

Dr. Levent Yilmaz

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Dr. Yilmaz is Associate Professor of **Computer Science and Software Engineering** and holds a joint appointment with the **Industrial and Systems Engineering** department.

EDUCATION Ph.D. Computer Science Virginia Tech
M.S. Computer Science Virginia Tech
B.S. Computer Engineering and Information Science Bilkent University

EXPERIENCE

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

HONORS, AWARDS, AND EDITORIAL POSITIONS

- **Editor-in-Chief** of the Simulation: Transactions of the Society for Modeling and Simulation International (2008-present).
- **Associate Editor** for Simulation & Gaming Journal, International Journal of Simulation and Process Modeling, International Journal of Engineering Education, SCS M&S Magazine, and SCS M&S Newsletter.
- 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.
- **Distinguished Professional Achievement Award.** Society for Modeling and Simulation International (SCS). 2011.
- **2010 Auburn University External Consulting Award.**
- **Best Paper Award.** 2011 Emerging Applications of Modeling and Simulation in Industry and Academia (EAIA) Conference. Part of the 2011 Spring Simulation Multiconference (SpringSim11) Sponsored by SCS -The Society for Modeling and Simulation International. Co-sponsored by ACM, M&SNet - McLeod Modeling and Simulation Network of the SCS, Boston, MA.

- **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-Based Simulation,
 - * Agent-Supported Simulation
 - **Theory and Methodology** — e.g., generative parallax multisimulation, autonomic introspective simulation, computational tools and models for
 - * reproducibility/replicability in computational science,
 - * autonomy and autonomous systems,
 - * scientific discovery and theory formation, and
 - * robust decision support systems
- **Complex Adaptive Systems**
 - Dynamics of socio-technical, cognitive, cultural systems — e.g., systems models of collective creativity, dynamics of open science, innovation, and collaborative knowledge creation, simulation of scientific discovery processes, social simulation of projects, organizations, communities, and processes.
- **Science of Science and Innovation Policy** — Applications of *computational thinking* and *complexity science* for policy development and analysis.

EXTERNAL GRANTS AND CONTRACTS

1. AU External Research Grants

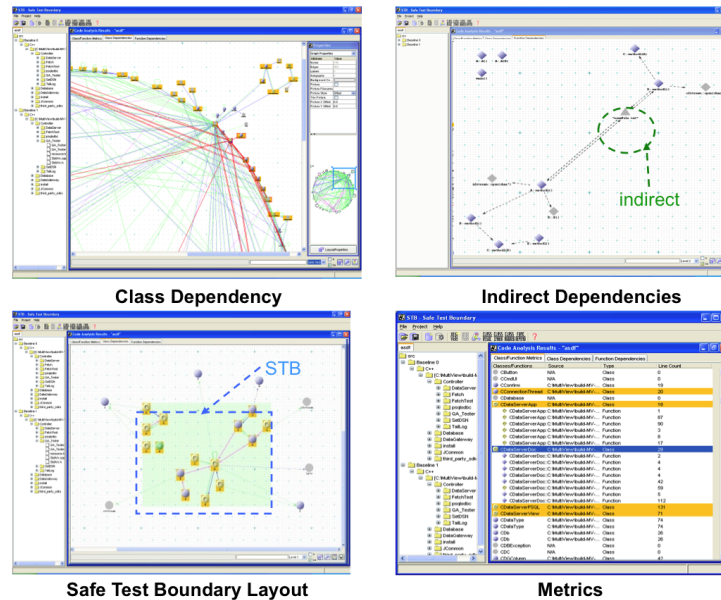
- **PI: Levent Yilmaz.** (with Bryan Edwards, Co-PI). Dynamics of Creativity and Innovation in Virtual Scientific Commons. Funding Agency: National Science Foundation (NSF). Duration: 10/2008 - 10/2012. Amount: **\$315,029**.
- **PI: Levent Yilmaz.** The Synergy of Conflict and Creativity in Open Source Software Development Communities. Funding Agency: National Science Foundation (NSF). Duration: 8/2007 - 8/2008. Amount: **\$76,450**.
- **PI: Levent Yilmaz,** co-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**.

- **PI: Levent Yilmaz**, Title: An Agent-supported Scalable Test Framework for Complex System of Systems. Funding Agency: Missile Defense Agency (STTR Program). Duration: 09/2006- 09/2007. Amount: **\$46,770**.
- **PI: Levent Yilmaz**. Title: Software in-kind-grant (Software donation), MAK Technologies Corporation. Total Value of Software: **\$300,000**.
- **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**.
- **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**.

2. Other Funding

- **PI: Levent Yilmaz** (DOD/Navy SBIR). Title: Upward Compatible Baseline Support Framework for Effective Force Level System Regression Testing and Certification. Funding Agency: Naval Surface Warfare Center (Dahlgren). Duration: 2003-2008.
 - Phase I: Duration: 05/12/00- 11/13/00. Total Contract Funding: **\$69,887**.
 - Phase II: Duration: 2/15/01-6/25/04. Total Contract Funding: **\$749,450**.
- **PI: Levent Yilmaz** (DOD/Navy SBIR). Title: Force Level Automated Certification of Downward Compatible Baseline Software. Funding Agency: Naval Surface Warfare Center (Dahlgren)
 - Phase I: Duration: 05/12/00- 11/13/00. Total Contract Funding: **\$69,980**
 - Phase II: Duration: 1/8/02-8/1/04. Total Contract Funding: **\$749,066**
- **PI: Levent Yilmaz** (DOD/Army SBIR). Title: Synthetic Natural Environment (SNE) Development & Interoperability. Funding Agency: US Army Simulation, Training, and Instrumentation Command (STRICOM).
 - Phase I: Duration: 12/14/01- 09/15/02. Total Contract Funding: **\$69,788**.
 - Phase II: Duration: 02/4/03-12/23/04. Total Contract Funding: **\$726,211**.
- **PI: Levent Yilmaz** (DOD/NavAir SBIR). Title: Processor Technology Insertion Recertification. Funding Agency: Navair.
 - Phase I: Duration: 10/24/00-04/22/01. Total Contract Funding: **\$69,854**.

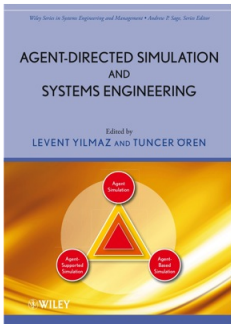
- **Safe Test Boundaries (STB).** Funding Agency: Naval Surface Warfare Center (Dahlgren). Duration: 2002-2008. Total investment and revenue: \$2.54M. **The technology is now listed by the U.S. Navy as one of the top 50 successful Small Business Innovative Research (SBIR/STTR) technology transfers of 2008.** <http://www.eng.auburn.edu/news/2009/09/yilmaz-trident.html>
- **Major Contribution: Machine Understanding Technology** - A novel scalable approach and algorithms for understanding the indirect impact of change between two large, complex software source code baselines substantially reducing the amount of retesting and maintenance required for system upgrades. After the research phase was completed, \$749,000 Phase II SBIR was awarded to develop a full scale prototype.



During this phase, as the PI of the project, I continued to support the program under consulting agreements, as well as direct subcontracts to Auburn University. The combined Trident/Auburn team developed a successful prototype which led to several successful Phase III transitions for a total of \$841,000, including

- Joint SIAP (Single Integrated Air Picture) Program to analyze the impact of change for the IABM (Integrated Architecture Behavioral Model) for E2C Aircraft
- Naval Surface Warfare Center (NSWC) Dahlgren to analyze Aegis C&D (Controls & Displays) baseline upgrades
- Advanced Seal Delivery System (ASDS) Integrated Controls & Displays (ICAD) to understand the extent of the impact of ICAD upgrades on the safety Certified Software
- Tridents Collaboration Gateway technology to analyze the impact of changes between versions prior to re-certification by NSA and DIA

BOOKS



1. Edited Books

1. **Yilmaz L.** and T. Ören (Eds.) (2009). *Agent-Directed Simulation and Systems Engineering*, Wiley Series in Systems Engineering and Management. ISBN: 978-3-527-40781-1. Wiley. [Authored/co-authored more than half of the chapters and contributed to remaining]. For details about the book, please see <http://www.eng.auburn.edu/news/2009/11/yilmaz-book.html>

2. Edited Journal Special Issues and Conference Proceedings

1. **Yilmaz L.** (Ed.) (2012-in press). Special Issue on 60th Anniversary of SCS. *Simulation: Transactions of the Society for Modeling and Simulation International*, forthcoming in September 2012.
2. Zhang Y., **L. Yilmaz**, T. I. Ören, G. Madey, and M. Sierhuis (Eds.) (2012-in press). Special Issue on Agent-Directed Simulation – Selected best papers from the ADS 2011 conference, *Computational and Mathematical Organization Theory*. Published online first: <http://www.springerlink.com/content/2812235114h05q81/>.
3. **Yilmaz L.**, Madey, T. Ören, Sierhus M., Y. Zhang (Eds.) (2011, 2010, 2009). The Proceedings of the *Agent-Directed Simulation Symposium*. Part of the Proceedings of the 2011, 2010, 2009 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, Boston, MA.
4. **Yilmaz L.**, Madey, T. Ören, and Sierhus M. (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. Ottawa, Canada.
5. **Yilmaz L.** (Ed.) (2005) The Proceedings of the *Agent-Directed Simulation Symposium* of the 2005 Spring Simulation Multiconference, SCS Press, Simulation Series vol. 37, no. 2, San Diego, CA.
6. Zhang Y., **L. Yilmaz**, T. I. Ören, G. Madey, and M. Sierhuis (Eds.) (2010). Special Issue on Agent-Directed Simulation, *The International Journal of Agent Technologies and Systems (IJATS)*, vol. 2, no. 3, July-September 2010.
7. Zhang Y., T. I. Ören, **L. Yilmaz**, G. Madey, and M. Sierhuis (Eds.) (2009). Special Issue on Agent-Directed Simulation, *The International Journal of Intelligent Control and Systems (IJICS)*, vol. 14, no. 1, March 2009
8. O. Balci, X. Hu, M. Sierhuis, and **L. Yilmaz** (Eds.). (2009). The Proceedings of the *2009 Summer Computer Simulation Conference* of the 2009 International Simulation Multiconference (ISMc'09), July, 2009. SCS Press.
9. **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).
10. **Yilmaz L.**, T. Ören, and Precha 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 (pp. 7-9).

11. Wainer G., A. Tolk, H. Vakilzadian, **L. Yilmaz** (Eds. 2007) The Proceedings of the 2007 Summer Computer Simulation Conference, July 15-18, 2007, Sponsored by SCS -The Society for Modeling and Simulation International. San Diego, CA, USA.
12. **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

Note: Student co-authors are noted with an asterisk.

1. Book Chapters

1. Ören T. and **Yilmaz L.** (2012-in press). "Philosophical Aspects of Modeling and Simulation," to appear in (Tolk A. ed.) *Epistemology of Modeling and Simulation*, Springer.
2. **Yilmaz L.** and T. Ören (2012-in press). "Toward Replicability-Aware Modeling and Simulation: Changing the Conduct of M&S in the Information Age," to appear in (Tolk A. ed.) *Epistemology of Modeling and Simulation*, Springer.
3. Bharathy G. and **L. Yilmaz** (2012). "Agent-Directed Simulation for Combat Modeling and Distributed Simulation," in *Engineering Principles of Combat Modeling and Distributed Simulation*, edited by Andreas Tolk. pp. 669-714. Wiley.
4. **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].
5. Ören T. and **Yilmaz L.** (2011). "Understanding, Misunderstanding, Multi-Understanding, and Switchable Understanding by Agents," chapter 13 in Elci A., Kone T. M., and Orgun M. (eds.) *Semantic Agent Systems: Foundations and Applications*, Series: Studies in Computational Intelligence, Vol. 344. Springer.
(<http://www.springer.com/engineering/mathematical/book/978-3-642-18307-2>).
6. **Yilmaz L.** and C. A. Hunt (2011). "Advanced Concepts and Generative Simulation Formalisms for Creative Discovery Systems Engineering," pp. 233-258. Chapter 9 in Tolk A. and Jain L. (eds.) *Handbook on Intelligence-Based Approaches for Systems Engineering*, Intelligent Systems Reference Library of Springer.
7. Zeigler B., A. Muzy, **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.
8. **Yilmaz L.** and B. Mitchell* (2009). "Autonomic Introspective Simulation Systems," Chapter 2 in Yilmaz and Ören (eds.) *Agent-directed Simulation and Systems Engineering*, pp. 37-72. Wiley Series in Systems Engineering and Management. Wiley.

9. **Yilmaz L.** and T. Ören (2009). “Agent-directed Simulation,” Chapter 4 in Yilmaz and Ören (eds.) *Agent-directed Simulation and Systems Engineering*, pp. 111-144. Wiley Series in Systems Engineering and Management. Wiley.
10. Balci O., W. F. Ormsby and **L. Yilmaz** (2009). “Quality Assurance Simulation Studies of Complex Networked Agent Systems,” Chapter 6 in Yilmaz and Ören (eds.) *Agent-directed Simulation and Systems Engineering*, pp. 173-188. Wiley Series in Systems Engineering and Management. Wiley.
11. Ören T. and **L. Yilmaz** (2009). “Failure Avoidance in Agent-directed Simulation,” Chapter 7 in Yilmaz and Ören (eds.) *Agent-directed Simulation and Systems Engineering*, pp. 189-218. Wiley Series in Systems Engineering and Management. Wiley.
12. **Yilmaz L.** (2009). “Toward Systems Engineering for Agent-directed Simulation,” Chapter 8 in Yilmaz and Ören (eds.) *Agent-directed Simulation and Systems Engineering*, pp. 219-236. Wiley Series in Systems Engineering and Management. Wiley.
13. **Yilmaz L.** and J. Phillips* (2009). “Agent Simulation for Software Process Performance Analysis,” Chapter 15 in Yilmaz and Ören (eds.) *Agent-directed Simulation and Systems Engineering*, pp. 433-450. Wiley Series in Systems Engineering and Management. Wiley.
14. Smith J., E. Sahin*, and **L. Yilmaz** (2009). “Agent-directed Simulation for Manufacturing System Engineering,” Chapter 16 in Yilmaz and Ören (eds.) *Agent-directed Simulation and Systems Engineering*, pp. 451-474. Wiley Series in Systems Engineering and Management. Wiley.
15. **Yilmaz L.** (2008). “Collaborative Technology: Improving Team Cooperation and Awareness in Distance Learning for IT Education,” Chapter 8 in the *Handbook of Distance Learning for Real-time and Asynchronous Information Technology*. (Eds. Negash S, Whitman M., Woszczynski A., Hoganson K., Mattord H.), pp. 157-169.
16. **Yilmaz L.** and A. Tolk (2008). “A Unifying Multimodel Taxonomy and Agent-Supported Multisimulation Strategy for Decision-Support,” in *Studies in Computational Intelligence (SCI) - Intelligent Decision Making: An AI-based Approach* (Eds. Phillips-Wren, Ichalkaranje, and Lakhmi). vol. 97, pp. 189-222.
17. **Yilmaz L.** and V. Ustun* (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*, pp. 129-150. SCS Press, San Diego, CA.
18. **Yilmaz L.** (2006). “Computer Aided Software Engineering. (In Turkish: Bilgisayar Destekli Yazilim Muhendisligi),” In: *Informatics Encyclopedia of Turkey* (In Turkish: Turkiye Bilisim Ansiklopedisi), pp. 197-204. Istanbul, Turkey. (March 2006).
19. **Yilmaz L.** (2006). “Formal Methods in Software Engineering (In Turkish: Yazilimda Bicimsel Yontemler),” In: *Informatics Encyclopedia of Turkey* (In Turkish: Turkiye Bilisim Ansiklopedisi), pp. 988-997. Istanbul, Turkey (March 2006).

2. Editorials

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

2. Zhang Y., **L. Yilmaz**, T. I. Ören, G. Madey, and M. Sierhuis (Eds.) (2012). "Introduction to the Special Issue on Agent-Directed Simulation," in *Computational and Mathematical Organization Theory*.
<http://www.springerlink.com/content/2812235114h05q81/>.
3. **Yilmaz L.** (2011). "Reproducibility in Modeling & Simulation Research," *SIMULATION*, vol. 87, no. 1, January 2011, pp. 3-4.
4. Zhang Y., **L. Yilmaz**, T. I. Ören, G. Madey, and M. Sierhuis (2010). "Introduction to the Special Issue on Agent-Directed Simulation," in *The International Journal of Agent Technologies and Systems (IJATS)*, vol. 2, no. 3, pp. i-iii. July-September 2010.
5. Zhang, Y., T.I. 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 (IJICS)*, vol. 14, no. 1, March 2009, pp. 1-3.
6. **Yilmaz L.** (2009). "Editorial: Letter from the Editor," *SIMULATION*, vol. 85, no. 1, January 2009, pp. 3-4
7. **Yilmaz L.**, T. Ören, and Precha 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, March 2008 (pp. 7-9).
8. **Yilmaz L.** and T.I. Ören (2005). "Editorial: Introduction to Agent-Directed Simulation," *Simulation: Transactions of the Society for Computer Simulation International*. vol. 81, no.7, July 2005, pp. 463-464.

3. Journal Articles

1. Holt* J, S. Biaz, **L. Yilmaz**, A. A. Chadia (2012). "A Symbiotic Simulation Architecture for Evaluating UAVs Collision Avoidance Techniques," submitted to *Journal of Simulation*.
2. **Yilmaz L.** (2012). "Reproducibility in M&S Research: Issues, Strategies, and Implications for Model Development Environments," accepted, forthcoming in *Journal of Experimental and Theoretical Artificial Intelligence*. doi:10.1080/0952813X.2012.693842
3. Zou G.* and **L. Yilmaz** (2012). "InnoScape: A Creative Artificial Ecosystem Model of Innovation Processes in Epistemic Communities," accepted, forthcoming in *International Journal of Simulation and Process Modeling*.
4. 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.
5. 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.
6. **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>.

7. 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.
8. **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.
9. **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.
10. Bradley M.* and **L. Yilmaz** (2008). "Symbiotic Adaptive Multisimulation: An Autonomous Simulation Framework for Real-time Decision Support under Uncertainty," *ACM Transactions on Modeling and Simulation*, vol.19, no.1, pp. 1-31, December 2008. <http://doi.acm.org/10.1145/1456645.1456647>
11. **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.
12. Phillips J.* and **L. Yilmaz** (2007). "Team-RUP: Agent-based Simulation of Team Behavior in Software Development Organizations," *International Journal of Simulation and Process Modelling*, vol. 3, no. 3, pp. 170-179.
13. **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.
14. **Yilmaz L.** (2007). "A Strategy for Improving Dynamic Composability: Ontology-driven Introspective Agent Architectures," *Journal of Systemics, Cybernetics, and Informatics*, vol. 5, no. 5, pp. 1-9.
15. **Yilmaz L.** (2007). "Toward Next Generation Simulation-based Computational Tools for Conflict and Peace Studies," *Social Science Computer Review*, vol. 25, no. 1, pp. 48-60. Spring 2007.
16. **Yilmaz L.** (2007). "Simulation Modeling of Software Processes as Human-centered Adaptive Work Systems," in *Lecture Notes in Computer Science (LNCS) - Software Process Improvement and Innovation*, vol. 4764, pp. 148-159, September 2007.
17. **Yilmaz L.** (2006). "Validation and Verification of Social Processes within Agent-Based Computational Organization Models," *Computational & Mathematical Organization Theory*, vol. 12, no. 4, pp. 283-312. December 2006.
18. **Yilmaz L.** and J. Phillips* (2006). "Organization-theoretic Perspective for Simulation Modeling of Agile Software Processes," In *Lecture Notes in Computer Science (LNCS) - Software Process Simulation*, Springer-Verlag, vol. 3966, pp. 234-241.
19. **Yilmaz L.** (2006). "Expanding Our Horizons in Teaching the Use of Intelligent Agents for Simulation Modeling of Next Generation Engineering Systems," *International Journal of Engineering Education*, vol. 22, no.5, pp. 1097-1104.
20. **Yilmaz L.**, T. Ören, and A. Nasser-Ghasem (2006). "Agents, Simulation, and Gaming," *Simulation & Gaming Journal*. vol. 37, no. 3, pp. 339-349.

21. Wang S.* and **L. Yilmaz** (2006). "A Strategy and Tool Support to Motivate the Study of Formal Methods in Software Design Courses," *International Journal of Engineering Education*, vol. 22, no. 2, pp. 407-418.
22. **Yilmaz L.**, T. Ören, and A. Nasser-Ghasem. (2006). "Simulation-Based Problem Solving Environments for Conflict Studies," *Simulation & Gaming Journal*. vol. 37, no. 4, pp. 534-556. December 2006.
23. **Yilmaz L.** and S. Paspuletti* (2005). "Toward a Meta-Level Framework for Agent-supported Interoperation of Defense Simulations," *Journal of Defense Modeling and Simulation*. vol 2, no 3, pp. 161-175.
24. **Yilmaz L.** and S. Wang* (2005). "Integrating Model-Based Verification into Software Design Education," *Journal of Science, Technology, Engineering, and Math Education*, vol. 6, no. 3-4, pp.29-34.
25. **Yilmaz L.** (2004) "Verifying Collaborative Behavior in Component-Based DEVS Models," in *Simulation: Transactions of the Society for Modeling and Simulation International*. Special Issue: Component-Based Modeling and Simulation, Vol. 80, No. 7-8, 399-415.
26. **Yilmaz L.** (2004). "On the Need for Contextualized Introspective Simulation Models to Improve Reuse and Composability of Defense Simulations," *Journal of Defense Modeling and Simulation*, vol. 1, no. 3. pp. 135-145.
27. **Yilmaz L.** and T. Ören (2004). "Prospective Issues in Simulation Model Composability: Basic Concepts to Advance Theory, Methodology, and Technology of Modeling and Simulation," The Modeling and Simulation Information Analysis Center (MSIAC) e-Journal. Fall 2004, vol 6. no. 1, December 2004.

4. Magazine Articles

1. **Yilmaz L.** and T. Ören (2010). "Agent-Directed Simulation Conference Series: A Growing Global Community," in *M&S Newsletter* online version available at <http://www.scs.org/newsletters/2010-04/index.htm>
2. **Yilmaz L.** and T. Ören (2010). "Agent-Directed Simulation: Intelligent Agent Technologies for Advancing Simulation-based Systems Engineering," *Modeling & Simulation*, July 2010. <http://www.scs.org/magazines/2010-07/indexfile/Files/article0ren.pdf>
3. **Yilmaz L.** (2004). "Advancing the Theory and Methodology of M&S to Explore, Understand, and Manage Conflicts," *Modeling & Simulation* vol 3. no 2, pp. 14-16.
4. Szczerbicka H. and **L. Yilmaz** (2004). "M&S Statement: The Mission of the SCS Technical Council on Theory and Methodology," *SCS Modeling & Simulation Magazine*, vol.3, no.3. pp. 18-19.

5. Conference Articles

1. **Yilmaz L.** (2012). "Scholarly Communication of Reproducible Modeling and Simulation Research using e-Portfolios," accepted, forthcoming in Proceedings of the *2012 Summer Computer Simulation Conference*. July 8-11, 2012. Genoa, Italy.

2. Ören T. and **L. Yilmaz**. “Agent-Monitored Anticipatory Multisimulation: A Systems Engineering Approach for Threat Management Training,” submitted to *The 24th European Modeling & Simulation Symposium*. September 19-21. Vienna, Austria.
3. Özmen Ö.*, J. Smith, **L. Yilmaz**, A. Smith (2012). “A Complex Adaptive Model of Information Foraging and Preferential Attachment Dynamics in Global Participatory Science,” in *Proceedings of the 2012 IEEE International Multi-Disciplinary Conference on Cognitive Methods in Situation Awareness and Decision Support*. March 6-8, 2012. New Orleans, LA.
4. Zou G.* and **L. Yilmaz** (2012). “Exploring the Impact of Social Communication on the Innovation Potential of Epistemic Communities,” in *Proceedings of the 50th ACM SouthEast Conference*, pp. 315-320. Tuscaloosa, AL. March 29-31, 2012.
5. Özmen Ö*. and **L. Yilmaz** (2012). “An Agent-Based Information Foraging Model of Scientific Knowledge Creation and Spillover in Open Science Communities,” in *Proceedings of the Agent-Directed Simulation Symposium of the 2012 Spring Simulation Multiconference*, pp. 24-31. March 26-29, 2012. Orlando, FL.
6. **Yilmaz L.**, G. Zou*, and O. Balci (2011). “A Robust Evolutionary Strategy for Generative Validation of Agent-based Models using Adaptive Simulation Ensembles,” in *IEEE/ACM Proceedings of the Winter Simulation Conference*, pp. 2852-2864. December 11-14, 2011. Phoenix, Arizona.
7. Zou G.* and **L. Yilmaz** (2011). “InnoScape: A Creative Artificial Ecosystem Model of Boundary Processes in Open Science,” in *Proceedings of the IEEE Atlanta Conference on Science and Innovation Policy*, pp. 1-12. September 15-17, 2011 Atlanta, USA. <http://conferences.library.gatech.edu/acsip/index.php/acsip/ATLC11/paper/viewFile/419/351>
8. **Yilmaz L.**, T. Ören, and C. A. Hunt (2011). “Towards Simulation-based Robust Computational Scientific Discovery Systems,” in *Proceedings of the Summer Computer Simulation Conference*. pp. 75-81, June 26-30, Hague, Netherlands.
9. Barjis J., I. Rychkova, and **L. Yilmaz** (2011). “Modeling and Simulation Driven Software Development,” in *Proceedings of the 2011 Emerging Applications of Modeling and Simulation in Industry and Academia (EAIA) Conference*. pp. 4-10. Part of the 2011 Spring Simulation Multiconference (SpringSim11). Boston, Massachusetts, April 4-7, 2011. (**Best paper award**).
10. **Yilmaz L.** (2011). “Simulation Reproducibility: Implications for Theory, Methodology, and Model Development Environments,” *Epistemology of Modeling & Simulation Conference*, (<http://www.modelingepistemology.pitt.edu/program/>), Pittsburgh, April 1-3, 2011.
11. **Yilmaz L.** and D. Kent* (2011). “ACART: An API Compliance and Analysis Report Tool for Discovering Reference Design Traceability,” in *Proceedings of the 49th ACM SouthEast Conference*. pp. 243-248, doi: 10.1145/2016039.2016103. March 24-26, 2010 Kennesaw, Georgia.
12. Barjis J., R. Spahn*, and **L. Yilmaz** (2010). “Simulating Performance Robustness and Resilience in Healthcare Provider Organizations,” in *Proceedings of the 2010 Huntsville Simulation Conference*, pp. 24-30, October 29-31, Huntsville, AL.

13. Zou G.* and **L. Yilmaz** (2010). “A Computational Model of Collective Creativity and Innovation in Virtual Open Source Science Networks: What Distinguishes Innovative Virtual Communities?,” in *Proceedings of the 2010 IEEE/ACM Winter Simulation Conference*. pp. 708-719. December 5-8, 2011. Orlando, Florida.
14. Magnotti J.* and **L. Yilmaz** (2010). “An Agent Simulation Study of Optimal Foraging: The Ideal Free Distribution with Individual Scalar Expectancies,” in *Proceedings of the Agent-Directed Simulation Symposium of the SpringSim Multiconference*. pp. 25-34. Orlando, Florida.
15. **Yilmaz L.** (2010). “Emergence, Innovation, and Resilience of Collaboration Structures in Virtual Open Science and Innovation Collaboratories,” in *Proceedings of the SIMUL 2010: The Second International Conference on Advances in System Simulation*, pp. 52-58. August 22-27, 2010. Nice, France.
16. Arnold M.*, D. Shenwiwagle*, and **L. Yilmaz** (2010). “SciBrowser: A Computational Ethnography Tool to Explore Open Source Science Communities,” In *Proceedings of the The 48th ACM SouthEast Conference*.
<http://doi.acm.org/10.1145/1900008.1900045>. April 15-17, 2010 Oxford, Mississippi.
17. **Yilmaz L.** (2009). “On the Synergy of Conflict and Collective Creativity in Open Innovation Socio-technical Ecologies: Complex Adaptive Systems Perspective,” in *Proceedings of the 2009 IEEE International Conference on Social Computing (Social-Com’09)*, pp. 502-508. Vancouver, Canada. August 29-31, 2009.
18. **Yilmaz L.** and T. Ören (2009). “Rethinking M&S to Enhance Creativity and Computational Discovery,” in *Proceedings of the Summer Computer Simulation Conference (SCSC’09) of 2009 International Simulation Multiconference*, pp. 66-74. Istanbul, Turkey, July 13-16, 2009.
19. Ören T., **L. Yilmaz**, M. Kazemifard, and N. G. Aghae (2009). “Multi-understanding: A Basis for Switchable Understanding for Agents,” *Proceedings of the Summer Computer Simulation Conference (SCSC’09) of 2009 International Simulation Multiconference*, pp. 395-402. Istanbul, Turkey, July 13-16, 2009.
20. **Yilmaz L.** (2009). “Simulating the Impact of Community Culture and Governance in Virtual Innovation Communities,” In *Proceedings of the 2009 Atlanta Conference on Science and Innovation Policy*, ed. Susan E. Cozzens and Pablo Catalnto. Atlanta, Georgia. October 1-3, 2009. Digital Object Identifier 10.1109/ACSIP.2009.5367842.
21. **Yilmaz L.** and B. Mitchell* (2009). “Generative Multisimulation: Decision-Support under Uncertainty using Evolutionary Multimodels,” in *Proceedings of the 2009 Cargese Interdisciplinary Seminar on Modeling & Simulation of Evolutionary Agents in Virtual Worlds*, pp. 83-104. Corsica, France, April 20-25, 2009.
22. **Yilmaz L.** and J. Smith (2008). “Prelude to the Panel on What Makes Good Research in Modeling and Simulation,” *ACM/IEEE Winter Simulation Conference*, pp. 671-677. Miami, FL. December 7-10, 2008.
23. **Yilmaz L.**, P. Davis, P. A. Fishwick, X. Hu, J. A. Miller, M. Hybinette, T. I. Ören, P. Reynolds, H. Sarjoughian, and A. Tolk (2008). “What Makes Good Research in Modeling and Simulation: Sustaining the Growth and Vitality of the M&S Discipline,” *ACM/IEEE Winter Simulation Conference*, pp. 677-688. Miami, FL. December 7-10, 2008.

24. **Yilmaz L.** (2008). "Autonomic Introspective Simulation Systems: Concepts and Applications," in Proceedings of the *Summer Computer Simulation Conference (SCSC'08) of 2008 International Simulation Multiconference & 2008 Summer Simulation Multiconference*. pp. 1-8. Edinburgh, UK.
25. Xu J., **L. Yilmaz**, and J. Zhang (2008). "Agent Simulation of Collaborative Knowledge Processing in Wikipedia," in *Proceedings of the Agent-Directed Simulation Symposium* of the SpringSim Multiconference. pp. 19-25. April 14-17. Ottawa, Canada.
26. **Yilmaz L.** (2008). "Innovation Systems are Self-organizing Complex Adaptive Systems," In *Proceedings of the Creative Intelligent Systems Workshop of the AAAI Spring Symposium (SS-08-03)*, pp. 142-148. AAAI Press. Stanford University, California.
27. **Yilmaz L.** (2007). "Exploring the Impact of Employee Turnover on the Effectiveness of Software Development Team Archetypes," in *Proceedings of the Agent-Directed Simulation Symposium* of the Spring Simulation Multiconference (SMC'07), pp. 94-101. Norfolk, VA, March 2007.
28. Ören, T.I., G-A. Nasser, and **L. Yilmaz** (2007). "An Ontology-Based Dictionary of Understanding as a Basis for Software Agents with Understanding Abilities," in *Proceedings of the Agent-Directed Simulation Symposium* of the Spring Simulation Multiconference (SMC'07), pp. 19-27. Norfolk, VA, March 2007.
29. **Yilmaz L.** and T. I. Ören (2007). "On Multiresolution Simulation Modeling of Team and Human Behavior for Software Process Design," in *Proceedings of the Tenth World Congress On Integrated Design & Process Technology*, pp. 210-219, Antalya, Turkey, June 3-8, 2007.
30. **Yilmaz L.** (2007). "Using Meta-level Ontology Relations to Measure Conceptual Alignment and Interoperability of Simulation Models," in *Proceedings of the 2007 ACM/IEEE Winter Simulation Conference*, pp. 1090-1099. Washington D.C.
31. **Yilmaz L.**, Lim A., Bowen S.*, and Ören I. T. (2007). "Requirements and Design Principles for Multisimulation with Multiresolution, Multistage Models," in *Proceedings of the 2007 ACM/IEEE Winter Simulation Conference*, pp. 823-832. Washington D.C.
32. **Yilmaz L.** and T. I. Ören (2007). "Agent-directed Simulation Systems Engineering," in *Proceedings of 2007 Summer Computer Simulation Conference*, pp. 897-904. San Diego, CA, July 14-19, 2007.
33. **Yilmaz L.** (2006). "On Improving Dynamic Composability via Ontology-driven Introspective Agent Architectures," In *Proceedings of the 10th World Multi-Conference on Systemics, Cybernetics and Informatics: WMSCI 2006*, Vol 4, pp. 112-117, Orlando, Florida.
34. 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, Melbourne, Florida.
35. Ustun 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, Melbourne, Florida.
36. 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, Huntsville, AL, April 2006.

37. Saple A.*, **L. Yilmaz**, T.I. 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.
38. Ören T.I. and **L. Yilmaz** (2006). "Synergy of Systems Engineering and Modeling and Simulation," *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.
39. **Yilmaz L.** and A. Tolk (2006). "Engineering Ab Initio Dynamic Interoperability and Composability via Agent-mediated Introspective Meta-simulation," In *Proceedings of the 2006 ACM/IEEE Winter Simulation Conference*, pp. 1075-1082, Monterey, CA. December 3-6 2006.
40. Seck, M., C. Frydman, N. Giambiasi, T.I. 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*, July 22-27, 2005, Las Vegas, Nevada.
41. **Yilmaz L.** and T.I. 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)*, San Diego, CA, April 2005, pp. 63-70.
42. Ören, T.I. and **L. Yilmaz** (2005). "Quality Principles for the Ergonomics of Human-Computer Interfaces of Modeling and Simulation Software, In *Proceedings of SIM-CHI'05 - 2005 International Conference on Human-Computer Interface Advances for Modeling and Simulation*," January 23 - 25, 2005, New Orleans, Louisiana, pp. 5-11.
43. **Yilmaz L.** (2005). "On the Potential of DEVS in Teaching Engineering of Quality into Simulation Models," *2005 International Conference on Simulation in Education (ICSiE'05)*, pp. 89-94.
44. **Yilmaz L.** and Ören, T.I. (2004). "Dynamic Model Updating in Simulation with Multimodels: A Taxonomy and a Generic Agent-Based Architecture," In *Proceedings of SCSC 2004 - Summer Computer Simulation Conference*, July 25-29, 2004, San Jose, CA., pp. 3-8.
45. Ören, T.I. and **L. Yilmaz** (2004). "Behavioral Anticipation in Agent Simulation," In *Proceedings of ACM/IEEE WSC 2004 - Winter Simulation Conference*, Washington, D.C., December 5-8, 2004, pp. 801-806.
46. **Yilmaz L.** and Ören, T.I. (2004). "Exploring Agent-Supported Simulation Brokering on the Semantic Web: Foundations for a Dynamic Composability Approach," in *Proceedings of ACM/IEEE WSC 2004 - Winter Simulation Conference*, Washington, D.C., December 5-8, 2004, pp. 766-773.
47. **Yilmaz L.** and T. Ören (2004). "A Conceptual Model for Reusable Simulations within a Model-Simulator-Context Framework," *CMS 2004 - Conference on Conceptual Modeling and Simulation, Part of the I3M - International Mediterranean Modeling Multiconference*, pp. 235-241. October 28-31, 2004, Genoa, Italy.

48. **Yilmaz L.** and S. Edwards (2004). "On the Analysis and Detection of Collaborative Behavior Conflicts within the DEVS Formalism," In the *Proceedings of the 2004 UK Simulation Workshop*, pp. 19-26. University of Birmingham, UK, March 23-24.
49. **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 2004 (DASD'04)*, pp. 149-155. April 18-22.
50. **Yilmaz L.** (2004). "Integrating Model-Based Verification into Software Design Education," In *Proceedings of the American Society for Engineering Education Annual Conference*, April 4-6.
51. **Yilmaz L.** (2003). "Towards a Metric Suite for Discrete-Event Trace Validity," In *Proceedings of the 2003 Summer Computer Simulation Conference*, July 13, 17 1997. The Society for Computer Simulation International, San Diego, California.
52. **Yilmaz L.**, De La Cruz J., Nguyen T, and T. Kohler (2002). "Building Ontologies using DAML+OIL for Semantic Interoperability," *Interservice/Industry Training, Simulation & Education Conference (I/ITSEC'02)*, December 2002, Orlando, Florida.
53. **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.
54. 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) at ASTC'04 Multiconference*. pp. 15-19.
55. **Yilmaz L.** and Stephen H. Edwards (2002). "Specifying and verifying collaborative behavior in component-based systems," In *Proceedings of the RESOLVE Workshop 2002*. Technical Report TR-02-11, Dept. of Computer Science, Virginia Tech, Blacksburg, VA, pp. 95-104.
56. 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. The Johns Hopkins University Applied Physics Laboratory Laurel, Maryland, October 22-24, 2002.
57. **Yilmaz L.** and Ören, T.I. (2004). "Towards Simulation-based, Problem-solving Environments for Conflict Management in Computational Social Science," *Proceedings of Agent 2003 - The Agent 2003 Conference on Challenges in Social Simulation*, Chicago, Illinois, October, 2-4, 2003, pp. 25-37.
58. **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. The Society for Computer Simulation International, Reno Nevada.
59. **Yilmaz L.** and O. Balci (1997). "Object-Oriented Simulation Model Verification and Validation", In *Proceedings of the 1997 Summer Computer Simulation Conference*, July 13, 17 1997. The Society for Computer Simulation International, San Diego, California.

6. Selected List of Technical Reports (complete list is available on demand)

1. **Yilmaz L.**, and J. Reber (2010). “Automated Analysis and Verification of Application Program Interfaces (APIs),” submitted to US Navy SPAWAR.
2. **Yilmaz L.** (2008). “The Synergy of Conict and Creativity in Open Source Software Development Communities,” submitted to National Science Foundation.
3. **Yilmaz L.** and A. Lim (2008). “Insertion of Multiresolution Simulation Technology into a Federated Simulation Infrastructure, submitted to Air Force Research Laboratory.
4. **Yilmaz L.** and M. Stoddard (2007). “Test Ready Models for System of Systems,” submitted to Missile Defense Agency.
5. **Yilmaz L.** and A. Lim (2007). “Insertion of Multiresolution Simulation Technology into a Federated Simulation Infrastructure, submitted to Air Force Research Lab-Rome, NY.
6. Tolk A. and **L. Yilmaz** (2005). “Evaluating Intelligent Agent Architectures for the Future Combat Systems,” Technical Report. Submitted to Loch Harbour Group (BAE Systems).
7. **Yilmaz L.** (2005). “Integration of Composable Simulations with Real-time Applications and Databases,” Technical Report. Submitted to Trident
8. **Yilmaz L.**, (2003). “Exploratory Conflict Multisimulation for Campaign Level Adversarial Behavior Analysis,” White paper submitted to Trident Systems Incorporated (TSI).
9. **Yilmaz L.** (2003). “Integration of Design and Run-Time Assurance Strategies with Contract Violation Detectors,” White paper submitted to TSI.
10. **Yilmaz L.** and Tankersley L.(2001). “Processor Technology Insertion Recertification, Trident Systems Inc. Technical Report-S&S Division, April 2001 (Submitted to US Naval Air Warfare).
11. **Yilmaz L.** and Tankersley L. (2000). “A Model-Based Interaction Analysis and Recertification Environment for Dependable Upgradability and Interoperability Engineering, Trident Systems Inc. Technical Report-S&S Division, (Submitted to US Naval Surface Warfare Center).
12. **Yilmaz L.**, Tankersley L. and Green T.(1999). “ASSET: HLA Advanced Synthetic System Environment Interoperability Analysis Tool, Technical Report-S&S Division, April 2000.
13. **Yilmaz L.**, Tankersley L., and Breslin B. (1999). “Alternate Time Management Mechanisms for Use in Defense Modeling and Simulation Office High Level Architecture Federate Simulation,” Trident Systems Inc. Technical Report-S&S Division, June 99 (Submitted to US Navy).
14. **Yilmaz L.** (1998). “A Taxonomical Review of Object-Oriented Simulation Model Verification and Validation Techniques,” Technical Report TR-98-6. Department of Computer Science, Virginia Polytechnic Institute and State University, Blacksburg, Va. (March).

SELECTED
INVITED TALKS

1. Yilmaz L. (2009). "Using Agent-Directed Simulation to Accelerate Unraveling the Complexities of Adaptive Biological Systems," American Association of Pharmaceutical Scientists (AAPS) Annual Meeting. November 8-12, 2009, Los Angeles, CA.
2. Yilmaz L. (2007). (Invited member and session chair for the "Determining a Validation Methodology for Agent-Based Simulation Workshop" at Northrop Grumman, Fair Lakes, 12900 Federal Systems Park Drive, Fairfax, Virginia, 22033. (May 1-2, 2007).
3. Yilmaz L. (2005). "Agent-Directed Simulation: A Framework for Expanding Our Horizons in Teaching the Use of Agents in M&S" at Virginia Modeling, Analysis, and Simulation Center (VMASC). June 20-24, 2005.
<http://www.vmasc.odu.edu/speakers/lyilmaz.php>
4. Yilmaz L., David Britton, and John Reber (2004). "OneSAF Model Marketplaces on the Semantic Grid," presented on August 3, 2004 to Defense Modeling and Simulation Office (DMSO).
5. Yilmaz L. (2004). "MultiSimulation with Contingency Models: Agent-Supported Simulation Brokering and Updating on the Semantic GRID," presented on August 3, 2004 to DMSO.
6. Yilmaz L. (2004). Invited to participate in the Johns Hopkins University Applied Physics Laboratory (JHU/APL) two-day workshop on Model Composability for the Defense Modeling and Simulation Office (DMSO) - "Engineering Composability into Simulation Models through the Separation of Concept, Content, and Context", September 28-29, 2004.
7. Yilmaz L. (2003). "Toward a DEVS-Based Modeling Theory for Predictable Complex System Designs," NSF Workshop on Modeling and Simulation for Design of Large Software-Intensive Systems: Challenges and New Research Directions (DLS03) [Dec 3-4, 2003]

SERVICE

1. University and Departmental Service

1. University Curriculum Committee (2009-2012, 2012-2015) - College of Engineering Representative.
2. Judge - Auburn University Graduate Research Competition (2009).
3. College of Engineering Curriculum Committee (2009 - present).
4. Member of CSSE Curriculum Committee (2009 - present).
5. CSSE Peer Evaluation Committee (2010 - present).
6. CSSE Seminar Series Committee (2010-present).
7. E-Day Committee (2003-2010).
8. Tenure & Promotion Committee (2008-present).
9. 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-present)

2. **Editorial Board Member** of the International Journal of Simulation and Process Modeling (2004-present).
3. **Associate Editor** of the Simulation & Gaming Journal (2008-present).
4. **Associate Editor** of the International Journal of Engineering Education (2006-present).
5. **Editorial Board Member** of M&S Magazine (2009-present).
6. **Editorial Board Member** of Modeling & Simulation Newsletter (2009-present).
7. **Member of the Board-of-Directors** of the Society for Modeling and Simulation International (2006-2008, 2008-2011, 2011-2013).
8. **Strategic Planning Committee** of the Society for Modeling and Simulation International (2011 - present).
9. **Vice President for Publications** of the Society for Modeling and Simulation International (2012 - 2015).
10. **Advisory Board Member** of the International Modeling & Simulation Body of Knowledge Initiative.
11. **Secretary** of the Society for Modeling and Simulation International (SCS) (2004-2006).
12. **Member of the Strategic Planning Committee** of the Society for Modeling and Simulation International (SCS) (2011-present).
13. **Advisor to Workforce Development Committee** of the Alabama Modeling and Simulation Council (<http://www.amsc.to>). (2006- present).
14. **General co-Chair** of the Agent-Directed Simulation Symposium of the 2012 Spring Simulation Multiconference, Orlando, Florida, March 26-29, 2012.
15. **Track Chair, Modeling Methodology**, 2011 IEEE/ACM Winter Simulation Conference, Phoenix, Arizona, December 11-14, 2011. <http://www.wintersim.org>
16. **General co-Chair** of the Agent-Directed Simulation Symposium of the 2011 Spring Simulation Multiconference, Boston, Massachusetts, April 2011.
17. **Invited Organizer and Session Chair** of the Agent-Directed Simulation sessions under the Methodology track at the 2010 IEEE/ACM Winter Simulation Conference, Baltimore, MD, December 2010.
18. **General co-Chair** of the Agent-Directed Simulation Symposium of the 2010 Spring Simulation Multiconference, Orlando, Florida, April 2010.
19. **General Chair** (with O. Balci, X. Hu, and M. Sietrhuis), 2009 International Summer Computer Simulation Conference, July 13-16, 2009. Istanbul, Turkey.
20. **Program Chair** (with Gabriel Wainer, Andreas Tolk, and Hamid Vakilzadian), 2007 International Summer Computer Simulation Conference, July 15-18, 2007, San Diego, CA, USA.
21. **Guest Editor** (with Tuncer Oren), Agent-Directed Simulation, Special Issue of the Transactions of the Society for Computer Simulation International. Vol. 81, No. 7 (July 2005).

22. **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.
23. **Guest Editor** (with Y. Zhang, T. Ören, M Sierhuis, G. Madey) Special Issue on Agent-Directed Simulation, *International Journal of Agent Technologies and Systems*. vol. 2, no. 3, July-September 2010.
24. **Guest Editor** (with Y. Zhang, T. Ören, 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.
25. **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).
26. **Organizer and Chair** (with J. Smith) of the Panel on What Makes Good Research in Modeling and Simulation. ACM/IEEE Winter Simulation Conference. Miami, FL. December 7-10, 2008.
27. **Program Chair** (with Tuncer Ören, Gregory Madey, Maarten Sierhuis, and Yu Zhang), Agent-Directed Simulation Symposium (2009) of the Spring Simulation Multiconference (SpringSim'10).
28. **Program Chair** (with Tuncer Ören, Gregory Madey, and Maarten Sierhuis), Agent-Directed Simulation Symposium (2009) of the Spring Simulation Multiconference (SpringSim'09).
29. **Program Chair** (with Tuncer Ören, Gregory Madey, and Maarten Sierhuis), Agent-Directed Simulation Symposium (2008) of the Spring Simulation Multiconference (SpringSim'08).
30. **Program Chair** (with Tuncer Ören, Gregory Madey, and Maarten Sierhuis), Agent-Directed Simulation Symposium (2007) of the Spring Simulation Multiconference (SpringSim'07).
31. **Program Chair** (with Tuncer Ören, Gregory Madey), Agent-Directed Simulation Symposium (2006) of the Spring Simulation Multiconference (SpringSim'06), Huntsville, AL, USA. April 2006.
32. **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.
33. **Publications Chair**, The 46th ACM Southeast Conference, March 28-29, 2008. Auburn, AL.
34. **Track Chair and Organizer** (with Tuncer Oren), Agent Directed Simulation Track of Sessions in 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010 Summer Computer Simulation Conference.
35. **Co-organizer** of the I/ITSEC 2005 SCS Panel on Artificial Intelligence, Intelligent Agents and Game Technology.
36. **Member of the Events Committee**, Alabama Modeling and Simulation Council. (2004-2005).

37. **Associate Chair** (2003-2004) of the Theory and Methodology Council of the Society for Modeling and Simulation International(SCS).
38. **SCS representative (liaison)** to I/ITSEC Conference Series. (2006)
39. **Organizer and Track Co-Chair** (with Bernard Espinasse), Multiagent Modeling and Simulation Track of Sessions in Conceptual Modeling and Simulation Conference - CMS 2007, Part of the International Mediterranean Modeling Multiconference.
40. **Organizer and Track Co-Chair** (with Tuncer Ören), Human Behavior and Performance Simulation Track of Sessions in Conceptual Modeling and Simulation Conference - CMS 2005 Marseilles, France, October 20-22, 2005 Part of the International Mediterranean Modeling Multiconference.
41. **Organizer and Track Co-Chair** (with Tuncer Ören), Agent-Directed Simulation. Track of Sessions in 20th European Modeling and Simulation Symposium, September 17-19, 2008, Briatico, Italy.
42. **Selected List - Invited Member of the International Scientific and Technical Program Committees** of
 - SOTICS 2011, The First International Conference on Social Eco-Informatics, July 17-22, 2011 - Bournemouth, UK.
 - 2011 International Summer Computer Simulation Conference, The Hague, Netherlands, June 27-30, 2011.
 - 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), Crete, Greece, June 28-30, 2011.
 - Symposium On Theory of Modeling and Simulation DEVS Integrative M&S Symposium (DEVS'11), Boston, Massachusetts, April, 2011.
 - Second IEEE International Conference on Social Computing (SocialCom2010) Minneapolis, USA on August 20-22, 2010.
 - 2010 International Summer Computer Simulation Conference, Ottawa, Canada, July 2011.
 - The 22nd European Modeling & Simulation Symposium. October 13-15, 2010 FES, Morocco
 - IADIS International e-Society Conference. 2010 March 18-21, 2010 - Porto, Portugal
 - 21st European Modeling and Simulation Symposium, Puerto de la Cruz (Tenerife - Canary Islands) (2009)
 - IASTED International Conference on Modelling, Simulation and Identification (MSI 2009), Beijing, China
 - 2009 DEVS and High Performance Computing Symposium, Spring Simulation Multiconference, San Diego, CA.

- Twelfth SDPS Transdisciplinary Conference on Integrated Systems, Design, and Process Science
- 3rd International ICST Conference on Simulation Tools and Techniques (SIMU-Tools 2010)
- IASTED International Conference on Modelling 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).
- 21st European Modeling and Simulation Symposium, Puerto de la Cruz (Tenerife - Canary Islands) (2009)
- The 13th World Multi-Conference on Systemics, Cybernetics and Informatics: WMSCI 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 Modelling, Simulation and Identification (MSI 2009), Beijing, China
- DEVS and High Performance Computing Symposium, Spring Simulation Multi-conference, 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: WMSCI 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), WMSCI 2008.
- 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 First International Workshop on Pattern Languages: Addressing Challenges (PLAC 2007) (in conjunction with OOPSLA 2007), Montreal, Canada, October 21-22, 2007.
- 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 Marseilles, France, October 20-22, 2005 Part of the International Mediterranean Modeling Multiconference.
 - 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 Modelling, 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.
43. **Panel member.** "Education and Training for the M&S Profession" at the International Conference on Simulation in Education (ICSiE) to be held in New Orleans, January 23-27, 2005 as part of the Western Simulation Multiconference (WMC).
44. **Co-Chair** (with Dale Pace) and Panelist. SCSC'03 VV&A Process Improvement, Montreal, Canada, July 2003.
45. **Exhibits Chair**, Advanced Simulation Technologies Conference (ASTC'04), Arlington, VA, April 2004.
46. **Reviewer** for the following **funding agencies** and **journals**:
- National Science Foundation (NSF) - Reviewer and Panelist
 - The Division Physical Sciences of the Netherlands Organisation for Scientific Research - 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