Web Services for Dynamic Composability and Interoperability," in *Modeling Command & Control Interoperability: Cutting the Gordian Knot* (Hamilton J. Ed.), pp. 129-150. SCS Press, San Diego, CA.

27. **Yilmaz L.** (2006). "Computer Aided Software Engineering (in Turkish: Bilgisayar Destekli Yazılım Mühendisliği)," *Informatics Encyclopedia of Turkey* (in Turkish: Türkiye Bilişim Ansiklopedisi) (Ören T., T. Üney, and R. Çölkesen Eds.), pp. 197-204. Istanbul, Turkey. (March 2006).

28. **Yilmaz L.** (2006). "Formal Methods in Software Engineering (in Turkish: Yazılımda Biçimsel Yöntemler)," *Informatics Encyclopedia of Turkey* (in Turkish: Türkiye Bilişim Ansiklopedisi)) (Ören T., T. Üney, and R. Çölkesen Eds.), pp. 988-997. Istanbul, Turkey (March 2006).

2. Editorials

1. **Yilmaz L.** (2012). "Guest Editorial: Special Issue on 60th Year Anniversary of SCS," *SIMULATION*, vol. 88, no. 9, pp. 1023-1024. September 2012.

2. **Yilmaz L.** (2012). "Reflections on the 60th Year Anniversary of SCS," *SIMULATION*, vol. 88, no. 1, pp. 3. January 2012.

3. Zhang Y., **L. Yilmaz**, T. Ören, G. Madey, and M. Sierhuis (Eds.) (2012). "Introduction to the Special Issue on Agent-Directed Simulation," in *Computational and Mathematical Organization Theory*, vol. 18, no. 4, pp. 375-379. December 2012.

4. **Yilmaz L.** (2011). "Reproducibility in Modeling & Simulation Research," *SIMULATION*, vol. 87, no. 1, pp. 3-4. January 2011.

5. Zhang Y., **L. Yilmaz**, T. Ö, G. Madey, and M. Sierhuis (2010). "Introduction to the Special Issue on Agent-Directed Simulation," *The International Journal of Agent Technologies and Systems*, vol. 2, no. 3, pp. i-iii. July-September 2010.

6. Zhang Y., T. Ören, **L. Yilmaz**, G. Madey, and M. Sierhuis (2009). "Introduction to the Special Issue on Agent-Directed Simulation," *The International Journal of Intelligent Control and Systems*, vol. 14, no. 1, pp. 1-3. March 2009.

7. **Yilmaz L.** (2009). "Editorial: Letter from the Editor," *SIMULATION*, vol. 85, no. 1, pp. 3-4. January 2009.

8. **Yilmaz L.** and S. E. Edwards (2008). "Guest Editorial: Trends in Software Engineering Education," *International Journal of Engineering Education*, vol. 24, no. 4, pp. 646-647.

9. **Yilmaz L.**, T. Ören, and P. Thavikulwat (2008). "Editorial: Intelligent Agents, Artificial Intelligence, and Simulation Gaming," Special Issue of the *Simulation & Gaming: An Interdisciplinary Journal of Theory, Practice, and Research*, vol. 39, no. 1, pp. 7-9. March 2008.

10. **Yilmaz L.** and T. Ören (2005). "Editorial: Introduction to Agent-Directed Simulation," *Simulation: Transactions of the Society for Computer Simulation International*. vol. 81, no.7, pp. 463-464. July 2005.

3. Journal Articles

1. Zhang, Z., **L. Yilmaz**, and B. Liu (2023) "Critical Review of Inductive Logic Programming Techniques for Explainable AI," *IEEE Transactions on Neural Networks and Learning Systems*. https://doi.org/10.1109/TNNLS.2023.3246980

2. Zou G., M. Gao, J. Tang, and **L. Yilmaz** (2023). "Simulation of Online Food Ordering Delivery Strategies using Multi-agent System Models," *Journal of Simulation*, vol.17, no.3, pp. 297-311. https://doi.org/10.1080/17477778.2021.2007808

3. **Yilmaz L.** (2022). "Understanding Narrative-driven Intergroup Conflict Dynamics using Computational Cognitive Coherence Maps," *Social Science Computer Review*, vol. 40, no. 5, pp. 1285-1301. https://doi.org/10.1177/08944393211006079

4. **Yilmaz L.** and Bo Liu (2022). "Model Credibility Revisited: Concepts and Considerations for Appropriate Trust," *Journal of Simulation*, vol. 16, no. 3, pp. 312-325. https://www.tandfonline.com/doi/full/10.1080/17477778.2020.1821587

5. Lyu D., F. Yang F, H. Kwon., W. Dong, **L.Yilmaz**, and B. Liu (2022) "TDM: Trustworthy Decision-Making via Interpretability Enhancement," *IEEE Transactions on Emerging Topics in Computational Intelligence*, vol. 6, no. 3, pp. 450-461, doi:10.1109/TETCI.2021.3084290

6. Çam S., H. Oğuztüzün, and **L. Yilmaz** (2022). "A Hypothesis-Driven Simulation Experiment Workflow with an Extension to SED-ML," in *International Journal of Simulation Modelig*, vol. 21, no.1, pp. 17-28. http://doi.org/10.2507/ijsimm21-1-583

7. Zou, G., J. Tang, and **L. Yilmaz** (2022). "Online Food Ordering Delivery Strategies based on Deep Reinforcement Learning," *Applied Intelligence*, vol. 52, no. 6, pp. 6853-6865. https://doi.org/10.1007/s10489-021-02750-3

8. **Yilmaz L.** (2020). "Managing Structural Variability in Agent-Based Models with Feature Coherence Graphs," *International Journal of Simulation and process Modeling*, vol. 15, no. 5, pp. 439-453.

9. Görür K. B., K. M. Imre, H. Oğuztüzün, **L. Yilmaz** (2019). "Predetermined Rollbacks: An Extension to Time Warp for Spatially Parallel Agent-Based Simulation," *Simulation Modelling Practice and Theory*, Volume 95, September 2019, pp. 60-67. https://doi.org/10.1016/j.simpat.2019.04.008

10. **Yilmaz L.** (2019). "A Quantum Cognition Model for Simulating Ethical Dilemmas among Multi-Perspective Agents," *Journal of Simulation*, vol 14, no. 2, pp. 98-106. DOI: 10.1080/17477778.2019.1603090

11. Sivaraj S. and **L. Yilmaz** (2019). "Cogent: A Coherence-Driven Cognitive Agent Modeling and Experimentation Framework", *International Journal of Simulation and Process Modeling*, vol. 14, no. 1, pp. 36-50. DOI: 10.1504/IJSPM.2019.097707.

12. Topçu O. and **L. Yilmaz** (2019). "Rapid Prototyping of Cognitive Agent Simulations Using C-BML Transformations," *Journal of Defense Modeling and Simulation*. https://doi.org/10.1177/1548512919860222

13. Drogul A., P. Fishwick, N. Gilbert, D. Pegden, G. Wagner, and **L. Yilmaz** (2018). "Panel Discussion: On the Unity and Diversity of Computer Simulation," *Journal of Simulation Engineering*. https://articles.jsime.org/1/4/Unity-and-Diversity-of-Simulation

14. Dayıbaş O., H. Oğuztüzün, and **L. Yilmaz** (2018). "On the Use of Model-Driven Engineering for the Management of Simulation Experiments," *Journal of Simulation*, pp. 1-13. https://doi.org/10.1080/17477778.2017.1418638

15. Zou G. and **L. Yilmaz** (2018). "Self-Organization Models of Urban Traffic Lights Based on Digital Infochemicals," *Simulation: Transactions of the SCS*, vol. 95, no. 3, pp. 271-285. https://doi.org/10.1177/0037549718777615

16. **Yilmaz L.**, A. Franco-Watkins, and T. S. Kroecker (2017). "Cognitive Models of Ethical Decision-Making: A Coherence-Driven Reflective Equilibrium Model," *Cognitive Systems Research*, vol. 46, December 2017, pp. 61-74.

17. Zou G. and **L. Yilmaz** (2016). "Exploring the Impact of Social Communication on the Innovation Potential of Open Source Science Communities," *IEEE Transactions on Systems, Man and Cybernetics: Systems*, vol. 46, no. 2, pp. 271-281.

18. Özmen Ö, **L. Yilmaz**, and J. Smith. (2016). "The Impact of Socio-Technical Communication Styles on the Diversity and Innovation Capacity of Global Science Collaboratories," in *Computational and Mathematical Organization Theory*, vol. 22, no: 4, pp. 521-548.

19. Taylor E. J. S., A. Khan, K. L. Morse, A. Tolk, **L. Yilmaz**, and J. Zander (2015). "Grand Challenges for Modeling and Simulation: Simulation Everywhere – From Cyberinfrastructure to Clouds to Citizens," *Simulation: Transactions of the SCS*, vol. 91, no. 7, pp. 648-665.

20. Negahban* A., **L. Yilmaz**, and T. Nall (2014). "Manufacturing Capacity Planning for New Product Diffusion: An Agent-Based Simulation Approach," *International Journal of Production Research*, vol. 52, no. 17, pp. 4950-4966.

21. Negahban* A. and **L. Yilmaz** (2014). "Agent-Based Simulation Applications in Marketing Research: An Integrated Review," *Journal of Simulation*, vol. 8, no. 2, pp. 129-142.

22. Holt J.*, S. Biaz, **L. Yilmaz**, and A. A. Chadia (2013). "A Symbiotic Simulation Architecture for Evaluating UAVs Collision Avoidance Techniques," *Journal of Simulation*, vol. 8, no. 1, pp. 64-75.

23. Özmen Ö.* and **L. Yilmaz** (2012). "An Information Foraging Model of Knowledge Creation and Spillover Dynamics in Open Source Science," *The International Journal of Agent Technologies and Systems (IJATS)*, vol. 4, no. 3, pp. 50-72. (**Outstanding Published Journal Article Award** – The International Journal of Agent Technologies and Systems – IGI Global's Fifth (2012) Annual Excellence in Research Journal Awards).

24. **Yilmaz L.** (2012). "Reproducibility in M&S Research: Issues, Strategies, and Implications for Model Development Environments," *Journal of Experimental and Theoretical Artificial Intelligence*, vol. 24, no. 4, pp. 457-474.

25. Zou G.* and **L. Yilmaz** (2012). "InnoScape: A Creative Artificial Ecosystem Model of Innovation Processes in Epistemic Communities," *International Journal of Simulation and Process Modeling*, vol. 7, no. 4, pp. 275-289.

26. Magnotti J.* and **L. Yilmaz** (2012). "Agent Simulation of a Unified Mechanism on Individual Foraging Behavior with Individual Scalar Expectancies," *Journal of Simulation*, vol. 6, no. 1, pp. 33-42.

27. Ören T. and **L. Yilmaz** (2012). "Synergies of Simulation, Agents, and Systems Engineering," in *Expert Systems with Applications: An International Journal*. vol. 39, no. 1, pp. 81-88.

28. **Yilmaz L.** (2011). "Toward Multi-Level, Multi-Theoretical Model Portfolios for Scientific Enterprise Workforce Dynamics," in the Special Issue on Simulating the Social Processes of Science of *The Journal of Artificial Societies and Social Simulation*. vol. 14, no. 4, URL: `http://jasss.soc.surrey.ac.uk/14/4/2.html`.

29. Zou G.* and **L. Yilmaz**. (2011). "Dynamics of Knowledge Creation in Global Participatory Science Communities: Open Innovation Communities from a Network Perspective," *Computational and Mathematical Organization Theory*, vol. 17, no. 1, pp. 35-58. doi: 10.1007/s10588-010-9068-0.

30. **Yilmaz L.** (2009). "An Agent Simulation Study on Conflict, Community Climate, and Innovation in Open Source Communities", *International Journal of Open Source Software and Processes (IJOSSP)*, vol. 1, no. 4, pp. 1-25.

31. **Yilmaz L.** and T. Ören (2009). "On the Synergy of Simulation and Agents: An Innovation Paradigm Perspective," *International Journal of Intelligent Control and Systems (IJICS)*, vol. 14, no. 1, pp. 4-19.

32. Mitchell B.* and **L. Yilmaz** (2008). "Symbiotic Adaptive Multisimulation: An Autonomic Simulation Framework for Real-time Decision Support under Uncertainty," *ACM Transactions on Modeling and Simulation*, vol.19, no.1, Article no: 2, 31 pages. December 2008. `http://doi.acm.org/10.1145/1456645.1456647`

33. **Yilmaz L.** (2008). "Reasoning about Conceptual Interoperability of Simulations using Meta-level Graph Relations," Special issue on *Ontology-driven Interoperability* in *Intelligent Decision Technologies Journal*, vol.2, no.1, pp. 33-51. January 2008.

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35. **Yilmaz L.** and J. Phillips* (2007). "The Impact of Turbulence on the Effectiveness and Efficiency of Software Development Teams in Small Organizations," *Software Process: Improvement and Practice Journal*, vol 12., no.3, pp. 247-265. May/June 2007.

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81. Saple A.*, **L. Yilmaz**, T. Ören (2006). "On the Performance of Reactive and Anticipatory Fault Management Agents in Adaptive Networks," in Proceedings of the *2006 Summer Computer Simulation Conference*, pp. 11-18. July 29-August 2, 2006. Calgary, Canada.

82. Ören T. and **L. Yilmaz** (2006). "Synergy of Systems Engineering and Modeling and Simulation," in Proceedings of the *2006 SCS International Conference on Modeling and Simulation - Methodology, Tools, Software Applications* (M&S-MTSA'06), pp. 10-17. July 29-August 2, 2006. Calgary, Canada.

83. Saple A.* and **L. Yilmaz** (2006). "Agent-based Simulation Study of Behavioral Anticipation: Anticipatory Fault Management in Computer Networks," in Proceedings of the 44th *ACM South East Conference*, pp. 383-388. April 2006. Melbourne, Florida.

84. Üstün V.*, **L. Yilmaz**, and J. S. Smith (2006). "A Conceptual Model for Agent-based Simulation of Physical Security Systems," in Proceedings of the 44th *ACM South East Conference*, pp. 365-370. April 2006. Melbourne, Florida.

85. Phillips J.* and **L. Yilmaz** (2006). "An Agent-based Simulation Study of Cooperative Team Behavior in Software Development with Rational Unified Process," in Proceedings of the *Agent-Directed Simulation Symposium* of the Spring Simulation Multiconference (SMC'06), pp.73-80, April 2006. Huntsville, Alabama.

86. **Yilmaz L.** (2005). "On the Potential of DEVS in Teaching Engineering of Quality into Simulation Models," in Proceedings of the *2005 International Conference on Simulation in Education (ICSiE'05)*, pp. 89-94. October 2005. New Orleans, Louisiana.

87. Seck, M., C. Frydman, N. Giambiasi, T. Ören, and **L. Yilmaz** (2005). "Use of a Dynamic Personality Filter in Discrete Event Simulation of Human Behavior under Stress and Fatigue," in Proceedings of the 1st *International Conference on Augmented Cognition*, 8 pages. July 22-27, 2005. Las Vegas, Nevada.

88. **Yilmaz L.** and T. Ören (2005). "Discrete-Event Multimodels and their Agent-Supported Activation and Update," in Proceedings of the *Agent-Directed Simulation Symposium* of the Spring Simulation Multiconference (SMC'05), pp. 63-70. April 2005. San Diego, California.

89. Ören, T. and **L. Yilmaz** (2005). "Quality Principles for the Ergonomics of Human-Computer Interfaces of Modeling and Simulation Software, in Proceedings of the *2005 International Conference on Human-Computer Interface Advances for Modeling and Simulation (SIM-CHI'05)*," pp. 5-11. January 23 - 25, 2005. New Orleans, Louisiana.

90. Ören T. and **L. Yilmaz** (2004). "Behavioral Anticipation in Agent Simulation," in Proceedings of the *2004 ACM/IEEE Winter Simulation Conference*, pp. 801-806. December 5-8, 2004. Washington, D.C.

91. **Yilmaz L.** and T. Ören (2004). "Exploring Agent-Supported Simulation Brokering on the Semantic Web: Foundations for a Dynamic Composability Approach," in Proceedings of the *2004 ACM/IEEE Winter Simulation Conference*, pp. 766-773. December 5-8, 2004. Washington D.C.

92. **Yilmaz L.** and T. Ören (2004). "A Conceptual Model for Reusable Simulations within a Model-Simulator-Context Framework," in Proceedings of the *2004 Conceptual Modeling and Simulation Conference, Part of the I3M - International Mediterranean Modeling Multiconference*, pp. 235-241. October 28-31, 2004. Genoa, Italy.

93. **Yilmaz L.** and T. Ören (2004). "Dynamic Model Updating in Simulation with Multimodels: A Taxonomy and a Generic Agent-Based Architecture," in Proceedings of the *2004 Summer Computer Simulation Conference*, pp. 3-8. July 25-29, 2004. San Jose, California.

94. **Yilmaz L.** and J. A. Hamilton (2004). "Modular Compositional Analysis of Protocol Conflicts for Network Interoperability," in Proceedings of the *Design, Analysis, and Simulation of Distributed Systems (DASD'04)*, pp. 149-155. April 18-22, 2004.

95. Hamilton A. J. and **L. Yilmaz** (2004). "Modeling Bilateral Interoperability through Command and Control Architecture," in Proceedings of the *Military, Government, and Aerospace Simulation (MGA'04)* of the ASTC'04 Multiconference, pp. 15-19. April 2004.

96. **Yilmaz L.** (2004). "Integrating Model-Based Verification into Software Design Education," in Proceedings of the *American Society for Engineering Education Annual Conference*, 6 pages. April 4-6, 2004. Auburn, Alabama.

97. **Yilmaz L.** and S. Edwards (2004). "On the Analysis and Detection of Collaborative Behavior Conflicts within the DEVS Formalism," in Proceedings of the *2004 UK Simulation Workshop*, pp. 19-26. March 23-24, 2004. University of Birmingham, UK.

98. **Yilmaz L.** and T. Ören (2003). "Towards Simulation-based, Problem-solving Environments for Conflict Management in Computational Social Science," in Proceedings of the *Agent 2003 – The Agent 2003 Conference on Challenges in Social Simulation*, pp. 25-37. October, 2-4, 2003. Chicago, Illinois.

99. **Yilmaz L.** (2003). "Towards a Metric Suite for Discrete-Event Trace Validity," in Proceedings of the *2003 Summer Computer Simulation Conference*, pp. 720-725. July 13-17, 1997. San Diego, California.

100. **Yilmaz L.**, De La Cruz J., Nguyen T, and T. Kohler (2002). "Building Ontologies using DAML+OIL for Semantic Interoperability," in Proceedings of the *Interservice/Industry Training, Simulation & Education Conference (I/ITSEC'02)*, 12 pages. December 2002. Orlando, Florida.

101. MacKenzie G., Schulmeyer G., and **L. Yilmaz** (2002). "Verification Technology Potential with Different Modeling and Simulation Development and Implementation Paradigms", in Proceedings of the *Foundations for V&V in the 21st Century Workshop (Foundations*

'02), pp. A1:1-40. October 22-24, 2002. The Johns Hopkins University Applied Physics Laboratory Laurel, Maryland.

102. **Yilmaz L.** and Stephen H. Edwards (2002). "Specifying and Verifying Collaborative Behavior in Component-based Systems," in Proceedings of the *RESOLVE Workshop 2002*, pp. 95-104. Columbus, Ohio. Also published as Technical Report TR-02-11, Dept. of Computer Science, Virginia Tech, Blacksburg, Virginia.

103. **Yilmaz L.** (2001). "Automated Object-Flow Testing of Dynamic Process Interaction Models," in Proceedings of the *2001 ACM/IEEE Winter Simulation Conference*, pp. 586-594. December 2001.

104. **Yilmaz L.** (1998)."Verification and Validation Guidelines for Object-Oriented Simulation Models," in Proceedings of the *1998 Summer Computer Simulation Conference*, pp. 645-656. July 19-22 1998. Reno Nevada.

105. **Yilmaz L.** and O. Balci (1997). "Object-Oriented Simulation Model Verification and Validation", in Proceedings of the *1997 Summer Computer Simulation Conference*, 7 pages. July 13-17 1997. San Diego, California.

EXTERNAL GRANTS AND CONTRACTS

- **PI: Levent Yilmaz** (with Bo Liu). Trustworthy Interactive Decision-making Using Symbolic Planning. Funding Agency: National Science Foundation. Duration: 4 years (10/01/2019-09/30/2023). Amount: **$418,170**.

- **Auburn PI: Levent Yilmaz** (with Bernard Zeigler and Nicholas Keller, RTSync Corporation). Efficient Development of Data-Driven Models through Hybrid DEVS/SES/Neural Network Methodology - Phase I. Funding Agency: DoD/STTR. Duration: 6 months (12/15/2021 - 06/14/2022). Amount: **$100,000**.

- **co-PI: Levent Yilmaz** (with Roy Hartfield and Mark Carpenter). Quantification of Confidence in Simulation Models - Phase II. Funding Agency: DoD. Duration: 1 year (08/04/2021-08/03/2022). Amount: **$300,000**.

- **co-PI: Levent Yilmaz** (with Jeff Smith, Alice E. Smith, and Alex Vinel). Analytical Framework and Modeling Support to Wargaming Logistics - Sustainment and Base Resiliency – Phase II. Funding Agency: Department of Defense. Duration: 2 years (09/15/2020-09/14/2022). Amount: **$687,738**.

- **co-PI: Levent Yilmaz** (with Roy Hartfield and Mark Carpenter). Quantification of Confidence in Simulation Models - Phase I. Funding Agency: DoD. Duration: 1 year (08/04/2020-07/31/2021). Amount: **$399,325**.

- **co-PI: Levent Yilmaz** (with Jeff Smith, Alice E. Smith, and Alex Vinel). Analytical Framework and Modeling Support to Wargaming Logistics - Sustainment and Base Resiliency. Funding Agency: Department of Defense. Duration: 2 years (09/15/2018-09/14/2020). Amount: **$834,377**.

- **PI: Levent Yilmaz**. (with Alice Smith and Halit Oğuztüzün, Co-PIs). A Model-Driven Generative Domain Architecture for Simulation Experiment Lifecycle Management and System Optimization. Funding Agency: Department of Defense. Duration: 3 years (03/2015 - 03/2018). Amount: **$589,612**.

- **PI: Levent Yilmaz** (with Ana Franco-Watkins). Computational Models of Ethical Decision-Making. Funding Agency: Air Force Office of Scientific Research. Duration: 12 months. (01/2015-12/2015). Amount: **$57,320**.

- **PI: Levent Yilmaz**. Assessment and Evaluation of the Software Change Impact Analysis System. Funding Agency: Trident Systems Incorporated. Duration: 16 months (10/2014 - 02/2016). Amount: **$67,516**.

- **co-PI: Levent Yilmaz** with (Alice E. Smith, PI and Jefff Smith, co-PI). Agile Systems Engineering – Kanban Scheduling. Funding Agency: Systems Engineering Research Center (SERC)/Stevens Institute of Technology. Duration: 15 months (10/2014 - 01/2016). Amount: **$172,874**.

- **PI: Levent Yilmaz**. (with Alice Smith and Halit Oğuztüzün, Co-PIs). An Integrated Framework for Engineering Replicability into High Assurance System Simulations. Funding Agency: Department of Defense. Duration: 3 years (12/2012 - 12/2015). Amount: **$434,505**.

- **PI: Levent Yilmaz**. (with Alice Smith and Halit Oğuztüzün, co-PIs). Model-Driven Simulation Experiment Lifecycle Management. Funding Agency: Department of Defense. Duration: 1 year (06/2014 - 05/2015). Amount: **$57,512**. [Supplemental funding to the above grant].

- **PI: Levent Yilmaz** (with Bryan Edwards, Co-PI). Dynamics of Creativity and Innovation in Virtual Scientific Commons. Funding Agency: National Science Foundation (NSF). Duration: 10/2008 - 10/2012. Amount: **$315,029**.

- **PI: Levent Yilmaz**. The Synergy of Conflict and Creativity in Open Source Software Development Communities. Funding Agency: National Science Foundation (NSF). Duration: 8/2007 - 8/2008. Amount: **$76,450**.

- **co-PI: Levent Yilmaz**, PI: Alvin Lim. Title: Insertion of Multiresolution Simulation Technology into a Federated Simulation Infrastructure. Funding Agency: Air Force Research Laboratory. Duration: 07/2006 - 6/2007. Amount: **$121,647**.

- **Auburn PI: Levent Yilmaz**, Trident Systems Inc. PI: Michael Stoddard. Title: An Agent-supported Scalable Test Framework for Complex System of Systems – Test Ready Model for Flexible System of Systems. Funding Agency: Missile Defense Agency (STTR Program). Duration: 09/2006- 09/2007. Amount: **$99,861**. AU Share: **$46,770**.

- **PI: Levent Yilmaz**. Title: Agent-supported Active Model Retrieval on the Grid. Funding Agency: Trident Systems Incorporated. Duration: 01/28/04 - 12/23/05. Amount: **$166,475**. This subcontract is based on the following grant:

  - **PI: Levent Yilmaz** (DOD/Army). Title: Phase II: Synthetic Natural Environment (SNE) Development & Interoperability. Funding Agency: US Army Simulation, Training, and Instrumentation Command. Duration: 01/2003-01/2005. Amount: **$726,211**.

- **PI: Levent Yilmaz**. Title: Software in-kind-grant (Software donation), MAK Technologies Corporation. Total Value of Software: **$300,000**.

- **PI: Levent Yilmaz**. Title: Tools for Testing and Certification of Distributed, Dynamic Configurations of a Total Ship Computing Environment, Funding Agency: Trident Systems Incorporated. Duration:.01/2004-07/2005. Amount: **$19,959**.

- **PI: Levent Yilmaz**. Title: Integrating Model-Based Verification into Software Design Education. Funding Agency: Trident Systems Incorporated. Duration: 01/28/04 - 08/01/04. Amount: **$24,980**.

- **PI: Levent Yilmaz**. Title: Architecture Difference Analysis and Its Applications, Funding Agency: Trident Systems Incorporated. Duration: 12/19/03 - 06/25/04. Amount: **$34,426**.
- **PI: Levent Yilmaz**, co-PI: Leland Tankersley (DOD/Navy). Title: Upward Compatible Baseline Support Framework for Effective Force Level System Regression Testing and Certification. Funding Agency: Naval Surface Warfare Center (Dahlgren). Duration: 05/12/00- 11/13/00. Amount: **$69,854**.
- **PI: Levent Yilmaz** (DOD/MDA). Title: Processor technology Insertion Recertification. Funding Agency: Missile Defense Agency. Duration: 0/24/2000 - 04/24/2001. Amount: **$69,900**.
- **PI: Levent Yilmaz** (DOD/Army). Title: Phase I: Synthetic Natural Environment (SNE) Development & Interoperability. Funding Agency: US Army Simulation, Training, and Instrumentation Command. Duration: 05/2002-11/2002. Amount: **$119,806**.

PATENTS, INVENTIONS, TECHNOLOGY TRANSFER

Safe Test Boundaries (STB). Funding Agency: Naval Surface Warfare Center (Dahlgren). Duration: 2002-2008. Total investment and revenue: $2.54M. **The U.S. Navy lists the technology as one of the top 50 successful Small Business Innovative Research (SBIR/STTR) technology transfers of 2007**. These activities were recognized by the Auburn University in 2010 by the Inaugural External Consulting Award.

SERVICE

1. University, College, and Departmental Service
- **Service to the University**
    - Member of the Steering Committee – Computational Science Cluster Initiative (2014 – present)
    - Member of the University Curriculum Committee – College of Engineering Representative (2009 – 2014).
    - Judge - Auburn University Graduate Research Competition (2009, 2012).
- **Service to the College of Engineering**
    - Member of the College of Engineering Curriculum Committee (2009 – 2014).
- **Service to the Department**
    - Member of the Tenure & Promotion Committee (2008 – present).
    - Member of the Curriculum and Assessment Committee (2009 – present).
    - Chair of the Peer Evaluation - Teaching Committee (2010 – present).
    - Faculty Search Committee Member (2015)
    - Search Committee Member – AU Cyber Research Center Director (2013).
    - Member of the E-Day Committee (2003 – 2010).
    - Member of the CSSE Seminar Series Committee (2010 – 2012).
    - ACM Faculty Advisor and Programming Team Coach (2006 – 2009).

2. Selected Professional Services
1. **Editor-in-Chief** of the Simulation: Transactions of the Society for Modeling and Simulation International (2008 – 2016). http://sim.sagepub.com/.

2. **Associate Editor** of the Journal of Simulation (2021 – present). https://www.tandfonline.com/toc/tjsm20/current.

3. **Associate Editor** of the Simulation: Transactions of the Society for Modeling and Simulation International (2016 – present). http://sim.sagepub.com/.

4. **Editorial Board Member** of the International Journal of Simulation and Process Modeling (2004 – present). http://www.inderscience.com/jhome.php?jcode=ijspm.

5. **Associate Editor** of the Simulation & Gaming Journal (2008 – 2016). http://sag.sagepub.com/.

6. **Associate Editor** of the Springer Complex Adaptive Systems Modeling Journal (2012 – present). http://www.springer.com/journal/40294.

7. **Associate Editor** of the International Journal of Engineering Education (2006 – present). http://www.ijee.ie/editors/IJEE_Editors.pdf.

8. **Advisory Editorial Board Member** of the Journal of Simulation Engineering (2018 – present). https://jsime.org/index.php/jsimeng/about/editorialTeam

9. **Advisory Editorial Board Member** of the M&S Magazine (2009 – present).

10. **Advisory Editorial Board Member** of the M&S Newsletter (2011 – present).

11. **Elected Member of the Board of Directors** of the Society for Modeling and Simulation International (2006 – 2008, 2008 – 2011, 2011 – 2013).

12. **Vice President** of the Society for Modeling and Simulation International.

13. **Advisory Board Member** of the International Modeling & Simulation Body of Knowledge Initiative.

14. **Member of the Strategic Planning Committee** of the Society for Modeling and Simulation International (SCS) (2011 – present).

15. **Advisor to Workforce Development Committee** of the Alabama Modeling and Simulation Council (http://www.amsc.to). (2006 – present).

16. **Secretary** of the Society for Modeling and Simulation International (SCS) (2004 – 2006).

17. **Lead Proceedings Editor** of the 2015 IEEE/ACM Winter Simulation Conference. December 2015.

18. **Proceedings co-Editor** of the 2014 IEEE/ACM Winter Simulation Conference. December 7-10, 2014. Savannah, Georgia.

19. **co-Chair** of the Agent-based Modeling Track of Sessions of the 2014 IEEE/ACM Winter Simulation Conference. December 7-10, 2014. Savannah, Georgia.

20. **General co-Chair** of the Agent-Directed Simulation Symposium of the 2014 Spring Simulation Multiconference. April 13-16, 2014. Tampa, Florida.

21. **Guest Editor** (with Tuncer Ö) (in progress), Special Issue on Sustainability and Simulation Gaming. Simulation and Gaming Journal: An Interdisciplinary Journal of Theory, Practice, and Research. (Publication date: Spring 2014).

22. **General co-Chair** of the Agent-Directed Simulation Symposium of the 2013 Spring Simulation Multiconference. April 7-10, 2013. San Diego, California.

23. **Tutorial/Workshops Chair** of the inaugural 2013 ACM SIGSIM Conference. May 19-22, 2013. Montreal, Canada.

24. **General co-Chair** of the Agent-Directed Simulation Symposium of the 2012 Spring Simulation Multiconference. March 26-29, 2012. Orlando, Florida.

25. **Track Chair, Modeling Methodology**, 2011 IEEE/ACM Winter Simulation Conference. December 11-14, 2011. Phoenix, Arizona.

26. **General co-Chair** of the Agent-Directed Simulation Symposium of the 2011 Spring Simulation Multiconference. April 2011. Boston, Massachusetts.

27. **Invited Organizer and Session Chair** of the Agent-Directed Simulation sessions under the Methodology track of the 2010 IEEE/ACM Winter Simulation Conference. December 2010. Baltimore, Maryland.

28. **General co-Chair** of the Agent-Directed Simulation Symposium of the 2010 Spring Simulation Multiconference. April 2010. Orlando, Florida.

29. **General Chair** (with O. Balci, X. Hu, and M. Sierhuis), 2009 International Summer Computer Simulation Conference. July 13-16, 2009. Istanbul, Turkey.

30. **Program Chair** (with Gabriel Wainer, Andreas Tolk, and Hamid Vakilzadian), 2007 International Summer Computer Simulation Conference. July 15-18, 2007. San Diego, California, USA.

31. **Guest Editor** (with Tuncer Ören), Agent-Directed Simulation, Special Issue of the Transactions of the Society for Computer Simulation International. vol. 81, no. 7. July 2005.

32. **Guest Editor** (with Tuncer Ören and Precha Thavikulwat). Special Issue on Intelligent Agents, Artificial Intelligence, and Simulation Gaming. Simulation and Gaming Journal: An Interdisciplinary Journal of Theory, Practice, and Research, vol. 39, no. 1. March 2008.

33. **Guest Editor** (with Y. Zhang, T. Ö, M Sierhuis, G. Madey) Special Issue on Agent-Directed Simulation, International Journal of Agent Technologies and Systems, vol. 2, no. 3. July-September 2010.

34. **Guest Editor** (with Y. Zhang, T. Ö, M Sierhuis, G. Madey) Special Issue on Agent-Directed Simulation, The International Journal of Intelligent Control and Systems. (IJICS), vol. 14, no. 1. March 2009.

35. **Guest Editor** (with Stephen Edwards) of the Special Issue on Trends in Software Engineering Education for the International Journal of Engineering Education, vol. 24. no. 4. August 2008.

36. **Organizer and Chair** (with J. Smith) of the Panel on What Makes Good Research in Modeling and Simulation. The 2008 ACM/IEEE Winter Simulation Conference. December 7-10, 2008. Miami, Florida.

37. **Program Chair** (with Tuncer Ören, Gregory Madey, Maarten Sierhuis, and Yu Zhang), Agent-Directed Simulation Symposium (2010) of the Spring Simulation Multiconference (SpringSim'10).

38. **Program Chair** (with Tuncer Ören, Gregory Madey, and Maarten Sierhuis), Agent-Directed Simulation Symposium (2009) of the Spring Simulation Multiconference (SpringSim'09).

39. **Program Chair** (with Tuncer Ören, Gregory Madey, and Maarten Sierhuis), Agent-Directed Simulation Symposium (2008) of the Spring Simulation Multiconference (SpringSim'08).

40. **Program Chair** (with Tuncer Ören, Gregory Madey, and Maarten Sierhuis), Agent-Directed Simulation Symposium (2007) of the Spring Simulation Multiconference (SpringSim'07).

41. **Program Chair** (with Tuncer Ören, and Gregory Madey), Agent-Directed Simulation Symposium (2006) of the Spring Simulation Multiconference (SpringSim'06), Huntsville, Alabama. April 2006.

42. **General Chair and Founding Organizer** of the 2005 Agent-Directed Simulation Symposium of the Spring Simulation Multiconference (SpringSim'05), San Diego, CA, USA. April 2005.

43. **Publications Chair** of the 46th ACM Southeast Conference. March 28-29, 2008. Auburn, Alabama.

44. **Track Chair and Organizer** (with Tuncer Ören) of the Agent Directed Simulation Track of Sessions in 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013 International Summer Computer Simulation Conference.

45. **Co-organizer** of the I/ITSEC 2005 SCS Panel on Artificial Intelligence, Intelligent Agents and Game Technology.

46. **Member of the Events Committee** of the Alabama Modeling and Simulation Council. (2004-2005).

47. **Associate Chair** (2003-2004) of the Theory and Methodology Council of the Society for Modeling and Simulation International(SCS).

48. **SCS representative (liaison)** to the I/ITSEC Conference Series. (2006)

49. **Organizer and Track Co-Chair** (with Bernard Espinasse), Multiagent Modeling and Simulation Track of Sessions in the Conceptual Modeling and Simulation Conference - CMS 2007, Part of the International Mediterranean Modeling Multiconference.

50. **Organizer and Track Co-Chair** (with Tuncer Ören) of the Human Behavior and Performance Simulation track of Sessions in Conceptual Modeling and Simulation Conference - CMS 2005. Part of the International Mediterranean Modeling Multiconference. October 20-22, 2005. Marseilles, France.

51. **Organizer and Track Co-Chair** (with Tuncer Ören) of the Agent-Directed Simulation track of Sessions at the 20th European Modeling and Simulation Symposium. September 17-19, 2008. Briatico, Italy.

52. **Invited Member of the International Scientific and Technical Program Committees** of

    - Symposium on Theory of Modeling and Simulation (TMS'14). April 13-16, 2014. Tampa, Florida.
    - The UK Operational Research Society (OR Society) Simulation Workshop. April 1-2, 2014. Abbey Hotel Golf and Country Club, Worcestershire.
    - 2013 ACM SIGSIM Conference. May, 2013. Montreal, Canada.
    - 3rd International Conference on Social Computing and Its Applications (SCA 2013). September 30 - October 2, 2013. Karlsruhe, Germany.
    - 2013 International Conference on Collaboration Technologies and Systems (CTS 2013). May 20-24, 2013. San Diego, California .
    - The 2012 International Workshop on Social Computing, Network, and Services (SocialComNet 2012). June 26-28, 2012. Vancouver, Canada.

- 2nd International Conference on Simulation and Modeling Methodologies, Technologies and Applications. July 28 - 31, 2012. Rome, Italy.
- 2012 International Summer Simulation Conference. July 8-12, 2012. Genoa, Italy.
- 2012 Epistemological Perspectives on Simulation Conference. October 10-12, 2012. San Antonio, Texas.
- 24th European Modeling and Simulation Symposium. September, 19-21, 2012. Vienna, Austria.
- SOTICS 2011, The First International Conference on Social Eco-Informatics. July 17-22, 2011. Bournemouth, UK.
- 2011 International Summer Computer Simulation Conference. June 27-30, 2011. The Hague, Netherlands.
- SIMUL 2011, The Third International Conference on Advances in System Simulation. October 23-28, 2011. Barcelona, Spain.
- 2011 IADIS International e-Society Conference. March 10-13, 2011. Avila, Spain.
- 23rd European Modeling and Simulation Symposium. October 17-20, 2011. Rome, Italy.
- The 2011 Workshop on Social Computing, Network, and Services (SocialComNet-2011). June 28-30, 2011.Crete, Greece.
- Symposium on Theory of Modeling and Simulation DEVS Integrative M&S Symposium (DEVS'11). April, 2011. Boston, Massachusetts.
- 2nd IEEE International Conference on Social Computing (SocialCom2010). August 20-22, 2010. Minneapolis, Minnesota.
- 2010 International Summer Computer Simulation Conference. July 2011. Ottawa, Canada.
- The 22nd European Modeling & Simulation Symposium. October 13-15, 2010. FES, Morocco.
- IADIS International e-Society Conference. March 18-21, 2010. Porto, Portugal.
- 21st European Modeling and Simulation Symposium. September 23-25, 2009. Puerto de la Cruz, Tenerife, Canary Islands.
- IASTED International Conference on Modeling, Simulation and Identification (MSI 2009). Beijing, China.
- 2009 DEVS and High Performance Computing Symposium, Spring Simulation Multiconference. San Diego, CA.
- 12th SDPS Transdisciplinary Conference on Integrated Systems, Design, and Process Science. June 2010. Antalya, Turkey.
- 3rd International ICST Conference on Simulation Tools and Techniques (SIMUTools 2010).
- IASTED International Conference on Modeling and Simulation (AfricaMS 2010).
- Symposium on Theory of Modeling and Simulation: DEVS Integrative M&S Symposium (DEVS'10).
- 4th Engineering Semantic Agent Systems (ESAS) Workshop (2010).

- The 13th World Multi-Conference on Systemics, Cybernetics and Informatics: WM-SCI 2009.

- The 2nd International Symposium on Academic Globalization: AG 2009.

- 33rd Annual IEEE International Computer Software and Applications Conference, Engineering Semantic Agent Systems (ESAS 2009).

- 13th World Multi-Conference on Systemics, Cybernetics and Informatics: WMSCI 2009.

- IASTED International Conference on Modeling, Simulation and Identification (MSI 2009), Beijing, China.

- DEVS and High Performance Computing Symposium, Spring Simulation Multiconference, San Diego, CA.

- Creative Intelligent Systems Workshop (CIS 2008) of AAAI 2008 Spring Symposia. Palo Alto, CA.

- The 12th World Multi-Conference on Systemics, Cybernetics and Informatics: WM-SCI 2008.

- The 3rd IEEE International Workshop on Engineering Semantic Agent Systems (ESAS 2008).

- UK Operational Research Society 4th Simulation Workshop (SW'08).

- The 2007 International Conference on Modeling, Simulation and Visualization Methods (MSV'07) of the 2007 World Congress in Computer Science, Computer Engineering, and Applied Computing WORLDCOMP'07.

- The World Multi-Conference on Systemics, Cybernetics, and Informatics (WMSCI 2007).

- The 2nd IEEE International Workshop on Engineering Semantic Agent Systems (ESAS 2007).

- Workshop on Extending Computational Cognitive Modeling to Issues of Multi-Agent Interaction (ECMMAI 2007) [in conjunction with ICAI'07].

- The 1st International Workshop on Pattern Languages: Addressing Challenges (PLAC 2007) (in conjunction with OOPSLA 2007), October 21-22, 2007. Montreal, Canada.

- The IASTED Asian Conference on Modeling and Simulation (ASIAMS 2007). October 8-10, 2007. Beijing, China.

- The International Conference on Modeling and Simulation (Emerging Methods towards Frontier Technologies), CITICOMS 2007. 27-29 August 2007. Coimbatore, India.

- Conceptual Modeling and Simulation Conference - CMS 2005, part of the International Mediterranean Modeling Multiconference. October 20-22, 2005. Marseilles, France.

- AIS-CMS 2007: AI, Simulation and Planning in High Autonomy Systems (AIS) Conceptual Modeling and Simulation (CMS) - CMS 2007, part of the International Mediterranean Modeling Multiconference.

- DEVS Integrative M&S Symposium (DEVS'06).

- Summer Computer Simulation Conference Series (SCSC'04, 05, 06).

- International Software Engineering Conference on Software Engineering in Industrial Applications (ISEC'04).
- IADIS International Conference on e-Society (IADIS'04, 05, 06).
- The IASTED International Conference on Modeling, Simulation, and Optimization (2005, 2006).
- The 2006 International Conference on Modeling, Simulation and Visualization Methods (MSV'06) of the 2006 World Congress in Computer Science, Computer Engineering, and Applied Computing WORLDCOMP'06.

53. **Panel member**. "Education and Training for the M&S Profession" at the International Conference on Simulation in Education (ICSiE) as part of the Western Simulation Multiconference (WMC). January 23-27, 2005. New Orleans, Louisiana.

54. **Co-Chair** (with Dale Pace) and Panelist. SCSC'03 VV&A Process Improvement. July 2003. Montreal, Canada.

55. **Exhibits Chair**, Advanced Simulation Technologies Conference (ASTC'04). April 2004. Arlington, Virginia.

56. **Reviewer** for the following **funding agencies** and **journals**:

- National Science Foundation (NSF) - Reviewer and Panelist
- The Division Physical Sciences of the Netherlands Organization for Scientific Research – proposal reviewer
- Research Grant Council (RGC) of Hong Kong – proposal reviewer
- IEEE Transactions on Systems, Man & Cybernetics
- Simulation & Gaming Journal
- Journal of Simulation
- ACM Transactions on Modeling and Simulation
- Computational and Mathematical Organization Theory
- Journal of Defense Modeling and Simulation
- Journal of Autonomous Agents and Multi-Agent Systems
- The International Journal of Agent Technologies and Systems
- International Journal of Intelligent Control and Systems
- International Journal of Engineering Education
- IEEE Transactions on Industrial Informatics
- International Journal of Computers and Applications
- International Journal of Simulation and Process Modelling
- Simulation: Transactions of the SCS International
- International Journal of Simulation, Systems, Science & Technology
- IEEE Transactions on Industrial Informatics
- Intelligent Decision Technologies Journal