

Curriculum Vitae

John A. Miller

Department of Computer Science
415 Graduate Studies Research Center
The University of Georgia
Athens, Georgia 30602-7404
(706) 542-3440 (tel)
(706) 542-2966 (fax)
jam@cs.uga.edu (e-mail)
<http://www.cs.uga.edu/~jam>

1 Academic History:

1.1 Highest Degree, the Institution, the Date:

<i>Degree</i>	<i>Department</i>	<i>Institution</i>	<i>Date</i>
Ph.D.	Information and Computer Science Industrial and Systems Engineering	Georgia Institute of Technology (minor)	1986
M.S.	Information and Computer Science	Georgia Institute of Technology	1982
B.S.	Applied Mathematics	Northwestern University	1980

1.2 List of Academic Positions:

<i>Position</i>	<i>Department</i>	<i>Institution</i>	<i>Dates</i>
Associate Head	Computer Science	University of Georgia	2013 - present
Professor	Computer Science	University of Georgia	2000 - present
Graduate Coordinator	Computer Science	University of Georgia	1995 - 2003
Associate Professor	Computer Science	University of Georgia	1993 - 2000
Assistant Professor	Computer Science	University of Georgia	1986 - 1993
Graduate Teaching Assist.	Info. & Comp. Sc.	Georgia Tech	1985 - 1986
Graduate Research Assist.	Info. & Comp. Sc.	Georgia Tech	1980 - 1984

1.3 Other Professional Employment:

<i>Position</i>	<i>Department</i>	<i>Institution</i>	<i>Dates</i>
Programmer (Co-op)	Plasma Physics Laboratory	Princeton University	1977 - 1979

2 Research Interests:

2.1 General Interests:

(i) Modeling & Simulation, (ii) Web Services/Workflow, (iii) Database Systems, (iv) Big Data Analytics and (v) Bioinformatics.

2.2 Research Projects/Areas:

- **Big Data Analytics** (with Lakshmi Ramaswamy). Since the early 2010's, the SCALATION project has been under development. It serves a testbed for exploring a modeling continuum that includes Analytics, Simulation and Optimization. The research explores parallel and distributed algorithms, development of easy to use frameworks, analytics databases, and ontology-directed analytics for the purpose of enhancing Big Data Analytics. In the area of graph analytics, pattern matching in massive data graphs is explored using new types of graph simulation (e.g., tight simulation) as well as efficient pruning techniques for subgraph isomorphism. In the area of predictive analytics, parallel algorithms for regression and Bayesian networks are being developed.
- **Ontologies for Modeling and Simulation** (with Paul A. Fishwick). Since the mid 2000's, the Discrete-event Modeling Ontology (DEMO) has been under development. A large amount of data and knowledge about systems under study are becoming available in the Semantic Web, especially in ontologies. DEMO serves as an intermediary between domain ontologies and executable simulation models and utilizes techniques for mapping one ontology to another. Forward engineering that maps DEMO instances to executable models is relatively straightforward. In addition, reverse engineering of executable models to instances in an ontology has also been pursued by other researchers. Mapping a domain ontology to a modeling ontology like DEMO is more of a challenge. Ontology alignment techniques are not sufficient, rather a form of analogical mapping is needed. DEMOFORGE is a tool that assists a human modeler to make these mappings using structural analogs, e.g., biochemical pathways stored in ontologies and Petri net-based simulation models have similar structures.
- **Semantic Web Services** (with Amit P. Sheth). Since the early 2000's, the METEOR-S project has been under development. The idea behind this project was to make it easy for developers to add semantic annotations to their Web services. Although the Web Service Description Language (WSDL) is helpful, discovery, composition and interoperability can be substantially improved by adding semantics. The project involved the development and evaluation of tools for annotating (RADIANT), discovering (LUMINA) and composing (METEOR-S Composer, Service Suggestion Engine) Semantic Web Services. In addition, this project led to a joint proposal between the University of Georgia and IBM Thomas Watson Research Center called WSDL-S. This proposal served as the basis for a W3C standard, Semantic Annotations for WSDL and XML Schema (SAWSDL). Drs. Miller and Sheth were members of W3C SAWSDL Working Group.
- **Web-Based Simulation Environments** (with Andrew F. Seila). Since the mid 1990's, the JSIM Web-based simulation environment, implemented in Java and runnable locally as an application and over the Web as an applet, has been under development. This work built upon work done starting in the late 1980's which involved the development of algorithms for model instantiation, specification of criteria for the adequacy of query responses, and design and implementation of prototypes of a *Query Driven Simulation* system/environment which transparently integrate database management with model management. A prototype using the SIMODULA simulation language was built on top of an extended relational database system, OBJECTR.
- **Workflow Management and Modeling** (with Amit P. Sheth and Krys J. Kochut). Since the mid 1990's, intensive funded research has been carried out to develop advanced workflow management systems.

This work involved the design and prototype implementation of Workflow Management Systems (WfMSs) as well as issues involved in the modeling of workflows. Two large-scale experimental WfMS were developed: (i) a Web-based system called WEBWORK and (ii) a reliable distributed implementation called ORBWORK. WfMSs coordinate, control, monitor workflows consisting of automated/semi-automated tasks and the information flowing between them. The project addressed several open issues: transactional workflows, interoperability via CORBA and/or Java, familiar easy-to-use interfaces (Web browsers), multiple WfMS architectures, easy-to-use graphical design tools, application to the health-care domain, and multi-paradigm workflows.

- **Object Database Systems** (with Walter D. Potter and Krys J. Kochut). Since the late 1980's work has been done to design and implement the ACTIVE-KDL database system. Each of its sub-languages, Data Modeling Language, Query Language and Database Programming Language, follow both the functional and object-oriented paradigms. The prototype implementation was done in C++. Several important design issues were analyzed (*e.g.*, properties of inheritance lattices, advantages of declarative languages, clashes between functional and object-oriented paradigms, and properties of modeling primitives and language operators/constructs). Object-Relational Database technology was applied to genome research. Graphical tools for querying XML documents stored in Object-Oriented Databases were explored. Related work involved the design and prototype implementation of a repository management system tailored to the needs of the Westinghouse Savannah River Company (WSRC). This effort utilized both the Oracle RDBMS and Oracle CASE Tools.
- **Database Transaction Management/Time Warp Protocol** (with Nancy D. Griffeth). Since the mid 1980's, work has been done analyzing the performance of database protocols for recovery and concurrency control. This work lead to the development of new database transaction management protocols (*e.g.*, Variants of Time Warp and Hybrids of Time Warp with Multiversion Timestamp Ordering). Time Warp is a popular protocol used in Parallel and Distributed Simulation, while Multiversion Timestamp Ordering is a well known protocol for Database Transaction Management. Simulation and analysis of these new protocols as well as traditional protocols enforcing serializability and/or recoverability were performed.

3 Instruction:

3.1 Courses Proposed and Approved

<i>Course Proposed</i>	<i>Title</i>	<i>Date</i>	<i>System</i>
CS 837	Advanced Database Systems	1989	Quarter
CSCI 1360	Foundations for Informatics and Data Analytics	2015	Semester
CSCI 2360	Data Science I	2015	Semester
CSCI 2720	Data Structures	1998	Semester
CSCI 4210 / 6210	Simulation and Modeling	1998	Semester
CSCI 4360 / 6360	Data Science II	2015	Semester
CSCI 4370 / 6370	Database Management	1998	Semester
CSCI 7000	Master's Research	1998	Semester
CSCI 7300	Master's Thesis	1998	Semester
CSCI 7007	Internship in Computer Science	1998	Semester
CSCI 7100	Technical Report	1998	Semester
CSCI 8370	Advanced Database Systems	1998	Semester
CSCI 8990	Research Seminar	1998	Semester
CSCI 9000	Doctoral Research	1998	Semester
CSCI 9300	Doctoral Dissertation	1998	Semester

Table 1: Courses Proposed

3.2 Courses Taught under the Quarter System (before Fall 1998)

CS 203	Programming Project Design	w94, s94, s95, s96
CS 303	Data Structures	u88, s90, s94, f94, w95
CS 371	Introductory Computer Lab	w91, w92, s92
CS 405 / 605	Software Engineering	f91
CS 421 / 621	Simulation	w87, w88, f88, f89, f90, s98
CS 424 / 624	Performance Evaluation	s88, s89, s90, s91
CS 437 / 637	Database Management I w95, w97, w98, u98	f86, s87, f87, w89, u89, w90, w91, w93
CS 438 / 638	Database Management II	w87, w88, s89, s91, s93, s97
CS 472 / 672	Computer System Architecture	u87, f87
CS 473 / 673	Computer Operating Systems	f88, w92, w96
CS 476 / 676	Data Communications & Networks	s93
CS 495 / 695	Directed Study	numerous offerings
CS 504 / 704	Intro. to UNIX & C Programming	u94
CS 700M	Master's Research	numerous offerings
CS 710T	Technical Report	numerous offerings
CS 730M	Master's Thesis	numerous offerings
CS 805	Knowledge Based Systems	f92
CS 837	Advanced Database Systems	f89, f91, w94, s96, s98
CS 895	Graduate Seminar	numerous offerings
ICS 2301	File Processing (Georgia Tech)	u85, w86

Table 2: Quarter Courses Taught (w-winter, s-spring, u-summer, f-fall)

3.3 Courses Taught under the Semester System (starting Fall 1998)

<i>Course Taught</i>	<i>Title</i>	<i>Offerings</i>
CSCI 4050 / 6050	Software Engineering	s05, f06
CSCI 4210 / 6210	Simulation and Modeling	s02, s03, f05, f07, f09, f11, s14
CSCI 4370 / 6370	Database Management f03, u04, f04, u05, f06, u07, u08, f08 s15, u15, f15, s16, u16, f16	s99, s00, s01, u01, f01, u02, f02, u03 u09, u10, f10, u11, u12, s13, u13, u14
CSCI 4720	Computer Architecture & Org.	u00
CSCI 4730 / 6730	Operating Systems	f12
CSCI 4950 / 6950	Directed Study	numerous offerings
CSCI 7000	Master's Research	numerous offerings
CSCI 7007	Internship in Computer Science	numerous offerings
CSCI 7100	Technical Report	numerous offerings
CSCI 7300	Master's Thesis	numerous offerings
CSCI 8370	Advanced Database Systems s07, s08, s09, s10, s11, s12, f12, f13	f98, f99, f00, f01, s03, s04, s05, s06 f14, s17
CSCI 8990	Research Seminar	u99, u00, u01, u02, s03, u03
CSCI 9000	Doctoral Research	numerous offerings
CSCI 9300	Doctoral Dissertation	numerous offerings

Table 3: Semester Courses Taught (s-spring, u-summer, f-fall)

4 Publications:

h-index = 48 \Rightarrow \geq 48 papers with \geq 48 Google Scholar citations (see <http://scholar.google.com/citations?user=K7j2Uk8AAAAJ&hl=en> for citation counts).

4.1 Books Edited

1. John A. Miller, Stephan Reiff-Marganiec and Xiaofei Xu, Guest Editors, *IEEE Transactions on Services Computing (TSC)*, Special Issue: Recent Advances in Web Services Research, Vol. 11, No. . (2018) pp. 1-. IEEE Computer Society Press, Los Alamitos, CA. (to appear)
2. John A. Miller, Hong Zhu and Jia Zhang, Guest Editors, *IEEE Transactions on Services Computing (TSC)*, Special Issue: Advances in Web Services Research, Vol. 10, No. 1 (2017) pp. 1-154. IEEE Computer Society Press, Los Alamitos, CA.
3. Jia Zhang, John A. Miller and Xiaofei Xu, Editors, Proceedings of the 13th IEEE International Conference on Services Computing (SCC'16), San Francisco, California (June-July 2016) p. 1-890. IEEE Computer Society Press, Los Alamitos, CA.
4. John A. Miller and Hong Zhu, Editors, *Proceedings of the 22nd IEEE International Conference on Web Services (ICWS'15)*, New York, New York (June-July 2015) pp. 1-778. IEEE Computer Society Press, Los Alamitos, CA.
5. Andreas Tolk, Saikou Y. Diallo, Ilya O. Ryzhov, Levent Yilmaz, Stephen J. Buckley and John A. Miller, Editors, *Proceedings of the 46th ACM/IEEE Winter Simulation Conference (WSC'14)*, Savannah, Georgia (December 2014) pp. 1-4272. IEEE Press, Piscataway, NJ.
6. Andreas Tolk and John A. Miller, Guest Editors, *Journal of Simulation (JOS)*, Special Issue: Enhancing Simulation Composability and Interoperability using Conceptual/Semantic/Ontological Models, Vol. 5, No. 3 (August 2011) pp. 133-245. Palgrave Macmillan Publishers, Hampshire, UK.
7. John A. Miller and Jeffery W. Smith, Editors, *Proceedings of the 39th Annual ACM Southeast Conference (ACM-SE'01)*, Athens, Georgia (March 2001) pp. 1-316. OMNIPRESS, Madison, WI.
8. John A. Miller, Guest Editor, *IEEE Potentials (IEEE-SMT)*: Special Issue on Simulating Real-World Goals on the Web, Vol. 19, No. 1 (February/March 2000) pp. 1-48. IEEE Press, Piscataway, NJ.
9. John A. Miller, Guest Editor, *International Journal in Computer Simulation (IJCS)*, Special Issue on Object-Oriented Simulation, Vol. 5, No. 4 (October 1995) pp. 351-453. JAI Press, Inc. and Ablex Publishing Corp.
10. John A. Miller, Editor, *Proceedings of the 26th Annual Simulation Symposium (ANSS'93)*, Arlington, Virginia (April 1993) pp. 1-347. IEEE Computer Society Press, Los Alamitos, CA.

4.2 Chapters in Books

1. William S. York, Krys J. Kochut and John A. Miller, "Integration of Glycomics Knowledge and Data," (Chapter 8) in *Handbook of Glycomics*, R.D. Cummings and J.M. Pierce, Editors (September 2009) pp. 179-195. Elsevier: Academic Press, San Diego, CA.
2. Osama Al-Haj Hassan, Lakshmith Ramaswamy, John A. Miller, Khaled Rasheed and E. Rodney Canfield, "Replication in Overlay Networks: A Multi-objective Optimization Approach," in *Collaborative Computing: Networking, Applications and Worksharing*, Revised Selected Paper from 4th International Conference, CollaborativeCom 2008, Orlando, FL, November 13-16, 2008, Lecture Notes of the Institute

- for Computer Sciences, Social Informatics and Telecommunications Engineering, Vol. 10, Part 3, Elisa Bertino and James B.D. Joshi, Editors (July 2009) pp. 512-528. Springer, Berlin Heidelberg, Germany.
3. Karthik Gomadam, Ajith Ranabahu, Zixin Wu, Amit P. Sheth and John A. Miller, "A Declarative Approach using SAWSDL and Semantic Templates Towards Process Mediation," in *Semantic Web Services Challenge: Results from the First Year*, Series: Semantic Web and Beyond, Vol. 8, C. Petrie, T. Margaria, H. Lausen and M. Zaremba, Editors (January 2009) pp. 101-118. Springer-Verlag, Berlin-Heidelberg, Germany.
 4. Jorge Cardoso, John A. Miller and Savitha Emaini, "Web Services Discovery Utilizing Semantically Annotated WSDL," in *Reasoning Web 2008*, Lecture Notes in Computer Science (LNCS), Vol. 5224, Baroglio et al., Editors (September 2008) pp. 240-268. Springer-Verlag, Berlin-Heidelberg, Germany.
 5. Richard S. Patterson, John A. Miller, Jorge Cardoso and Mike Davis, "Bringing Semantic Security to Semantic Web Services," in *The Semantic Web: Real-World Applications from Industry*, Series: Semantic Web and Beyond, Vol. 6, J. Cardoso, M. Hepp, M. Lytras, Editors (January 2008) pp. 273-306. Springer Verlag, Berlin-Heidelberg, Germany.
 6. John A. Miller, Congzhou He and Julia L. Couto, "Impact of the Semantic Web on Modeling and Simulation," in *Handbook of Dynamic System Modeling*, P.A. Fishwick, Editor (May 2007) pp. 3-1 - 3-22. Chapman & Hall/CRC Press, Boca Raton, FL.
 7. Cary Pennington, Jorge Cardoso, John A. Miller, Richard S. Patterson and Ivan Vasquez, "Introduction to Web Services," in *Semantic Web Services: Theory, Tools and Applications*, J. Cardoso, Editor (March 2007) pp. 134-154. IGI Global/Idea Group Publishing, Hershey, PA.
 8. Ke Li, Kunal Verma, Ranjit Mulye, Reiman Rabbani, John A. Miller and Amit P. Sheth, "Designing Semantic Web Processes: The WSDL-S Approach," in *Semantic Web Processes and Their Applications*, J. Cardoso and A.P. Sheth, Editors (December 2006) pp. 161-193. Springer, New York, NY.
 9. Jorge Cardoso, John A. Miller, Jianwen Su and Jeff Pollock, "Academic and Industrial Research: Do Their Approaches Differ in Adding Semantics to Web Services?" in *Semantic Web Services and Web Process Composition: 1st International Workshop*, Revised Selected Papers, Lecture Notes in Computer Science (LNCS), Vol. 3387, J. Cardoso and A. Sheth, Editors (January 2005) pp. 14-21. Springer Verlag, Berlin-Heidelberg, Germany.
 10. Preeda Rajasekaran, John A. Miller, Kunal Verma and Amit Sheth, "Enhancing Web Services Description and Discovery to Facilitate Composition," in *Semantic Web Services and Web Process Composition: 1st International Workshop*, Revised Selected Papers, Lecture Notes in Computer Science (LNCS), Vol. 3387, J. Cardoso and A. Sheth, Editors (January 2005) pp. 55-68. Springer Verlag, Berlin-Heidelberg, Germany.
 11. Jonathan Arnold, Heinz-Bernd Schuttler, David A. Logan, Dorjsuren Battogtokh, James Griffith, I. Budak Arpinar, Suchi M. Bhandarkar, Sumana Datta, Krys J. Kochut, Eileen T. Kraemer, John A. Miller, Amit P. Sheth, George L. Strobel, Thiab R. Taha, Boanerges Aleman-Meza, Jereme Doss, LaTrece Harris and Abassi Nyong, "Metabolomics," in *Handbook of Industrial Mycology*, Vol. 22, Zhiqiang An, Editor (August 2004) pp. 597-633. Marcel Dekker, Inc., New York, NY.
 12. Kaarthik Sivashanmugam, Amit P. Sheth, John A. Miller, Kunal Verma, Rohit Aggarwal and Preeda Rajasekaran, "Metadata and Semantics for Web Services and Processes," in *Datenbanken und Informationssysteme*, (Databases and Information Systems) Festschrift zum 60. Geburtstag von Gunter Schlageter, W. Benn, P. Dadam, S. Kirn and R. Unland, Editors (October 2003) pp. 245-271. Praktische Informatik I, Hagen, Germany.

13. R. David Hall, John A. Miller, Jonathan Arnold, Krys J. Kochut, Amit P. Sheth and Michael J. Weise, "Using Workflow to Build an Information Management System for a Geographically Distributed Genome Sequencing Initiative," in *Genomics of Plants and Fungi*, R.A. Prade and H.J. Bohnert, Editors, Vol. 18 (April 2003) pp. 359-371. Marcel Dekker, Inc. New York, NY.
14. Andrew F. Seila, John A. Miller and Senthilnand Chandrasekaran, "Java," in *Encyclopedia of Information Systems*, Vol. 2, H. Hossein, Editor (2003) pp. 693-714. Academic Press, San Diego, CA.
15. John A. Miller, Orville R. Weyrich, Jr., Walter D. Potter and Vance C. Kessler, "The SIMODULA/OBJECTR Query Driven Simulation Support Environment," in *Simulation Systems*, G.W. Zobrist, J.V. Leonard, Editors (2000) pp. 1-43. Gordon-Breach Science Publishers.
16. John A. Miller, Amit P. Sheth and Krys J. Kochut, "Perspectives in Modeling: Simulation, Database and Workflow," in *Conceptual Modeling: Current Issues and Future Directions: Selected Papers from the Workshop on Conceptual Modeling*, Lecture Notes in Computer Science (LNCS), Vol. 1565, P.P. Chen, J. Akoka, H. Kangassalo, B. Thalheim, Editors (April 1999) pp. 154-167. Springer Verlag, Berlin-Heidelberg.
17. John A. Miller, Walter D. Potter, Krys J. Kochut and Deepa Ramesh, "Object-Oriented Simulation Languages and Environments: A Four-Level Architecture," in *Object-Oriented Simulation: Reusability, Adaptability, Maintainability*, G.W. Zobrist, J.V. Leonard, Editors (September 1996) pp. 53-88. Wiley-IEEE Press.
18. Walter D. Potter, Krys J. Kochut, John A. Miller, Veena P. Gandham and Ramakrishna V. Polamraju, "The Evolution of the Knowledge/Data Model," in *Advances in Databases and Artificial Intelligence*, Vol. 1: Intelligent Database Technology: Approaches and Applications, F. Petry, L.M.L. Delcambre, Editors (1995) pp. 263-310. JAI Press, Inc. and Ablex Publishing Corp.

4.3 Journal Articles (JA)

1. John A. Miller, Hong Zhu and Jia Zhang, "Guest Editorial: Advances in Web Services Research," *IEEE Transactions on Services Computing (TSC)*, Vol. 10, No. 1 (January-February 2017) pp. 5-8.
2. Rene Ranzinger, Krys J. Kochut, John A. Miller, Matthew Eavenson, Thomas Lutteke and William S. York, "GLYDE-II: The GLYcan Data Exchange Format," *Perspectives in Science (PISC)*, Vol./No. 392 (j.pisc.2016.05.013) (October 2016) pp. 1-21. Elsevier, The Netherlands.
3. Mustafa V. Nural, Michael E. Cotterell, Hao Peng, Rui Xie, Ping Ma and John A. Miller, "Automated Predictive Big Data Analytics Using Ontology Based Semantics," *International Journal of Big Data (IJBD)*, Vol. 2, No. 2 (October 2015) pp. 43-56. Services Society, New York, NY.
4. John A. Miller, Lakshmish Ramaswamy, Krys J. Kochut and Arash J.Z. Fard, "Directions for Big Data Graph Analytics Research," *International Journal of Big Data (IJBD)*, Vol. 2, No. 1 (September 2015) pp. 15-27. Services Society, New York, NY.
5. Khalifeh Al Jadda, Melody P. Poterfield, Robert Bridger, Christian Heiss, Michael Tiemeyer, Lance Wells, John A. Miller, William S. York and Rene Ranzinger, "EUROCarbDB (CCRC): A EUROCarbDB Node for Storing Glycomics Standard Data," *Oxford Journal on Bioinformatics (BIOINF)*, Vol. 31, No. 2 (Online Version: September 2014; January 2015) pp 242-245. Oxford University Press, Oxford, UK.
6. Matthew Eavenson, Krys J. Kochut, John A. Miller, Rene Ranzinger, Mike Tiemeyer, Kazuhiro Aoki and William S. York., "Qrator: A Web-Based Curation Tool for Glycan Structures," *Oxford Journal on Glycobiology (GLYCOBIO)*, Vol. 25, No. 1 (Online Version: August 2014; January 2015) pp 66-73. Oxford University Press, Oxford, UK.

7. Arash J.Z. Fard, M. Usman Nisar, John A. Miller, Lakshmish Ramaswamy, "Distributed and Scalable Graph Pattern Matching: Models and Algorithms," *International Journal of Big Data (IJBD)*, Vol. 1, No. 1 (January-March 2014) pp. 1-14. Services Society, New York, NY.
8. Gregory A. Silver, John A. Miller, Maria Hybinette, Gregory Baramidze and William S. York, "DeMO: An Ontology for Discrete-event Modeling and Simulation," *SIMULATION: Transactions of the Society for Modeling and Simulation International (SIM)*, Vol. 87, No. 9 (Online Version: December 2010; September 2011) pp. 747-773. Sage Publications, Thousand Oaks, CA.
9. Andreas Tolk and John A. Miller, "Editorial: Enhancing Simulation Composability and Interoperability using Conceptual/Semantic/Ontological Models, it Journal of Simulation (JOS), Vol. 5, No. 3 (August 2011) pp. 133-134. Palgrave Macmillan Publishers, Hampshire, UK.
10. Osama Al-Haj Hassan, Lakshmish Ramaswamy and John A. Miller, "The MACE Approach for Caching Mashups," *International Journal of Web Services Research (JWSR)*, Vol. 7, No. 4 (October/December 2010) pp. 64-88. IGI Global/Idea Group Publishing, Hershey, PA.
11. Cristina Aurrecochea, John Brestelli, Brian P. Brunk, Steve Fischer, Bindu Gajria, Xin Gao, Alan Gingle, Greg Grant, Omar S. Harb, Mark Heiges, Frank Innamorato, John Iodice, Jessica C. Kissinger, Eileen T. Kraemer, Wei Li, John A. Miller, Vishal Nayak, Cary Pennington, Deborah F. Pinney, David S. Roos, Chris Ross, Ganesh Srinivasamoorthy, Christian J. Stoeckert, Jr., Ryan Thibodeau, Charles Treatman and Haiming Wang, "EuPathDB: A Portal to Eukaryotic Pathogen Databases," *Nucleic Acids Research (NAR)*, Vol. 38, Database Issue (Online Version; November 2009; January 2010) pp. D415-D419. Oxford Journals, Oxford University Press.
12. Martin Aslett, Cristina Aurrecochea, Matthew Berriman, John Brestelli, Brian P. Brunk, Mark Carington, Steve Fischer, Bindu Gajria, Xin Gao, Malcolm Gardner, Alan Gingle, Greg Grant, Omar S. Harb, Mark Heiges, Christiane Hertz-Fowler, Robin Houston, Frank Innamorato, John Iodice, Jessica C. Kissinger, Eileen Kraemer, Wei Li, Flora Logan, John A. Miller, Peter Myler, Vishal Nayak, Cary Pennington, Deborah F. Pinney, Matthew Rogers, David S. Roos, Chris Ross, Deborah F. Smith, Christian J. Stoeckert Jr., Adrian Tivey, Charles Treatman, Giles Velarde, Haiming Wang, "TriTrypDB: A Functional Genomic Resource for the Trypanosomatidae," *Nucleic Acids Research (NAR)*, Vol. 38, Database Issue (Online Version: October 2009; January 2010) pp. D457-D462. Oxford Journals, Oxford University Press.
13. Zhiming Wang, Xin Gao, Congzhou He, John A. Miller, Jessica C. Kissinger, Mark Heiges, Cristina Aurrecochea, Eileen T. Kraemer and Cary Pennington, "An Evaluation of Multiple Approaches for Federating Biological Data," *Journal of Information Technology Research (JITR)*, Vol. 2, No. 2 (April-June 2009) pp. 42-64. IGI Global/Idea Group Publishing, Hershey, PA.
14. Cristina Aurrecochea, John Brestelli, Brian P. Brunk, Jane M. Carlton, Jennifer Dommer, Steve Fischer, Bindu Gajria, Jerric Gao, Alan Gingle, Greg Grant, Omar S. Harb, Mark Heiges, Frank Innamorato, John Iodice, Jessica C. Kissinger, Eileen T. Kraemer, Wei Li, John A. Miller, Hilary G. Morrison, Vishal Nayak, Cary Pennington, Deborah F. Pinney, David S. Roos, Chris Ross, Christian J. Stoeckert, Jr., Steven Sullivan, Charles Treatmen and Haiming Wang, "GiardiaDB and TrichDB: Integrated Genomic Resources for the Eukaryotic Protist Pathogens Giardia lamblia and Trichomonas vaginalis," *Nucleic Acids Research (NAR)*, Vol. 37, Database Issue (Online Version: September 2008; January 2009) pp. D526-D530. Oxford Journals, Oxford University Press.
15. Cristina Aurrecochea, John Brestelli, Brian P. Brunk, Jennifer Dommer, Steve Fischer, Bindu Gajria, Xin Gao, Alan Gingle, Greg Grant, Omar S. Harb, Mark Heiges, Frank Innamorato, John Iodice, Jessica C. Kissinger Eileen T. Kraemer, Wei Li, John A. Miller, Vishal Nayak, Cary Pennington, Deborah F. Pinney, David S. Roos, Chris Ross, Christian J. Stoeckert, Jr., Charles Treatman and Haiming Wang, "PlasmoDB: A Functional Genomic Database for Malaria Parasites," *Nucleic Acids Research (NAR)*, Vol.

- 37, Database Issue (Online Version: October 2008; January 2009) pp. D539-D543. Oxford Journals, Oxford University Press.
16. Meenakshi Nagarajan, Kunal Verma, Amit P. Sheth and John A. Miller, "Ontology Driven Data Mediation in Web Services," *International Journal of Web Services Research (JWSR)*, Vol. 4, No. 4 (October/December 2007) pp. 104-126. IGI Global/Idea Group Publishing, Hershey, PA.
 17. Cristina Aurrecochea, Mark Heiges, Haiming Wang, Zhiming Wang, Steve Fischer, Philippa Rhodes, John A. Miller, Eileen T. Kraemer, Christian J. Stoeckert, Jr., David S. Roos, and Jessica C. Kissinger, "ApiDB: Integrated Resources for the Apicomplexan Bioinformatics Resource Center," *Nucleic Acids Research (NAR)*, Vol. 35, Database Issue (Online Version: November 2006; January 2007) pp. D427-D430. Oxford Journals, Oxford University Press.
 18. Mark Heiges, Haiming Wang, Edward Robinson, Cristina Aurrecochea, Xin Gao, Nivedita Kaluskar, Philippa Rhodes, Sammy Wang, Congzhou He, Yanqi Su, John A. Miller, Eileen T. Kraemer and Jessica C. Kissinger, "CryptoDB: A Cryptosporidium Bioinformatics Resource Update," *Nucleic Acids Research (NAR)*, Vol. 34, Database Issue (January 2006) pp. D419-D422. Oxford Journals, Oxford University Press.
 19. Swapna Oundhakar, Kunal Verma, Kaarthik Sivashanmugam, Amit P. Sheth and John A. Miller, "Discovery of Web Services in a Multi-Ontology and Federated Registry Environment," *International Journal of Web Services Research (JWSR)*, Vol. 2, No. 3 (July 2005) pp. 8-39. IGI Global/Idea Group Publishing, Hershey, PA.
 20. Kunal Verma, Kaarthik Sivashanmugam, Amit P. Sheth, Abhijit Patil, Swapna Oundhakar and John A. Miller, "METEOR-S WSDI: A Scalable Infrastructure of Registries for Semantic Publication and Discovery of Web Services," *Information Technology and Management (ITM)*, Special Issue on Universal Global Integration, Vol. 6, No. 1 (January 2005) pp. 17-39. Kluwer Academic Publishers.
 21. Kaarthik Sivashanmugam, John A. Miller, Amit P. Sheth and Kunal Verma, "Framework for Semantic Web Process Composition," *International Journal of Electronic Commerce (IJEC)*, Special Issue on Semantic Web Services and Their Role in Enterprise Application Integration and E-Commerce, Vol. 9, No. 2 (Winter 2004-5) pp. 71-106. M.E. Sharpe, Inc.
 22. Jorge Cardoso, Amit P. Sheth, John A. Miller, Jonathan Arnold and Krys J. Kochut, "Modeling Quality of Service for Workflows and Web Service Processes," *Web Semantics: Science, Services and Agents on the World Wide Web (WS)*, Vol. 1, No. 3 (April 2004) pp. 281-308. Elsevier Science.
 23. Sudhanshu Sipani, John A. Miller, Kunal Verma and Boanerges Aleman-Meza, "Designing a High Performance Database Engine for the 'Db4XML' Native XML Database System," *Journal of Systems and Software (JSS)* Vol. 69, No. 1 (January 2004) pp. 87-104. Elsevier Science.
 24. Kemafor Anyanwu, Amit P. Sheth, Jorge Cardoso, John A. Miller and Krys J. Kochut, "Healthcare Enterprise Process Development and Integration," *Journal of Research and Practice in Information Technology (JRPIT)*, Special Issue on Health Knowledge Management, Vol. 35, No. 2 (May 2003) pp. 83-98. Australian Computer Society, Inc.
 25. Senthilanand Chandrasekaran, John A. Miller, Gregory A. Silver, I. Budak Arpinar and Amit P. Sheth, "Performance Analysis and Simulation of Composite Web Services," *Electronic Markets: The International Journal of Electronic Commerce and Business Media (EM)*, Special Issue on Web Services, Ronald Klueber and Heiko Ludwig (Guest Editors) Vol. 13, No. 2 (Spring 2003) pp. 18-30. Taylor and Francis Publishing.
 26. Zheng Xu, Britton Lance, Claudia Vargas, I. Budak Arpinar, Suchi M. Bhandarkar, Eileen T. Kraemer, Krys J. Kochut, John A. Miller, Jeff R. Wagner, Michael J. Weise, John K. Wunderlich, James Stringer,

- George Smilian, Melanie T. Cushion and Jonathan Arnold, "Mapping by Sequencing the Pneumocystis Genome using the ODS3 Tool," *Genetics (GENE)*, Vol. 163, No. 4 (April 2003) pp. 1299-1313. Genetics Society of America.
27. Steffen Staab, Wil van der Aalst, V. Richard Benjamins, Amit P. Sheth, John A. Miller, Christoph Bussler, Alexander Maedche, Dieter Fensel and Dennis Gannon, "Web Services: Been There, Done That?" *IEEE Intelligent Systems (IEEEIS)*, Vol. 18, No. 1 (January/February 2003) pp. 72-85. IEEE Computer Society Press.
 28. Amit P. Sheth and John A. Miller, "Web Services: Technical Evolution yet Practical Revolution?" *IEEE Intelligent Systems (IEEEIS)*, Vol. 18, No. 1 (January/February 2003) pp. 78-80. IEEE Computer Society Press. (section of above article)
 29. Chris Halaschek and John A. Miller, "Native XML Databases Today," *XML Journal (XMLJ)*, Vol. 4, No. 1 (January 2003) pp. 22-27. SYS-CON Publications, Inc.
 30. Krys J. Kochut, Jonathan Arnold, Amit P. Sheth, John A. Miller, Eileen T. Kraemer, I. Budak Arpinar and Jorge Cardoso, "IntelliGEN: A Distributed Workflow System for Discovering Protein-Protein Interactions," *Distributed and Parallel Databases, An International Journal (DAPD)*, Special Issue on Bioinformatics, Vol. 13, No. 1 (January 2003) pp. 43-72. Kluwer Academic Publishers.
 31. Xiang Fang, John A. Miller and Jonathan Arnold, "J3DV: A Java-Based 3D Database Visualization Tool," *Software: Practice and Experience (SPE)*, Vol. 32, No. 5 (April 2002) pp. 443-463. John Wiley & Sons.
 32. Shengli Wu, Amit P. Sheth, John A. Miller and Zongwei Luo, "Authorization and Access Control of Application Data in Workflow Systems," *Journal of Intelligent Information Systems: Integrating Artificial Intelligence and Database Technologies (JIIS)*, Vol. 18, No. 1 (January 2002) pp. 71-94. Kluwer Academic Publishers.
 33. Amit P. Sheth, John A. Miller, Krys J. Kochut and I. Budak Arpinar, "Research in Multi-Organizational Processes and Semantic Information Brokering at the LSDIS Lab," *SIGMOD Record (SIGMOD)*, Vol 30, No. 4 (December 2001) pp. 123-128. ACM.
 34. John A. Miller, Paul A. Fishwick, Simon J.E. Taylor, Perakath Benjamin and Boleslaw Szymanski, "Research and Commercial Opportunities in Web-Based Simulation," *Simulation Practice and Theory (SPT)*, Special Issue on Web-Based Simulation, Vol. 9, No. 1-2 (October 2001) pp. 55-72. Elsevier Science.
 35. John A. Miller, Andrew F. Seila and Xuewei Xiang, "The JSIM Web-Based Simulation Environment," *Future Generation Computer Systems Journal (FGCS)*, Special Issue on Web-Based Modeling and Simulation, Vol. 17, No. 2 (October 2000) pp. 119-133. Elsevier North-Holland.
 36. Zongwei Luo, Amit P. Sheth, Krys J. Kochut and John A. Miller, "Exception Handling in Workflow Systems," *Artificial Intelligence: An International Journal (AI)*, Vol. 13, No. 2 (September/October 2000) pp. 125-147. Elsevier Science.
 37. John A. Miller and Sonali Sheth, "Web-Based Simulation: Querying XML Documents," *IEEE Potentials (IEEE-SMT)*, Vol. 19, No. 1 (February/March 2000) pp. 24-26. IEEE Press.
 38. Krys J. Kochut, Amit P. Sheth, John A. Miller, "Optimizing Workflow," *Component Strategies (CS)*, Vol. 1, No. 9 (March 1999) pp. 45-57. SIGS Publications, Inc.
 39. John A. Miller, Devanand Palaniswami, Amit P. Sheth, Krys J. Kochut and Harvinder Singh, "WebWork: METEOR₂'s Web-Based Workflow Management System," *Journal of Intelligent Information Systems: Integrating Artificial Intelligence and Database Technologies (JIIS)*, Special Issue on Workflow Management Systems, Vol. 10, No. 2 (March/April 1998) pp. 185-215. Kluwer Academic Publishers.

40. John A. Miller, Amit P. Sheth, Krys J. Kochut and Xuzhong Wang, "CORBA-Based Run-Time Architectures for Workflow Management Systems," *Journal of Database Management (JDM)*, Special Issue on Multidatabases, Vol. 7, No. 1 (Winter 1996) pp. 16-27. IGI Global/Idea Group Publishing, Hershey, PA.
41. John A. Miller, "Guest Editorial: Object-Oriented Simulation: Aspects of the Model Development Life Cycle," *International Journal in Computer Simulation (IJCS)*, Special Issue on Object-Oriented Simulation, Vol. 5, No. 4 (October 1995) pp. 351-353. JAI Press, Inc. and Ablex Publishing Corp.
42. Walter D. Potter, John A. Miller and Krys J. Kochut, "A Hyper-Semantic Approach to Intelligent Information Systems," *Integrated Computer-Aided Engineering (ICAE)*, Special Issue on Intelligent Information Systems, Vol. 1, No. 4 (October 1994) pp. 341-357. Wiley-Interscience.
43. John A. Miller and Nancy D. Griffeth, "Performance of Time Warp Protocols for Transaction Management in Object-Oriented Systems," *International Journal in Computer Simulation (IJCS)*, Vol. 4, No. 3 (July 1994) pp. 259-282. JAI Press, Inc. and Ablex Publishing Corp.
44. John A. Miller, Walter D. Potter, Ravi V. Gandham and Chito N. Lapena, "An Evaluation of Local Improvement Operators for Genetic Algorithms," *IEEE Transactions on Systems, Man, and Cybernetics (TSMC)*, Vol. 23, No. 5 (September/October 1993) pp. 1340-1351. IEEE Press.
45. Walter D. Potter, Krys J. Kochut, John A. Miller, Veena P. Gandham and Ramakrishna V. Polamraju, "The Evolution of the Knowledge/Data Model", *International Journal of Expert Systems: Research and Applications (IJES)*, Special Issue on Artificial Intelligence and Databases, Vol. 6, No. 1 (January 1993) pp. 39-81. JAI Press, Inc. and Ablex Publishing Corp.
46. Walter D. Potter, Terry Anthony Byrd, John A. Miller and Krys J. Kochut, "Extending Decision Support Systems: The Integration of Data, Knowledge, and Model Management," *Annals of Operations Research (AOR)*, Special Issue on Model Management, Vol. 38, No. 1 (December 1992) pp. 501-527. Baltzer Science Publishers.
47. John A. Miller, Walter D. Potter and Krys J. Kochut, "Knowledge, Data, and Models: Taking an Objective Orientation on Integrating these Three," *IEEE Potentials (IEEE-SMT)*, Vol. 11, No. 4 (December 1992) pp. 13-17. IEEE Press.
48. Walter D. Potter, John A. Miller, Bruce E. Tonn, Ravi V. Gandham and Chito N. Lapena, "Improving the Reliability of Heuristic Multiple Fault Diagnosis via the EC-Based Genetic Algorithm," *Applied Intelligence: The International Journal of Artificial Intelligence, Neural Networks, and Complex Problem-Solving Technologies (IJAI)*, Vol. 2, No. 1 (July 1992) pp. 5-23. Kluwer Academic Publishers.
49. John A. Miller, Walter D. Potter, Krys J. Kochut, Ali A. Keskin and Ender Ucar, "The Active KDL Object-Oriented Database System and Its Application to Simulation Support," *Journal of Object-Oriented Programming (JOOP)*, Special Issue on Databases, Vol. 4, No. 4 (July/August 1991) pp. 30-45. SIGS Publications, Inc.
50. John A. Miller, Krys J. Kochut, Walter D. Potter, Ender Ucar and Ali A. Keskin, "Query-Driven Simulation Using Active KDL: A Functional Object-Oriented Database System," *International Journal in Computer Simulation (IJCS)*, Vol. 1, No. 1 (January 1991) pp. 1-30. JAI Press, Inc. and Ablex Publishing Corp.
51. Walter D. Potter, John A. Miller and Orville R. Weyrich, Jr., "A Comparison of Methods for Diagnostic Decision Making," *Expert Systems with Applications: An International Journal (ESWA)*, Special Edition on Integration and Competition of AI with Quantitative Methods for Managerial Support, Vol. 1, No. 4 (October 1990) pp. 425-436. Pergamon Press.

52. Nancy D. Griffith and John A. Miller, "Performance Modeling of Database Recovery Protocols," *IEEE Transactions on Software Engineering (TSE)*, Special Issue on Reliability in Distributed Software and Database Systems, Vol. SE-11, No. 6 (June 1985) pp. 564-572. IEEE Computer Society Press.

4.4 Conference Proceedings (CP)

1. John A. Miller, Hao Peng and Casey N. Bowman, "Advanced Tutorial on Microscopic Discrete-Event Traffic Simulation," *Proceedings of the 2017 ACM/IEEE Winter Simulation Conference (WSC'17)*, Las Vegas, Nevada (December 2017) pp. -. (to appear)
2. John A. Miller, Hao Peng and Michael E. Cotterell, "Adding Support for Theory in Open Science Big Data," *Proceedings of the 6th IEEE International Congress on Big Data (BigData'17)*, Honolulu, Hawaii (June 2017) pp. 251-255.
3. Hao Peng, Zhe Jin, and John A. Miller, "Bayesian Networks with Structural Restrictions: Parallelization, Performance, and Efficient Cross-Validation," *Proceedings of the 6th IEEE International Congress on Big Data (BigData'17)*, Honolulu, Hawaii (June 2017) pp. 7-14.
4. Casey N. Bowman and John A. Miller, "Modeling Traffic Flow Using Simulation and Big Data Analytics," *Proceedings of the 2016 ACM/IEEE Winter Simulation Conference (WSC'16)*, Washington, DC (December 2016) pp. 1206-1217.
5. Vishnu Gowda Harish, Vinay Kumar Bingi and John A. Miller, "A Big Data Platform Integrating Compressed Linear Algebra with Columnar Databases," *Proceedings of the 1st Open Science in Big Data Workshop (OSBD 2016)*, Part of the 4th IEEE International Conference on Big Data (IEEE BigData'16), Washington, DC (December 2016) pp. 2344-2352.
6. John A. Miller, Casey N. Bowman, Vishnu Gowda Harish and Shannon Quinn, "Open Source Big Data Analytics Frameworks Written in Scala," *Proceedings of the 5th IEEE International Congress on Big Data (BigData'16)*, San Francisco, California (June-July 2016) pp. 389-393.
7. John A. Miller, Hong Zhu, Elisa Bertino, Ling Liu and Manish Parashar, "Plenary Panel 1: The Arc of Research Activity in Key Areas of Services Computing," *Program of the 22nd IEEE International Conference on Web Services (ICWS'15)*, New York, New York (June-July 2015) pp. 14-15.
8. John A. Miller, Lakshmish Ramaswamy, Arash J.Z. Fard and Krys J. Kochut, "Research Directions in Big Data Graph Analytics," *Proceedings of the 4th IEEE International Congress on Big Data (BigData'15)*, New York, New York (June-July 2015) pp. 785-794.
9. Mustafa V. Nural, Michael E. Cotterell and John A. Miller, "Using Semantics in Predictive Big Data Analytics," *Proceedings of the 4th IEEE International Congress on Big Data (BigData'15)*, New York, New York (June-July 2015) pp. 254-261.
10. John A. Miller, "Preface: From the Program Chair," *2014 Winter Simulation Conference: Exploring Big Data Through Simulation, Final Program*, Also in *Proceedings of the 46th ACM/IEEE Winter Simulation Conference (WSC'14)*, Savannah, Georgia (December 2014) pp. 9-11.
11. Arash J.Z. Fard, Satya Manda, Lakshmish Ramaswamy and John A. Miller, "Effective Caching Techniques for Accelerating Pattern Matching Queries," *Proceedings of the 2nd IEEE International Conference on Big Data (IEEE BigData'14)*, Washington, DC (October 2014) pp. 491-499.
12. Khalifeh Al Jadda, Mohammed Korayem, Camilo Ortiz, Trey Grainger, John A. Miller and William S. York, "PGMHD: A Scalable Probabilistic Graphical Model for Massive Hierarchical Data Problems," *Proceedings of the 2nd IEEE International Conference on Big Data (IEEE BigData'14)*, Washington, DC (October 2014) pp. 55-61.

13. Matthew Saltz, Ayushi Jain, Abhishek Kothari, Arash J.Z. Fard, John A. Miller and Lakshmesh Ramaswamy, "DualIso: An Algorithm for Subgraph Pattern Matching on Very Large Labeled Graphs," *Proceedings of the 3rd IEEE International Congress on Big Data (BigData'14)*, Anchorage, Alaska (June-July 2014) pp. 498-505.
14. John A. Miller, Michael E. Cotterell and Stephen J. Buckley, "Supporting a Modeling Continuum in ScalaTion: From Predictive Analytics to Simulation Modeling," *Proceedings of the 45th ACM/IEEE Winter Simulation Conference (WSC'13)*, Washington, DC (December 2013) pp. 1191-1202.
15. William S. York, Rene Ranzinger, Matthew Eavenson, Krys J. Kochut and John A. Miller, "Semantic Technologies for Glycoinformatics," *Program and Abstracts for the 40th Annual Conference of the Society for Glycobiology (SFG'13)*, St. Petersburg, Florida (November 2013) pp. 1359-1359. Also in *Oxford Journal on Glycobiology*, Vol. 32, No. 11.
16. Arash J.Z. Fard, M. Usman Nisar, Lakshmesh Ramaswamy, John A. Miller and Matthew Saltz, "A Distributed Vertex-Centric Approach for Pattern Matching in Massive Graphs." *Proceedings of the 1st IEEE International Conference on Big Data (IEEE BigData'13)*, Santa Clara, California (October 2013) pp. 403-411.
17. Mustafa V. Nural, John A. Miller and I. Budak Arpinar, "Improving Entity Linking Performance using Frame Semantics," *Proceedings of the 7th IEEE International Conference on Semantic Computing (ICSC'13)*, Irvine, California (September 2013) pp. 56-63.
18. M. Usman Nisar, Arash J.Z. Fard and John A Miller, "Techniques for Graph Analytics on Big Data," *Proceedings of the 2nd IEEE International Congress on Big Data (BigData'13)*, Santa Clara, California (June-July 2013) pp. 255-262.
19. Khalifeh Al Jadda, Rene Ranzinger, John A. Miller and William S. York, "IsO and Isobol Curator: An Ontology and Web-based Tool to Formalize Subjective Knowledge used for MS Annotation," *Abstracts for the 9th International Symposium on Bioinformatics Research and Applications (ISBRA'13)*, Charlotte, North Carolina (May 2013) pp. 1-4.
20. Jorge Cardoso, John A. Miller, Casey Bowman, Christian Hass, Amit P. Sheth and Tom W. Miller, "Open Service Networks Analysis," *Proceedings of the 1st International IFIP Working Conference on Value-Driven Social Semantics & Collective Intelligence (IFIP-VaSCo'13)*, in conjunction with ACM Web Science, Paris, France (May 2013) pp. 1-17.
21. Arash J.Z. Fard, Amir Abdolrashidi, Lakshmesh Ramaswamy and John A. Miller, "Towards Efficient Query Processing on Massive Time-Evolving Graphs," *Proceedings of the 1st International Workshop on Collaborative Big Data (C-Big'12)*, in conjunction with the 8th IEEE International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborativeCom'12), Pittsburgh, Pennsylvania (October 2012) pp. 1-8.
22. Alok Dhamanaskar, Michael E. Cotterell, Jie Zheng, Jessica C. Kissinger, Christian J. Stoeckert, Jr. and John A. Miller, "Suggestions for Galaxy Workflow Design Using Semantically Annotated Services," *Proceedings of the 7th International Conference on Formal Ontology in Information Systems (FOIS'12)*, Graz, Austria (July 2012) pp. 29-42.
23. Karthik Gomadam, Peter Z. Yeh, Kunal Verma and John A. Miller, "Data Enrichment using Web APIs," *Proceedings of the 1st IEEE International Conference on Services Economics (SE'12)*, (renamed Big-Data'12) in conjunction with the 2012 IEEE International Conference on Web Services (ICWS'12), Honolulu, Hawaii (June 2012) pp. 46-53.

24. Jorge Cardoso and John A. Miller, "Internet-Based Self-Services: From Analysis and Design to Deployment," *Proceedings of the 1st IEEE International Conference on Services Economics (SE'12)*, (renamed BigData'12) in conjunction with the 2012 IEEE International Conference on Web Services (ICWS'12), Honolulu, Hawaii (June 2012) pp. 24-31.
25. Michael E. Cotterell, John A. Miller, Jun Han and Tom Horton, "Extending ScalaTion, a Domain-Specific Language for Modeling & Simulation, for Simulation Optimization," *Proceedings of the 1st AlaSim International Modeling and Simulation Conference & Exhibition (AlaSim'12)*, Huntsville, Alabama (May 2012) pp. 1-1.
26. Jun Han, John A. Miller and Gregory A. Silver, "SoPT: Ontology for Simulation Optimization for Scientific Experiments," *Proceedings of the 43rd ACM/IEEE Winter Simulation Conference (WSC'11)*, Phoenix, Arizona (December 2011) pp. 2914-2925.
27. Chaitanya Guttula, Alok Dhamanaskar, Rui Wang, John A. Miller, Jessica C. Kissinger, Jie Zheng and Christian J. Stoeckert, Jr., "Enriching the Ontology for Biomedical Investigations (OBI) to Improve its Suitability for Web Service Annotations," *Proceedings of the 2nd International Conference on Biomedical Ontology (ICBO'11)*, Buffalo, New York (July 2011) pp. 246-248.
28. Rui Wang, Chaitanya Guttula, Maryam Panahiazar, Haseeb Yousaf, John A. Miller, Eileen T. Kraemer and Jessica C. Kissinger, "Web Service Composition using Service Suggestions," *Proceedings of the 1st IEEE International Workshop on Formal Methods in Services and Cloud Computing (FM-S&C)* in conjunction with the 2011 IEEE International Conference on Web Services (ICWS'11), Washington, DC (July 2011) pp. 482-489.
29. Jun Han, John A. Miller and William S. York, "Simulating Mass Spectra: A Step Towards Analyzing Glycan Biosynthesis," *Website Archive of the 42nd ACM/IEEE Winter Simulation Conference (WSC'10)*, Baltimore, Maryland (December 2010) pp. 1-1.
30. John A. Miller, Jun Han and Maria Hybinette, "Using Domain Specific Language for Modeling and Simulation: ScalaTion as a Case Study," *Proceedings of the 42nd ACM/IEEE Winter Simulation Conference (WSC'10)*, Baltimore, Maryland (December 2010) pp. 741-752.
31. Osama Al-Haj Hassan, Lakshmish Ramaswamy and John A. Miller, "CoMaP: A Cooperative Overlay-based Mashup Platform," *Proceedings of the 18th International Conference on Cooperative Information Systems (CoopIS'10)*, Crete, Greece (October 2010) pp. 454-471. (Best Paper Award)
32. Rui Wang, Sumedha Ganjoo, John A. Miller and Eileen T. Kraemer, "Ranking-Based Suggestion Algorithms for Semantic Web Service Composition," *Proceedings of the 1st IEEE International Workshop on Web X (WebX.o'10)* in conjunction with the 2010 IEEE International Conference on Web Services (ICWS'10), Miami, Florida (July 2010) pp. 606-613.
33. Osama Al-Haj Hassan, Lakshmish Ramaswamy and John A. Miller, "Enhancing Scalability and Performance of Mashups through Merging and Operator Reordering," *Proceedings of the 2010 IEEE International Conference on Web Services (ICWS'10)*, Miami, Florida (July 2010) pp. 171-178.
34. Gregory A. Silver, Kushel Rai Bellipady, John A. Miller, William S. York and Krys J. Kochut, "Supporting Interoperability Using the Discrete-event Modeling Ontology (DeMO)," *Proceedings of the 41st ACM/IEEE Winter Simulation Conference (WSC'09)*, Austin, Texas (December 2009) pp. 1399-1410.
35. Rui Wang, Douglas Brewer, Shefali Shastri, Srikalyan Swayampakula, John A. Miller, Eileen T. Kraemer and Jessica C. Kissinger, "Adapting the Galaxy Bioinformatics Tool to Support Semantic Web Service Composition," *Proceedings of the 3rd IEEE International Workshop on Scientific Workflows (SWF'09)*, in conjunction with the 2009 IEEE International Conference on Web Services (ICWS'09), Los Angeles, California (July 2009) pp. 283-290.

36. Osama Al-Haj Hassan, Lakshmish Ramaswamy and John A. Miller, "MACE: A Dynamic Caching Framework for Mashups," *Proceedings of the 2009 IEEE International Conference on Web Services (ICWS'09)*, Los Angeles, California (July 2009) pp. 75-82.
37. Levent Yilmaz, Paul Davis, Paul A. Fishwick, Xiaolin Hu, John A. Miller, Maria Hybinette, Tuncer I. Oren, Paul Reynolds, Hessam Sarjoughian and Andreas Tolk, "What Makes Good Research in Modeling and Simulation: Sustaining the Growth and Vitality of the M&S Discipline," *Proceedings of the 40th ACM/IEEE Winter Simulation Conference (WSC'08)*, Miami, Florida (December 2008) pp. 677-688.
38. William S. York, John A. Miller, Krys J. Kochut, Rajesh Narra, Matthew Eavenson, Maciej Janik, Shravya Nimmagadda and Jun Han, "Leveraging the GlycO Ontology for the Analysis of Glycomics and Glycoproteomics Data," *Proceedings of the 2008 Annual Meeting of the Society for Glycobiology (Glycobiology'08)*, Fort Worth, Texas (November 2008) pp. 21-21.
URL: <http://glycobiology.org/Default.aspx?tabid=98&type=viewabstract&lognumber=275>
39. Osama Al-Haj Hassan, Lakshmish Ramaswamy, John A. Miller, Khaled Rasheed and E. Rodney Canfield, "Replication in Overlay Networks: A Multi-Objective Optimization Approach," *Proceedings of the 4th International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborativeCom'08)*, Orlando, Florida (November 2008) pp. 512-528.
40. Zhiming Wang, John A. Miller, Jessica C. Kissinger, Rui Wang, Douglas Brewer and Cristina Aurecochea, "WS-BioZard: A Wizard for Composing Bioinformatics Web Services," *Proceedings of the 2nd IEEE International Workshop on Scientific Workflows (SWF'08)*, in conjunction with the 5th IEEE International Conference on Services Computing (SCC'08), Honolulu, Hawaii (July 2008) pp. 437-444.
41. Matthew Eavenson, Maciej Janik, Shravya Nimmagadda, John A. Miller, Krys J. Kochut, and William S. York, "GlycoBrowser: A Tool for Contextual Visualization of Biological Data and Pathways Using Ontologies," *Proceedings of the 4th International Symposium on Bioinformatics Research and Applications (ISBRA'08)*, Atlanta, Georgia (May 2008) pp. 305-316.
42. Shravya Nimmagadda, Amrita Basu, Matthew Eavenson, Jun Han, Maciej Janik, Rajesh Narra, Kishore Nimmagadda, Arpan Sharma, Krys J. Kochut, John A. Miller and William S. York, "GlycoVault: A Bioinformatics Infrastructure for Glycan Pathway Visualization, Analysis and Modeling," *Proceedings of the 5th International Conference on Information Technology: New Generations (ITNG'08)*, Las Vegas, Nevada (April 2008) pp. 692-697.
43. Zhiming Wang, John A. Miller, Jessica C. Kissinger, Rui Wang, Douglas Brewer and Cristina Aurecochea, "A Composition Designer for Bioinformatics Web Services," *Abstract Booklet for the 3rd Annual Computational and Systems Biology Symposium (CSBS'08)*, Athens, Georgia (March 2008) pp. 27-27.
44. Gregory A. Silver, Osama Al-Haj Hassan and John A. Miller, "From Domain Ontologies to Modeling Ontologies to Executable Simulation Models," *Proceedings of the 39th ACM/IEEE Winter Simulation Conference (WSC'07)*, Washington, DC (December 2007) pp. 1108-1117.
45. Zhiming Wang, Xin Gao, Congzhou He, John A. Miller, Jessica C. Kissinger, Mark Heiges, Cristina Aurecochea, Eileen T. Kraemer and Cary Pennington, "A Comparison of Federated Databases with Web Services for the Integration of Bioinformatics Data," *Proceedings of the 7th International Conference on Bioinformatics & Computational Biology (BIOCOMP'07)*, Las Vegas, Nevada (June 2007) pp. 334-338.
46. David Luper, Delroy Cameron, John A. Miller and Hamid R. Arabnia, "Spatial and Temporal Target Association through Semantic Analysis and GPS Data Mining," *Proceedings of the 6th International Conference on Information and Knowledge Engineering (IKE'07)*, Las Vegas, Nevada (June 2007) pp. 251-257.

47. Zixin Wu, Karthik Gomadam, Ajith Ranabahu, Amit P. Sheth and John A. Miller, "Automatic Composition of Semantic Web Services using Process Mediation," *Proceedings of the 9th International Conference on Enterprise Information Systems (ICEIS'07)*, Funchal, Portugal (June 2007) pp. 453-461.
48. Gregory A. Silver, Lee W. Lacy and John A. Miller, "Ontology Based Representations of Simulation Models Following the Process Interaction World View," *Proceedings of the 38th ACM/IEEE Winter Simulation Conference (WSC'06)*, Monterey, California (December 2006) pp. 1168-1176.
49. Zhiming Wang, Xin Gao, Congzhou He, John A. Miller, Jessica C. Kissinger, Mark Heiges, Cristina Aurrecochea, Eileen T. Kraemer, Steve Fischer, Christian J. Stoeckert, Jr., "Creating a Federation of Bioinformatics Databases in Oracle," *Proceedings of the 9th Annual Conference on Computational Genomics (ACCG'06)*, Baltimore, Maryland (October 2006) pp. 148-149.
50. Kunal Verma, Prashant Doshi, Karthik Gomadam, John A. Miller and Amit P. Sheth, "Optimal Adaptation in Web Processes with Coordination Constraints," *Proceedings of the 4th IEEE International Conference on Web Services (ICWS'06)*, Chicago, Illinois (September 2006) pp. 257-264.
51. Meenakshi Nagarajan, Kunal Verma, Amit P. Sheth, John A. Miller and Jonathan Lathem, "Semantic Interoperability of Web Services - Challenges and Experiences," *Proceedings of the 4th IEEE International Conference on Web Services (ICWS'06)*, Chicago, Illinois (September 2006) pp. 273-380.
52. Richard S. Patterson and John A. Miller, "Expressing Authorization in Semantic Web Services," *Proceedings of the 2nd IEEE International Conference on Granular Computing (IEEE-GrC'06)*, Atlanta, Georgia (May 2006) pp. 1-4.
53. Karthik Gomadam, Jon Lathem, John A. Miller, Meenakshi Nagarajan, Cary Pennington, Amit P. Sheth, Kunal Verma and Zixin Wu, "Semantic Web Services Challenge 2006-Phase I," *Proceedings of the SWS Challenge Phase I Stanford Workshop (SWS Challenge)*, Palo Alto, California (March 2006) pp. 1-3.
54. Ivan Vasquez, John A. Miller, Kunal Verma and Amit P. Sheth, "Open WS-Transaction: Enabling Reliable Web Service Transactions," *Proceedings of the 3rd International Conference on Service Oriented Computing (ICSOC'05)*, 2005 Lecture Notes in Computer Science (LNCS 3826), B. Benatallah, F. Casati and P. Traverso, Editors, Amsterdam, The Netherlands (December 2005) pp. 490-494. Springer Verlag.
55. Karthik Gomadam, Kunal Verma, Amit P. Sheth, John A. Miller, "Demonstrating Dynamic Configuration and Execution of Web Processes," *Proceedings of the 3rd International Conference on Service-oriented Computing (ICSOC'05)*, 2005 Lecture Notes in Computer Science (LNCS 3826), B. Benatallah, F. Casati and P. Traverso, Editors, Amsterdam, The Netherlands (December 2005) pp. 502-507. Springer Verlag.
56. John A. Miller and Gregory Baramidze, "Simulation and the Semantic Web," *Proceedings of the 37th ACM/IEEE Winter Simulation Conference (WSC'05)*, Orlando, Florida (December 2005) pp. 2371-2377.
57. Karthik Gomadam, Kunal Verma, Douglas Brewer, Amit P. Sheth and John A. Miller, "Radiant: A Tool for Semantic Annotation of Web Services," *Proceedings of the 4th International Semantic Web Conference (ISWC'05)*, Demo Paper, Galway, Ireland (November 2005) pp. 1-2.
58. Ranjit Mulye, John A. Miller, Kunal Verma, Karthik Gomadam and Amit P. Sheth, "A Semantic Template Based Designer for Semantic Web Processes," *Proceedings of the 3rd IEEE International Conference on Web Services (ICWS'05)*, Orlando, Florida (July 2005) pp. 461-469.
59. Kunal Verma, Adrian Mochan, Michal Zaremba, Amit P. Sheth, John A. Miller and Christoph Bussler, "Linking Semantic Web Service Efforts - Integrating WSMX and METEOR-S," *Proceedings of the 2nd International Workshop on Semantic and Dynamic Web Processes (SDWP'05)*, part of the 3rd IEEE International Conference on Web Services (ICWS'05), Orlando, Florida (July 2005) pp. 126-138.

60. Rama Akkiraju, Joel Farrell, John A. Miller, Meenakshi Nagarajan, Amit Sheth and Kunal Verma, "Web Service Semantics - WSDL-S," *Proceedings of the W3C Workshop on Frameworks for Semantics in Web Service (W3CW'05)*, Innsbruck, Austria (June 2005) pp. 1-5. Full W3C Submission: Web Service Semantics - WSDL-S (November 2005).
61. Satya S. Sahoo, Amit P. Sheth, William S. York and John A. Miller, "Semantic Web Services for N-Glycosylation Process," *Proceedings of the International Symposium on Web Services for Computational Biology and Bioinformatics (ISWS'05)*, Blacksberg, Virginia (May 2005) pp. 1-2.
62. Amit P. Sheth, Kunal Verma, John A. Miller and Preeda Rajasekaran, "Enhancing Web Service Descriptions using WSDL-S," *Proceedings of EclipseCon 2005*, Burlingame, California (March 2005) pp. 1-2.
63. Paul A. Fishwick and John A. Miller, "Ontologies for Modeling and Simulation: Issues and Approaches," *Proceedings of the 36th ACM/IEEE Winter Simulation Conference (WSC'04)*, Washington, DC (December 2004) pp. 259-264.
64. William S. York, Amit P. Sheth, Krys J Kochut, John A. Miller, Christopher Thomas, Karthik Gomadam, Xiaochuan Yi, Meenakshi Nagarajan and Satya Sahoo, "Semantic Integration and Analysis of Glycomics Information," *Proceedings of the 2004 Joint Meeting of the Society for Glycobiology and the Japanese Society of Carbohydrate Research*, Glycobiology, Vol. 14, No. 11, Honolulu, Hawaii (November 2004) pp. 1196-1196.
65. Amit P. Sheth, William S. York, Christopher Thomas, Meenakshi Nagarajan and John A. Miller, "Semantic Web Technology in Support of Bioinformatics for Glycan Expression," *Proceedings of the W3C Workshop on Semantic Web for Life Sciences (SWLS'04)*, Cambridge, Massachusetts (October 2004) pp. 1-3.
66. Rohit Aggarwal, Kunal Verma, John A. Miller and William Milnor, "Constraint Driven Web Service Composition in METEOR-S," *Proceedings of the 1st IEEE International Conference on Services Computing (SCC'04)*, Shanghai, China (September 2004) pp. 23-32.
67. William S. York, Amit P. Sheth, Krys J. Kochut, John A. Miller, Christopher Thomas, Karthik Gomadam, Xiaochuan Yi and M. Nagarajan, "Semantic Integration of Glycomics Data and Information," *Proceedings of the Human Disease Glycomics/Proteome Initiative 1st Workshop 2004: Functional Glycomics in Disease*, Osaka, Japan (August 2004) pp. 1-1.
68. Preeda Rajasekaran, John A. Miller, Kunal Verma and Amit P. Sheth, "Enhancing Web Services Description and Discovery to Facilitate Composition," *Proceedings of the 1st International Workshop on Semantic Web Services and Web Process Composition (SWSWPC'04)*, Part of the 2nd IEEE International Conference on Web Services (ICWS'04), San Diego, California (July 2004) pp. 34-47.
69. John A. Miller, Gregory Baramidze, Paul A. Fishwick and Amit P. Sheth, "Investigating Ontologies for Simulation Modeling," *Proceedings of the 37th Annual Simulation Symposium (ANSS'04)*, Arlington, Virginia (April 2004) pp. 55-71.
70. Gregory A. Silver, John A. Miller, Amit P. Sheth, Jonathan Myers, Angela Maduko and Rabia Jafri, "Modeling and Simulation of Quality of Service for Composite Web Services," *Proceedings of the 7th World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI'03)*, Orlando, Florida (July 2003) pp. 420-425.
71. Kaarthik Sivashanmugam, Kunal Verma, Amit P. Sheth and John A. Miller, "Adding Semantics to Web Services Standards," *Proceedings of the 1st IEEE International Conference on Web Services (ICWS'03)*, Las Vegas, Nevada (June 2003) pp. 395-401.

72. Senthilnand Chandrasekaran, Gregory A. Silver, John A. Miller, Jorge Cardoso and Amit P. Sheth, "Web Service Technologies and their Synergy with Simulation," *Proceedings of the 34th ACM/IEEE Winter Simulation Conference (WSC'02)*, San Diego, California (December 2002) pp. 606-615.
73. Amit P. Sheth, Jorge Cardoso, John A. Miller, Krys J. Kochut and Myong Kang, "QoS for Service-Oriented Middleware," *Proceedings of the 6th World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI'02)*, Orlando, Florida (July 2002) pp. 528-534.
74. Jorge Cardoso, Amit P. Sheth and John A. Miller, "Workflow Quality of Service," *Proceedings of the IFIP TC5/WG5.12 International Conference on Enterprise Integration and Modeling Technique (ICEIMT'02)*, Enterprise Inter- and Intra-Organizational Integration: Building International Consensus, Valencia, Spain (April 2002) pp. 303-311. Also in *Enterprise Inter- and Intra-Organizational Integration: Building International Consensus*, K. Kosanke, R. Jochem, J. Nell and A. Ortiz-Bas, Editors Vol. 236 (108), Part 4 (November 2002) pp. 303-311. Book Series: IFIP International Federation for Information Processing. Kluwer Academic Publishers, Boston, MA.
75. John A. Miller, Jorge Cardoso and Gregory A. Silver, "Using Simulation to Facilitate Effective Workflow Adaptation", *Proceedings of the 35th Annual Simulation Symposium (ANSS'02)*, San Diego, California (April 2002) pp. 177-181.
76. Xeuqin Huang and John A. Miller, "Building a Web-Based Federated Simulation System with Jini and XML," *Proceedings of the 34th Annual Simulation Symposium (ANSS'01)*, Seattle, Washington (April 2001) pp. 143-150.
77. Jorge Cardoso, Zongwei Luo, John A. Miller, Amit P. Sheth and Krys J. Kochut, "Survivability Architecture for Workflow Management Systems," *Proceedings of the 39th Annual ACM Southeast Conference (ACMSE'01)*, Athens, Georgia (March 2001) pp. 207-214.
78. Maria Chinwala, Rakesh Malhotra and John A. Miller, "Progress Towards Standards for XML Databases," *Proceedings of the 39th Annual ACM Southeast Conference (ACMSE'01)*, Athens, Georgia (March 2001) pp. 277-284.
79. I. Budak Arpinar, John A. Miller and Amit P. Sheth, "An Efficient Data Extraction and Storage Utility for XML Documents," *Proceedings of the 39th Annual ACM Southeast Conference (ACMSE'01)*, Athens, Georgia (March 2001) pp. 293-295.
80. John A. Miller, Andrew F. Seila and Junxiu Tao, "Finding a Substrate for Federated Components on the Web," *Proceedings of the 32nd ACM/IEEE Winter Simulation Conference (WSC'00)*, Orlando, Florida (December 2000) pp. 1849-1854.
81. Andrew F. Seila and John A. Miller, "Scenario Management in Web-Based Simulation," *Proceedings of the 31st ACM/IEEE Winter Simulation Conference (WSC'99)*, Phoenix, Arizona (December 1999) pp. 1430-1437.
82. John A. Miller, Amit P. Sheth and Krys J. Kochut and ZongWei Luo, "Recovery Issues in Web-Based Workflow," *Proceedings of the 12th International Conference on Computer Applications in Industry and Engineering (CAINE'99)*, Atlanta, Georgia (November 1999) pp. 101-105.
83. Myong H. Kang, Judith N. Froscher, Amit P. Sheth, Krys J. Kochut and John A. Miller, "A Multilevel Secure Workflow Management System," *Proceedings of the 11th Conference on Advanced Information Systems Engineering (CAiSE'99)*, Lecture Notes in Computer Science (LNCS), Vol. 1626, Heidelberg, Germany (June 1999) pp. 271-285. Springer Verlag, Berlin-Heidelberg.

84. John A. Miller, Yongfu Ge and Junxiu Tao “Component-Based Simulation Environments: JSIM as a Case Study using Java Beans,” *Proceedings of the 30th ACM/IEEE Winter Simulation Conference (WSC’98)*, Washington, D.C. (December 1998) pp. 373-381.
85. ZongWei Luo, Amit P. Sheth, John A. Miller and Krys J. Kochut, “Defeasible Workflow, its Computation and Exception Handling,” *Online Proceedings of the 1998 Computer-Supported Cooperative Work Workshop (CSCW-98 Workshop): Towards Adaptive Workflow Systems*, Seattle, Washington (November 1998) pp. 1-12.
86. John A. Miller, Amit P. Sheth and Krys J. Kochut “Perspectives in Modeling: Simulation, Database and Workflow,” *Proceedings of the Workshop on Conceptual Modeling (ER’97 Symposium)*, Los Angeles, California (November 1997) pp. 1-16.
87. John A. Miller, Amit P. Sheth, Krys J. Kochut and Devanand Palaniswami, “The Future of Web-Based Workflow,” *Proceedings of the International Workshop on Research Directions in Process Technology (RDPT’97)*, Nancy, France (July 1997) pp. 1-6.
88. Amit P. Sheth, Devashish Worah, Krys J. Kochut, John A. Miller, Ke Zheng, Devanand Palaniswami, Souvik Das, “The METEOR Workflow Management System and Its Use in Prototyping Significant Healthcare Applications,” *Proceedings of the Towards An Electronic Patient Record (TEPR’97) Conference*, Vol. 2, Nashville, Tennessee (April/May 1997) pp. 267-278.
89. John A. Miller, Rajesh Nair, Zhiwei Zhang and Hongwei Zhao, “JSIM: A Java-Based Simulation and Animation Environment,” *Proceedings of the 30th Annual Simulation Symposium (ANSS’97)*, Atlanta, Georgia (April 1997) pp. 31-42.
90. Rajesh Nair, John A. Miller and Zhiwei Zhang, “A Java-Based Query Driven Simulation Environment,” *Proceedings of the 28th ACM/IEEE Winter Simulation Conference (WSC’96)*, Coronado, California (December 1996) pp. 786-793.
91. Amit P. Sheth, Krys J. Kochut, John A. Miller, Devashish Worah, Souvik Das, Chenye Lin, Devanand Palaniswami, John Lynch and Ivan Shevchenko, “Supporting State-wide Immunization Tracking using Multi-Paradigm Workflow Technology,” *Proceedings of the 22nd International Conference on Very Large Databases (VLDB’96)*, Bombay, India (September 1996) pp. 263-273.
92. John A. Miller, Amit P. Sheth, Krys J. Kochut, Xuzhong Wang and Arun Murugan, “Simulation Modeling within Workflow Technology,” *Proceedings of the 27th ACM/IEEE Winter Simulation Conference (WSC’95)*, Arlington, Virginia (December 1995) pp. 612-619.
93. Walter D. Potter, Robert W. Robinson, John A. Miller, Krys J. Kochut and D.Z. Redys, “Using the Genetic Algorithm to Find Snake-In-The-Box Codes,” *Proceedings of the 7th International Conference on Industrial & Engineering Applications of Artificial Intelligence and Expert Systems (IEA/AIE’94)*, Austin, Texas (June 1994) pp. 421-426.
94. Walter D. Potter, Robert W. Robinson, John A. Miller, Krys J. Kochut and D.Z. Redys, “Hunting for Snakes Using the Genetic Algorithm,” *Proceedings of the 3rd International Symposium on Artificial Intelligence and Mathematics (AIM’94)*, Fort Lauderdale, Florida (January 1994) pp. 26-26.
95. Krys J. Kochut, Jonathan Arnold, John A. Miller and Walter D. Potter, “Design of an Object-Oriented Database for Reverse Genetics,” *Proceedings of the 1st International Conference on Intelligent Systems for Molecular Biology (ISMB’93)*, Bethesda, Maryland (July 1993) pp. 234-242.
96. Krys J. Kochut and John A. Miller, “WarpLog: Time Warped Logical Objects,” *Proceedings of the 26th Annual Simulation Symposium (ANSS’93)*, Arlington, Virginia (April 1993) pp. 30-39.

97. John A. Miller, "Simulation of Database Transaction Management Protocols: Hybrids and Variants of Time Warp," *Proceedings of the 24th ACM/IEEE Winter Simulation Conference (WSC'92)*, Arlington, Virginia (December 1992) pp. 1232-1241.
98. Walter D. Potter, John A. Miller and Krys J. Kochut, "A Hyper-Semantic Approach to Intelligent Database Systems," part of the Panel on Intelligent Database Technology, *Proceedings of the 3rd Annual Symposium of the International Association of Knowledge Engineers (IAKE'92)* Washington, D.C. (November 1992) pp. 348-351.
99. Xiaoying Liu, John A. Miller and Nilesh R. Parate, "Transaction Management for Object-Oriented Databases: Performance Advantages of Using Multiple Versions," *Proceedings of the 25th Annual Simulation Symposium (ANSS'92)*, Orlando, Florida (April 1992) pp. 222-231.
100. John A. Miller, Jonathan Arnold, Krys J. Kochut, A. Jamie Cuticchia and Walter D. Potter, "Query Driven Simulation as a Tool for Genetic Engineers," *Proceedings of the International Conference on Simulation in Engineering Education*, Part of the 1992 Western Simulation Multiconference (WSM'92) Newport Beach, California (January 1992) pp. 67-72.
101. Walter D. Potter, John A. Miller, Ravi V. Gandham and Chito N. Lapena, "Improving the Reliability of Heuristic Diagnosis," *Proceedings of the International Conference on Systems, Man, and Cybernetics (IEEE-SMC'91)*, Vol. 2, Charlottesville, Virginia (October 1991) pp. 725-730.
102. Krys J. Kochut, John A. Miller, Walter D. Potter and Anthony D. Wright, "h-KDL: A Historically Extended Functional Object-Oriented Database System," *Proceedings of the 1991 International Conference on Technology of Object-Oriented Languages and Systems (TOOLS'91)*, Santa Barbara, California (July 1991) pp. 73-86.
103. Krys J. Kochut, John A. Miller and Walter D. Potter, "Design of a CLOS Version of Active KDL: A Knowledge/Data Base System Capable of Query Driven Simulation," *Proceedings of the 1991 AI and Simulation Conference*, Part of the 1991 Simulation Multi-Conference (SMC'91), New Orleans, Louisiana (April 1991) pp. 139-145. (highlighted in Dr. Wildberger's AI & Simulation Column which appears regularly in SIMULATION: The Journal of The Society for Computer Simulation, July 1991 issue)
104. John A. Miller and Nancy D. Griffith, "Performance Modeling of Database and Simulation Protocols: Design Choices for Query Driven Simulation," *Proceedings of the 24th Annual Simulation Symposium (ANSS'91)*, New Orleans, Louisiana (April 1991) pp. 205-216.
105. Walter D. Potter, John A. Miller, Krys J. Kochut and Sanford W. Wood, "Supporting an Intelligent Simulation/Modeling Environment Using the Active KDL Object-Oriented Database Programming Language," *Proceedings of the 21st Annual Pittsburgh Conference on Modeling and Simulation (PCMS'90)*, Vol. 21, Part 4, Pittsburgh, Pennsylvania (May 1990) pp. 1895-1900.
106. Orville R. Weyrich, Jr., Walter D. Potter and John A. Miller, "A Simulation Study of Heuristic Techniques for Diagnostic Decision Making," *Proceedings of the 1990 AI and Simulation Conference*, Part of the 1990 Simulation Multi-Conference (SMC'90), Nashville, Tennessee (April 1990) pp. 217-223.
107. John A. Miller, Walter D. Potter, Krys J. Kochut and Orville R. Weyrich, Jr., "Model Instantiation for Query Driven Simulation in Active KDL," *Proceedings of the 23rd Annual Simulation Symposium (ANSS'90)*, Nashville, Tennessee (April 1990) pp. 15-32. (won the Ira M. Kay Memorial Prize of \$500 for best paper at the 23rd Annual Simulation Symposium)
108. Walter D. Potter and John A. Miller, "Using Genetic Algorithms for Diagnostic Decision Making," *Proceedings of the 6th Annual USC-CS Symposium on Intelligent Systems (SIS'90)*, Columbia, South Carolina, (March 1990) pp. 17-32.

109. John A. Miller and Orville R. Weyrich, Jr., "Query Driven Simulation Using SIMODULA," *Proceedings of the 22nd Annual Simulation Symposium (ANSS'89)*, Tampa, Florida (March 1989) pp. 167-182.
110. John A. Miller, Orville R. Weyrich, Jr. and David (K.Y.) Suen, "A Software Engineering Oriented Comparison of Simulation Languages," *Proceedings of the 1988 Tools for the Simulationist Conference*, Part of the 1988 Simulation Multi-Conference (SMC'88), Orlando, Florida (April 1988) pp. 97-104.
111. Orville R. Weyrich, Jr., David B. Brown and John A. Miller, "The Use of Simulation and Prototypes in Software Testing," *Proceedings of the 1988 Tools for the Simulationist Conference*, Part of the 1988 Simulation Multi-Conference (SMC'88), Orlando, Florida (April 1988) pp. 5-10.
112. Nancy D. Griffeth and John A. Miller, "Performance Modeling of Database Recovery Protocols," *Proceedings of the 4th Symposium on Reliability in Distributed Software and Database Systems (SRDS'84)*, Silver Spring, Maryland (October 1984) pp. 75-83.
113. John A. Miller and Richard J. LeBlanc, Jr., "Distributed Compilation: A Case Study," *Proceedings of the 3rd International Conference on Distributed Computing Systems (ICDCS'82)*, Miami, Florida (October 1982) pp. 548-553.

4.5 Internet Publications (IP)

1. Joel Farrell and Holger Lausen (Editors), Rama Akkiraju, Carine Bournez, J.B. Domingue, Laura Ferrari, Laurent Henocque, Mathias Kleiner, Jacek Kopecky, Peter Matthews, Antony Miguel, John A. Miller, Carlos Pedrinaci, Eric Prud'hommeaux, Brahmananda Sapkota, Amit P. Sheth, Claudio Venezia, Tomas Vitvar (Working Group Members), "Semantic Annotations for WSDL and XML Schema," W3C Recommendation Technical Report, World Wide Web Consortium, Cambridge, Massachusetts (August 2007) pp. 1-19.
2. Rama Akkiraju, Joel Farrell, John A. Miller, Meenakshi Nagarajan, Marc-Thomas Schmidt, Amit P. Sheth and Kunal Verma, "Web Service Semantics - WSDL-S, W3C Member Submission," W3C Technical Report (November 2005) pp. 1-42. Note: this submission was preceded by (a) June 2005 CP (Akkiraju et al.), (b) April 2005 TR (Akkiraju et al.) and (c) July 2004 TR (Miller et al.).
3. Rama Akkiraju, Joel Farrell, John A. Miller, Meenashi Nagarajan, Marc-Thomas Schmidt, Amit P. Sheth and Kunal Verma, "Web Service Semantics - WSDL-S," IBM AlphaWorks Technical Note, version 1.0, Yorktown Heights, New York (April 2005) pp. 1-42.

4.6 Technical Reports (TR)

1. Michael E. Cotterell, John A. Miller and Tom Horton, "Unicode in Domain-Specific Programming Languages for Modeling & Simulation: ScalaTion as a Case Study," Technical Report #UGA-CS-LSDIS-TR-11-011, Department of Computer Science, University of Georgia, Athens, Georgia (May 2011) pp. 1-10. Also published in arXiv.org.
2. Angela Maduko, Kemafor Anyanwu, Amit P. Sheth, John A. Miller and Paul Schliekelman, "Graph Summaries for Optimizing Graph Pattern Queries on RDF Databases," Technical Report #UGA-CS-LSDIS-TR-09-011, Department of Computer Science, University of Georgia, Athens, Georgia (May 2009) pp. 1-39.
3. John D. Hogan, John A. Miller, Krys J. Kochut and William S. York, "GLYDE-II and Lignin: An XML Markup Language for Representing Lignin Structures," Technical Report (Poster) #UGA-CS-LSDIS-TR-08-013, Department of Computer Science, University of Georgia, Presented at the 2nd Annual BioEnergy Science Center Retreat, Chattanooga, Tennessee (December, 2008) pp. 1-1.

4. Zhiming Wang, Rui Wang, Cristina Aurrecoechea, Douglas Brewer, John A. Miller and Jessica C. Kissinger, "Semi-Automatic Composition of Web Services for the Bioinformatics Domain," Technical Report #UGA-CS-LSDIS-TR-08-012, Department of Computer Science, University of Georgia, Athens, Georgia (August 2008) pp. 1-33.
5. Kunal Verma, Karthik Gomadam, Prashant Doshi, John A. Miller and Amit P. Sheth, "Configuration and Adaptation of Semantic Web Processes," Technical Report #UGA-CS-LSDIS-TR-08-011, Department of Computer Science, University of Georgia, Athens, Georgia (June 2008) pp. 1-48.
6. William S. York, Krys J. Kochut, John A. Miller, Satya Sahoo, Christopher Thomas and Cory Henson, "GLYDE-II GLYcan Structural Data Exchange using Connection Tables," Technical Report #UGA-CCRC-TR-07-010, Department of Computer Science, University of Georgia, Athens, Georgia (May 2007) pp. 1-22.
7. Zixin Wu, Ajith Ranabahu, Karthik Gomadam, Amit P. Sheth and John A. Miller, "Automatic Composition of Semantic Web Services using Process and Data Mediation," Technical Report #UGA-CS-LSDIS-TR-07-012, Department of Computer Science, University of Georgia, Athens, Georgia (February 2007) pp. 1-10.
8. Kunal Verma, Amit P. Sheth, Swapna Oundhakar, Kaarthik Sivashanmugam, and John A. Miller, "Allowing the Use of Multiple Ontologies for Discovery of Web Services in Federated Registry Environment," Technical Report #UGA-CS-LSDIS-TR-07-011, Department of Computer Science, University of Georgia, Athens, Georgia (February 2007) pp. 1-27.
9. John A. Miller, Krys J. Kochut, Zhiming Wang and Amrita Basu, "Workflow and Web Processes in Bioinformatics," *Report of the Microsoft eScience Workshop at the Johns Hopkins University (MeSW'06)*, Baltimore, Maryland (October 2006) pp. 1-1. Technical Report (Poster) #UGA-CS-LSDIS-TR-06-013, Department of Computer Science, University of Georgia, Athens, Georgia.
10. Ivan Vasquez, John A. Miller and Kunal Verma, "Providing Fault Tolerance for Transactional Web Services," Technical Report #UGA-CS-LSDIS-TR-06-012, Department of Computer Science, University of Georgia, Athens, Georgia (September 2006) pp. 1-33.
11. John A. Miller, Paul A. Fishwick, Gregory Baramidze, Amit P. Sheth and Gregory A. Silver, "Ontologies for Modeling and Simulation: An Extensible Framework," Technical Report #UGA-CS-LSDIS-TR-06-011, Department of Computer Science, University of Georgia, Athens, Georgia (August 2006) pp. 1-47.
12. Zixin Wu, John F. Harney, Kunal Verma, John A. Miller and Amit P. Sheth, "Composing Semantic Web Services with Interaction Protocols," Technical Report #UGA-CS-LSDIS-TR-06-010, Department of Computer Science, University of Georgia, Athens, Georgia (January 2006) pp. 1-14.
13. William Milnor, Cartic Ramakrishnan, Matthew Perry, Amit P. Sheth, John A. Miller and Krys J. Kochut, "Discovering Informative Subgraphs in RDF Graphs," Technical Report #UGA-CS-LSDIS-TR-05-013, Department of Computer Science, University of Georgia, Athens, Georgia (December 2005) pp. 1-18.
14. Kunal Verma, Prashant Doshi, Karthik Gomadam, John A. Miller and Amit P. Sheth, "Optimal Adaptation in Autonomic Web Processes with Inter-Service Dependencies," Technical Report #UGA-CS-LSDIS-TR-05-013, Department of Computer Science, University of Georgia, Athens, Georgia (November 2005) pp. 1-10.
15. Kunal Verma, Karthik Gomadam, Amit P. Sheth, John A. Miller and Zixin Wu, "The METEOR-S Approach for Configuring and Executing Dynamic Web Processes," Technical Report #UGA-CS-LSDIS-TR-05-012, Department of Computer Science, University of Georgia, Athens, Georgia (June 2005) pp. 1-12.

16. Zhijun Zhang and John A. Miller, "Ontology Query Languages for the Semantic Web: A Performance Evaluation," Technical Report #UGA-CS-LSDIS-TR-05-011, Department of Computer Science, University of Georgia, Athens, Georgia (June 2005) pp. 1-34.
17. Preeda Rajasekaran, Kunal Verma, John A. Miller, Amit P. Sheth, "A Plug-in for Adding Semantics to WSDL," Technical Report #UGA-CS-LSDIS-TR-04-014, Department of Computer Science, University of Georgia, Athens, Georgia (September, 2004) pp. 1-5.
18. John A. Miller, Gregory Baramidze, Amit P. Sheth and Paul A. Fishwick, "Ontologies for Modeling and Simulation: An Initial Framework," Technical Report #UGA-CS-LSDIS-TR-04-013, Department of Computer Science, University of Georgia, Athens, Georgia (August, 2004) pp. 1-36.
19. Rohit Aggarwal, Kunal Verma, John Miller, William Milnor, "Dynamic Web Service Composition in METEOR-S," Technical Report #UGA-CS-LSDIS-TR-04-012, Department of Computer Science, University of Georgia, Athens, Georgia (August 2004) pp. 1-9. (slightly extended version of "Constraint Driven Web Service Composition in METEOR-S")
20. John A. Miller, Kunal Verma, Preeda Rajasekaran, Amit P. Sheth, Rohit Aggarwal and Kaarthik Sivashanmugan, "WSDL-S: A Proposal to W3C WSDL 2.0 Committee," Technical Report #UGA-CS-LSDIS-TR-04-011, Department of Computer Science, University of Georgia, Athens, Georgia (July 2004) pp. 1-11. Note: initially titled: "WSDL-S: Adding Semantics to WSDL - White Paper".
21. Jorge Cardoso, John A. Miller, Amit P. Sheth and Jonathan Arnold, "Modeling Quality of Service for Workflows and Web Service Processes," Technical Report #UGA-CS-LSDIS-TR-02-002, Department of Computer Science, University of Georgia, Athens, Georgia (December 2002) pp. 1-44.
22. Minrong Song, John A. Miller and I. Budak Arpinar, "RepoX: An XML Repository for Workflow Designs and Specifications," Technical Report #UGA-CS-LSDIS-TR-01-012, Department of Computer Science, University of Georgia, Athens, Georgia (August 2001) pp. 1-43.
23. Maria Chinwala and John A. Miller, "Algebraic Languages for XML Databases," Technical Report #UGA-CS-LSDIS-TR-01-011, Department of Computer Science, University of Georgia, Athens, Georgia (July 2001) pp. 1-33.
24. Rakesh Malhotra and John A. Miller, "XML Database Engines," Technical Report #UGA-CS-LSDIS-TR-01-010, Department of Computer Science, University of Georgia, Athens, Georgia (July 2001) pp. 1-38.
25. Sonali C. Sheth and John A. Miller, "Query Languages and Tools for XML Documents and Databases," Technical Report #UGA-CS-LSDIS-TR-99-011, Department of Computer Science, University of Georgia, Athens, Georgia (July 1999) pp. 1-34.
26. John A. Miller, Mei Fan, Shengli Wu, I. Budak Arpinar, Amit P. Sheth and Krys J. Kochut, "Security for the METEOR Workflow Management System," Technical Report #UGA-CS-LSDIS-TR-99-010, Department of Computer Science, University of Georgia, Athens, Georgia (June 1999) pp. 1-33.
27. Krys J. Kochut, Amit P. Sheth and John A. Miller, "ORBWork: A CORBA-Based Fully Distributed, Scalable and Dynamic Workflow Enactment Service for METEOR," Technical Report #UGA-CS-TR-98-006, Department of Computer Science, University of Georgia, Athens, Georgia (Fall 1998) pp. 1-11.
28. Devashish Worah, Amit P. Sheth, Krys J Kochut, John A. Miller, "An Error Handling Framework for the ORBWork Workflow Enactment Service of METEOR," Technical Report #UGA-CS-TR-97-002, Department of Computer Science, University of Georgia, Athens, Georgia (March 1997) pp. 1-27.

29. Souvik Das, Krys J. Kochut, John A. Miller, Amit P. Sheth and Devashish Worah, "ORBWork: A Reliable Distributed CORBA-based Workflow Enactment System for METEOR 2," Technical Report #UGA-CS-TR-97-001, Department of Computer Science, University of Georgia, Athens, Georgia (February 1997) pp. 1-24.
30. John A. Miller and Aideen Dennis, "Hybrid Time Warp (HYT): A Protocol for Parallel Database Transaction Management," Technical Report #UGA-CS-LSDIS-TR-96-010, Department of Computer Science, University of Georgia, Athens, Georgia (December 1996) pp. 1-42.
31. Krys J. Kochut, Walter D. Potter and John A. Miller, *Graphical User Interfaces: Designs and Standards*, Technical Report #WSRC-TR-94-002, Westinghouse Savannah River Company, Aiken, South Carolina (February 1994) pp. 1-237.
32. John A. Miller, Walter D. Potter, Krys J. Kochut, Sunderraman Krishnan, Bonnie Edwards, Wensheng Zhang and Jayesh Sahasi, *Design of a WSRC Repository with an End-User Emphasis*, Technical Report #WSRC-TR-94-001, Westinghouse Savannah River Company, Aiken, South Carolina (January 1994) pp. 1-75.
33. John A. Miller, Walter D. Potter, Krys J. Kochut, "On the Integration of Knowledge, Data, and Models," Technical Report #UGA-CS-TR-92-010, Department of Computer Science, University of Georgia, Athens, Georgia (August 1992) pp. 1-25.
34. John A. Miller, Orville R. Weyrich Jr, "Model Instantiation Algorithms for Query Driven Simulation in SIMODULA," Technical Report #UGA-CS-TR-90-010, Department of Computer Science, University of Georgia, Athens, Georgia (December 1990) pp. 1-36.
35. John A. Miller, *Markovian Analysis and Optimization of Database Recovery Protocols*, Technical Report #GIT-ICS-TR-86-8, Ph.D. Thesis, Georgia Institute of Technology, Atlanta, Georgia (August 1986) pp. 1-91. Chair: Nancy D. Griffeth.

5 Grants Received:

Designations for Federally Funded Grants: Principal Investigator (PI), Co-Principal Investigator (Co-PI), Senior Investigator (SI) and Investigator (I)

1. January 1992 to January 1993 - \$5,500 - with match \$5,500. John A. Miller, "Performance of Time Warp Protocols for Database Transaction Management," University of Georgia Faculty Research Grants Program (UGARF).
2. January 1993 to February 1994 - \$52,661 - with match \$52,661. Krys J. Kochut, Walter D. Potter and John A. Miller, "Graphical User Interfaces: Designs and Standards," Westinghouse Savannah River Company (WSRC) and ERDA, via Department of Energy (DOE).
3. January 1993 to January 1994 - \$75,303 - with match \$75,303. John A. Miller, Walter D. Potter and Krys J. Kochut, "Building an Information Repository," Westinghouse Savannah River Company (WSRC) and ERDA, via Department of Energy (DOE).
4. February 1995 to August 1999 - \$725,000 - with match \$1,674,727. Amit P. Sheth (PI), John A. Miller (Co-PI) and Krys J. Kochut (Co-PI), "Healthcare Information Infrastructure Technology (HIIT): Workflow Management and Modeling," National Institute for Standards and Technology (NIST).
5. October 1995 to September 1996 - \$111,916 - with match \$161,686. Jeffrey W. Smith, Gary Barber, John A. Miller, Krys J. Kochut and Suchi M. Bhandarkar, "Multimedia-Based Instruction," Sun Microsystems (SUNW).
6. April 1996 to March 1997 - \$8,500 - with match \$8,500. Amit P. Sheth, Daniel M. Everett, John A. Miller, Krys J. Kochut, Jeffrey W. Smith, Robert W. Robinson and Hamid R. Arabnia, "Mobile Multimedia Instruction Environment," University of Georgia Office of Instructional Development (OID).
7. June 1996 to September 1997 - \$112,480 - with match \$124,980. Amit P. Sheth (PI), Krys J. Kochut (Co-PI) and John A. Miller (Co-PI), "Collaborative Tele-Consulting for Healthcare (CaTCH)," South Carolina Research Authority (SCRA), National Institute for Standards and Technology (NIST).
8. July 1998 to December 1999 - \$315,542 - with match \$330,542. Amit P. Sheth (PI), Krys J. Kochut (Co-PI) and John A. Miller (Co-PI), "Workflow Management for Advanced DoD Applications," Naval Research Laboratory (NRL), Department of the Navy.
9. January 2000 to December 2000 - \$200,000 - with match \$200,000. Amit P. Sheth (PI), John A. Miller (Co-PI) and Krys J. Kochut (Co-PI), "Extending METEOR with Workflow Reuse, Adaptation and Collaboration," Naval Research Laboratory (NRL), Department of the Navy.
10. January 2001 to March 2001 - \$1,000 - with match \$1,000. John A. Miller, Jeffrey W. Smith, Thiab R. Taha and E. Rodney Canfield, "Support for the ACM Southeast Conference," UGA President's Venture Fund (PVF).
11. July 2003 to July 2008 - \$6,700,000 - with match \$6,700,000, Comp. Sc. total \$647,557. J. Michael Pierce (PI), Stephen Dalton (SI), Alfred Merrill [GaTech] (SI), Kelley Moremen (SI), William S. York (SI), Parastoo Azadi (SI), in Comp. Sc.: Amit P. Sheth (I), Krys J. Kochut (I) and John A. Miller (I), "Integrated Technology Resource for Biomedical Glycomics," (Core 4: Bioinformatics of Glycan Expression), National Center for Research Resources (NCRR), National Institutes of Health (NIH).

12. October 2003 to December 2006 - \$1,250,000 - with match \$1,250,000, Comp. Sc. total \$597,705
Amit P. Sheth (PI), I. Budak Arpinar (Co-PI), John A. Miller (Co-PI), Krys J. Kochut (Co-PI), at
UMBC: Joshi (Co-PI), Finin (Co-PI), Yesha (Co-PI), “SemDis: Discovering Complex Relationships in
Semantic Web,” National Science Foundation, Information Technology Research (NSF-ITR).
13. October 2005 to December 2007 - \$100,000 - with match \$100,000.
Amit P. Sheth (PI), I. Budak Arpinar (Co-PI), Krys J. Kochut (Co-PI) and John A. Miller (Co-PI),
“SemGrid: Semantic Discovery on Adaptive Services Grid,” (Subcontract of 12), National Science Founda-
tion, Information Technology Research (NSF-ITR).
14. January 2007 to December 2007 - \$68,947 - with match \$68,947.
I. Budak Arpinar (PI), John A. Miller (Co-PI) and Krys J. Kochut (Co-PI), “SemDis: Discovering Com-
plex Relationships in Semantic Web,” (Subcontract of 12), National Science Foundation, Information
Technology Research (NSF-ITR).
15. November 2003 to June 2004 - \$73,740 - with match \$73,740.
Eileen T. Kraemer, Leon Deligiannidis and John A. Miller, “Enhanced Learning through Virtual Re-
ality,” Learning Technology Grant, Office of Instructional Student Development (OISD).
16. January 2004 to December 2004 - \$28,000 - with match \$28,000.
Amit P. Sheth and John A. Miller, “IBM Eclipse Innovation Grant: Integrating Teaching and Research
for Semantic Web Processes,” International Business Machines (IBM) Eclipse Foundation.
17. July 2004 to June 2009 - \$3,009,736 - with match \$3,009,736, Comp. Sc. total \$538,816.
Jessica C. Kissinger (Co-PI), in Comp. Sc.: John A. Miller (I) and Eileen T. Kraemer (I), “Integrated
Databases for Apicomplexan Pathogens,” UGA portion of UPenn/UGA grant, David Roos [UPenn] (PI),
National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH).
18. January 2005 to December 2005 - \$27,000 - with match \$27,000.
Amit P. Sheth and John A. Miller, “IBM Eclipse Innovation Grant: Integrating Teaching and Research
for Semantic Web Processes,” (Renewal), International Business Machines (IBM) Eclipse Foundation.
19. August 2008 to May 2013 - \$7,181,510 - with match \$7,181,510, Comp. Sc. total \$625,860.
Michael Pierce (PI), Stephen Dalton (SI), Kelley Moremen (SI), Ron Orlando (SI), Parastoo Azadi (SI),
Lance Wells (SI), William S. York (SI), in Comp. Sc.: Krys J. Kochut (I) and John A. Miller (I), “In-
tegrated Technology Resource for Biomedical Glycomics,” (Renewal), (Core 4: Bioinformatics of Glycan
Expression), National Center for Research Resources (NCRR), National Inst01 GM093132ealth (NIH).
20. April 2010 to March 2014 - \$432,022 - with match \$432,022.
Christian J. Stoeckert, Jr (PI), Jessica C. Kissinger (Co-PI), John A. Miller (Co-PI), Natasha Noy (Co-PI),
“Integrative Tools for Protozoan Parasite Research,” National Institutes of Health (NIH).
21. August 2013 to June 2015 - \$4,160,000 - with match \$4,160,000

J. Michael Pierce (PI), Parastoo Azadi (SI), Stephen Dalton (SI), Richard Steet (SI), Michael Tiemeyer (SI), Lance Wells (SI), Ron Orlando (SI), Kelley Moremen (SI), William S. York (SI), in Comp. Sc.: Krys J. Kochut (I) and John A. Miller (I), “National Center for Biomedical Glycomics,” (Renewal), (TR&D 4: Bioinformatics), National Institute of General Medical Sciences (NIGMS), National Institutes of Health (NIH).

5.1 Grants Pending:

6 Recognitions and Achievements:

1. 2010-present: Developed the SCALATION Big Data Simulation Environment. This work is one of the first simulation systems supporting Big Data Simulation. It supports big data analytics and optimizations as well as simulation modeling. This work was first presented at WSC'10 (the premier simulation conference). It currently consists of over 170,000 lines of Scala code.
2. 2010: Received best paper award at a database/information systems research conference. The paper titled "CoMaP: A Cooperative Overlay-based Mashup Platform," won Best Paper at the 18th International Conference on Cooperative Information Systems (CoopIS'10), held in Crete, Greece.
3. 2009-present: Appointed an Associate Editor for a top Journal in simulation, SIMULATION: Transactions of the Society for Modeling and Simulation International (SIM).
4. 2009-2010: Candidate for Vice Chair of the ACM Special Interest Group on Simulation and Modeling (SIGSIM).
5. 2006-2007: Appointed as an Invited Expert on the W3C Working Group, Semantic Annotation for the Web Services Description Language (SAWSDL).
6. 2005-present: Appointed the Editorial Board for a new Journal in simulation, Journal of Simulation (JOS).
7. 2004-present: Appointed the Editorial Board for a new Journal in simulation and process modeling, International Journal of Simulation and Process Modelling (IJSPM).
8. 2002-2014: Developed the METEOR-S Semantic Web Services (SWS) system (with Dr. Sheth) for creating dynamic Web service processes. Also, created the WSDL-S specification that lead to the W3C standardization of SAWSDL.
9. 1999-present: Appointed an Associate Editor for the premier Journal in simulation, ACM Transactions on Modeling and Computer Simulation (TOMACS).
10. 1999-2012: Appointed an Associate Editor for a top Journal in systems, IEEE Transactions on Systems, Man and Cybernetics (TSMC).
11. 1999: Developed and demonstrated (with David Hall) a workflow application for genome sequencing at the NSF site visit for the Science and Technology Center (STC) proposed by Dr. Arnold.
12. 1998: Developed and demonstrated a workflow application for patient referral between medical facilities for the final NIST review of the multi-million dollar Healthcare Information Infrastructure Technology (HIIT) project.
13. 1995-2010: Developed the JSIM Web-based simulation environment. This work is one of the first simulation systems meant for the Web and coded in Java. Presentation of this work along with two papers by other authors in a session at WSC'96 (the premier simulation conference) mark the beginning of the rapidly growing research area of Web-based simulation. It consists of over 50,000 lines of Java code.
14. 1995-2003: More than doubled the size (from 40 to 100 students) of the graduate program in Computer Science during term as Graduate Coordinator, 1995-2003, while improving the quality of the incoming students at the same time.

15. 1995-2001: Developed the METEOR Workflow Management System (WfMS) (with Drs. Sheth and Kochut) which consists of over 100,000 lines of C++ code. METEOR is probably the best known WfMS coming out of academia. METEOR has already been used by several organizations across the country: Medical College of Georgia (MCG), Connecticut Healthcare Research and Education Foundation (CHREF), Advanced Technology Institute (ATI), Microelectronics and Computer Technology Corporation (MCC), Naval Research Lab (NRL), Bellcore, Boeing, and Visigenic.
16. 1995-1997: Selected as a Beta Test Site for Sun Microsystems DOE and NEO CORBA products for distributed object management.
17. 1995-1996: Played a key role in proposing and developing the Ph.D. in Computer Science Degree.
18. 1993-1994: Consulted with the Franklin College of Arts and Sciences Dean's Office in the development of its Financial Information System.
19. 1991-1996: Elected to leadership track for the Annual Simulation Symposium. Secretary of the 24th (1991), Vice President of the 25th (1992), President/General Chair of the 26th (1993), and member of the Board of Directors for 27th-29th (1994-96). The Annual Simulation Symposium is the oldest continuously operating international conference/symposium dedicated to simulation. It is sponsored by the SCS and co-sponsored by the ACM and the IEEE Computer Society. The Annual Simulation Symposium, Inc. was incorporated in the state of Florida.
20. 1991: Research work highlighted in simulation journal. The paper entitled "Design of a CLOS Version of Active KDL: A Knowledge/Data Base System Capable of Query Driven Simulation," for which Dr. Miller was the second author and presented the paper, was highlighted for its quality and innovativeness by Dr. A. Martin Wildberger in his July AI & Simulation Column which appears in Simulation: The Journal of the Society for Computer Simulation. Dr. Wildberger was also the chair for the AI and Simulation Conference, held in New Orleans, Louisiana (1991), at which this paper was presented.
21. 1990: Received best paper award at a simulation research conference. The paper titled "Model Instantiation for Query Driven Simulation in Active KDL," for which Dr. Miller was the lead author and presented the paper, won the Ira M. Kay Memorial Prize of \$500 for Best Paper at the 23rd Annual Simulation Symposium (ANNS'90), held in Nashville, Tennessee.
22. 1989-1993: Developed the ACTIVE KDL Object-Oriented Database Management System (DBMS) (with Drs. Potter and Kochut) which features high-level functional languages for defining schema, formulating queries and writing database applications. It was written in C++.
23. 1988-1990: Designed and implemented the SIMODULA simulation language which has been used in the department's simulation classes and has been distributed to EG&G Idaho, Inc. at the Idaho National Engineering Laboratory. It was written in Modula-2.
24. Prior to joining the University of Georgia:
 - (a) Graduated with Distinction from Northwestern University's Technological Institute.
 - (b) Graduated with Co-Operative Education Certificate for completing a multi-quarter co-op program at Northwestern University by working at the Princeton Plasma Physics Laboratory providing software development for physicists carrying out nuclear fusion energy R&D. Developed software for two very important tokamaks, the Princeton Large Torus (PLT) and the Poloidal Diverter Experiment (PDX).
 - (c) Elected to an Honorary Engineering Society as a member of the Northwestern University chapter of Tau Beta Pi.
 - (d) Elected Vice President of the Gamma Rho chapter of the Pi Kappa Alpha fraternity at Northwestern University.

7 Supervision of Student Research:

7.1 Ph.D. Dissertations:

1. Mustafa V. Nural, “Automated Predictive Big Data Analytics Using Ontology,” Doctoral Dissertation (Ph.D. in CS Degree) Expected 2017. Committee: John A. Miller (Major), Jessica C. Kissinger, Khaled Rasheed and Hamid R. Arabnia, Employed by .
2. Khalifeh Al Jadda, “Scaling Up Machine Learning Algorithms to Handle Big Data,” Doctoral Dissertation (Ph.D. in CS Degree) December 2014. Committee: John A. Miller (Major), William S. York (Co-Major), Krys J. Kochut and Khaled Rasheed, Employed by CareerBuilder, Atlanta, GA.
3. Arash J.Z. Fard, “Subgraph Pattern Matching: Models, Algorithms, and Techniques,” Doctoral Dissertation (Ph.D. in CS Degree) July 2014. Committee: John A. Miller (Major), Lakshmish Ramaswamy (Co-Major), Hamid R. Arabnia, Krys J. Kochut, Employed by HP Vertica, Cambridge, MA.
4. Gregory A. Silver, “Ontology Driven Simulation using DeMO and JSIM,” Doctoral Dissertation (Ph.D. in CS Degree) April 2013. Committee: John A. Miller (Major), William S. York, Maria Hybinette, Hamid R. Arabnia, Employed by Anderson University (Assistant Professor), Anderson, SC.
5. Jun Han, “Quantitative Glycomics Using Simulation Optimization,” Doctoral Dissertation (Ph.D. in CS Degree) August 2012. Committee: John A. Miller (Major), William S. York, Krys J. Kochut and Maria Hybinette, Employed by Yext, Inc., New York, NY.
6. Rui Wang, “Algorithms for Semi-Automatic Web Service Composition: Data Mediation and Service Suggestion,” Doctoral Dissertation (Ph.D. in CS Degree) April 2011. Committee: Eileen T. Kraemer (Major), John A. Miller (Co-Major), Hamid R. Arabnia and Jessica C. Kissinger, Employed by Critical Mention, Inc., New York NY.
7. Osama Al-Haj Hassan, “Scalability and Efficiency in Personalized Web Services,” Doctoral Dissertation (Ph.D. in CS Degree) July 2010. Committee: Lakshmish Ramaswamy (Major), John A. Miller (Co-Major), Thiab Taha and Maria Hybinette. Employed by Al-Isra University (Assistant Professor), Amman, Jordan.
8. Angela I. Maduko, “Graph Summaries for Optimizing Graph Pattern Queries on RDF Databases,” Doctoral Dissertation (Ph.D. in CS Degree) April 2009. Committee: Amit P. Sheth (Major) and John A. Miller (Co-Major), I. Budak Arpinar, Krys J. Kochut and Jonathan Arnold. Employed by ADVIS Lab, University of Illinois at Chicago, Chicago, IL.
9. Zhiming (Sammy) Wang, “Using Web Services to Integrate Data and Compose Analytic Tools in the Life Sciences,” Doctoral Dissertation (Ph.D. in CS Degree) July 2008. Committee: John A. Miller (Major), Jessica C. Kissinger, Eileen T. Kraemer, Khaled Rasheed, Alan Gingle. Employed by NINDS, National Institutes of Health (NIH), Bethesda, MD.
10. Kunal Verma, “Configuration and Adaptation of Semantic Web Processes,” Doctoral Dissertation (Ph.D. in CS Degree) June 2006. Committee: John A. Miller (Major) and Amit P. Sheth (Co-Major), Robert P. Bostrom, I. Budak Arpinar, Ling Liu (Georgia Tech), Employed by Accenture, Palo Alto, CA.

7.2 M.S. Theses:

1. Vishnu Gowda Harish, “A Big Data Platform Integrating Compressed Linear Algebra with Columnar Databases,” Masters Thesis (M.S. in CS Degree) January 2017. Employed by Manhattan Associates, Atlanta, GA.
2. Zhe Jin, “Bayesian Networks with Structural Restrictions: Performance and Parallelizations,” Masters Thesis (M.S. in CS Degree) July 2016. Employed by FedEx Corp., Memphis, TN.

3. Zhaochong Liu, "Parallel Matrix Factorization in Big Data Analytics," Masters Thesis (M.S. in CS Degree) July 2016. Employed by Coca-Cola, Atlanta, GA.
4. Sumana Venkatesh, "Subgraph Pattern Matching for Graph Databases," Masters Thesis (M.S. in CS Degree) December 2014. Employed by .
5. Naman Fatehpuria, "Parallel Support Vector Machines Using SMO," Masters Thesis (M.S. in CS Degree) November 2014. Employed by Walmart Labs, Sunnyvale, CA.
6. Sameer Gaherwar, "Efficient Transfer of Scientific Data," Masters Thesis (M.S. in CS Degree) November 2014. Employed by mGage, Atlanta, GA.
7. Ayushi Jain, "Parallel Algorithms for Subgraph Pattern Matching," Masters Thesis (M.S. in CS Degree) July 2014. Employed by Symantec Corp., Mountain View, CA.
8. Matthew Saltz, "A Fast Algorithm for Subgraph Pattern Matching on Large Labeled Graphs," Masters Thesis (M.S. in CS Degree) July 2013. Enrolled in Erasmus Mundus Master's of Data Mining and Knowledge Management, University of Lyon 2, Lyon, France.
9. M. Usman Nisar, "A Comparison of Techniques for Graph Analytics on Big Data," Masters Thesis (M.S. in CS Degree) April 2013. Employed by LandMark Resources (LMKR), Inc. Islamabad, Pakistan.
10. Yung-Long Li, "Evaluation of Parallel Implementations of Dense and Sparse Matrices for the ScalaTion Library," Technical Report (M.A.M.S. Degree) December 2012. Employed by EITS, University of Georgia, Athens, GA.
11. Singaram Sundar, "Invocation of Web Services in Glycomics Portal," Masters Thesis (M.S. in CS Degree) July 2012. Advisors: William S. York (Major) and John A. Miller (Co-Major). Employed by CSG International, Atlanta, GA.
12. Alok Dhamanaskar, "Bioinformatics Workflow Design Using Semantically Annotated Web Services," Masters Thesis (M.S. in CS Degree) July 2012. Advisors: Jessica C. Kissinger (Major) and John A. Miller (Co-Major). Employed by Kissinger Lab, University of Georgia, Athens, GA.
13. Ki Tae Myoung, "Keyword Search in the Glycomics Portal," Masters Thesis (M.S. in CS Degree) April 2012. Employed by CCRC, University of Georgia, Athens, GA.
14. Haseeb Yousaf, "Performance Evaluation of Java Object-Relational Mapping Tools," Masters Thesis (M.S. in CS Degree) April 2012. Employed by the Environmental Protection Agency, Athens, GA.
15. Chaitanya Guttula, "RadiantWeb: A Tool Facilitating Semantic Annotation of Web Services," Masters Thesis (M.S. in CS Degree) April 2012. Employed by CCRC, University of Georgia, Athens, GA.
16. Naga Krishna Gollapudi, "SemCloud: Using Semantics to Improve Automation on a Cloud," Masters Thesis (M.S. in CS Degree) July 2010. Employed by EITS, University of Georgia, Athens, GA.
17. Shiva Sandeep Garlapati, "Comparative Evaluation of SAWSDL-Based Semantic Web Service Discovery Algorithms," Masters Thesis (M.S. in CS Degree) July 2010. Employed by OVPR, University of Georgia, Athens, GA.
18. Sumedha Ganjoo, "Extending Galaxy with Semantic Web Services," Masters Thesis (M.S. in CS Degree) July 2010. Employed by Employed by National Instruments, Austin, TX.
19. Srikalyan Swayampakula, "Service Oriented Web Applications: GlycoVault as a Case Study," Masters Thesis (M.S. in CS Degree) April 2010. Employed by SemanticBits, Herndon, VA.

20. Sadiq Charaniya, "Facilitating DL Reasoners through Ontology Partitioning," Masters Thesis (M.S. in CS Degree) April 2010. Employed by OVPR, University of Georgia, Athens, GA.
21. Shefali Shastri, "Use of Semantics in Designing and Executing Scientific Workflows: A Case Study Using Galaxy," Masters Thesis (M.S. in CS Degree) December 2009. Employed by EITS, University of Georgia, Athens, GA.
22. Cary Marcus Pennington, "Building Federated Bioinformatics Databases Using Web Services," Masters Thesis (M.S. in CS Degree) October 2009. Employed by Kissinger Lab, University of Georgia, Athens, GA
23. Kushel Rai Bellipady, "Ontology Driven Simulation Using Ontology Mediation Techniques," Masters Thesis (M.S. in CS Degree) July 2009. Employed by Epic Systems Corporation, Madison-Verona, WI.
24. Savitha Emani, "A Comparative Evaluation of Semantic Web Service Discovery: Algorithms and Engines," Masters Thesis (M.S. in CS Degree) April 2009. Employed by G. Narayanamma Institute of Technology and Sciences (Assistant Professor), Hyderabad, India.
25. Kishore Nimmagadda, "Ontology Driven Simulation of Biochemical Pathways Using Hybrid Petri Nets," Masters Thesis (M.S. in CS Degree) December 2008. Employed by EITS, University of Georgia, Athens, GA.
26. Shravya S. Nimmagadda, "GlycoVault: A Web-Based Resource for Glycan Pathway Visualization, Analysis and Modeling," Masters Thesis (M.S. in CS Degree) July 2008. Employed by Capgemini, Atlanta, GA.
27. Rajesh Narra, "Qrator: A Population and Curation Tool for the Glyco Ontology," Masters Thesis (M.S. in CS Degree) July 2008. Advisors: John A. Miller (Major) and William S. York (Co-Major). Employed by E-Trade, Atlanta, GA.
28. Jonathan D. Lathem, "SA-REST: Adding Semantics to REST-Based Web Services," Masters Thesis (M.S. in CS Degree) July 2007. Advisors: Amit P. Sheth (Major) and John A. Miller (Co-Major). Employed by Athens Heart Center, Athens, GA.
29. Richard S. Patterson, "Security and Authorization Issues in HL7 Electronic Health Records: A Semantic Web Services Based Approach," Masters Thesis (M.S. in CS Degree) August 2006. Employed by Knowledge Integrity, Washington, DC.
30. Ivan Vasquez, "Providing Fault Tolerance for Transactional Web Services," Masters Thesis (M.S. in CS Degree) April 2006. Employed by ITOS, University of Georgia, Athens, GA.
31. Ke Li, "Lumina: Using WSDL-S for Web Service Discovery," Masters Thesis (M.S. in CS Degree) December 2005. Employed by Employease, Inc., Atlanta, GA.
32. William H. Milnor, III, "Discovering Informative Subgraphs in RDF Graphs," Masters Thesis (M.S. in CS Degree) August 2005. Advisors: Amit P. Sheth (Major) and John A. Miller (Co-Major). Employed by TopQuadrant, Inc., Beaver Falls, PA.
33. Zhijun Zhang, "Ontology Query Languages for the Semantic Web: A Performance Evaluation," Masters Thesis (M.S. in CS Degree) June 2005. Employed by .
34. Ranjit Mulye, "METEOR-S Process Design and Development Tool," Masters Thesis (M.S. in CS Degree) March 2005. Employed by Oblix, Inc., Cupertino, CA.
35. Preeda L. Rajasekaran, "Enhancing Web Service Descriptions using WSDL-S," Masters Thesis (M.S. in CS Degree) December 2004. Employed by Semagix, Athens, GA.

36. Rohit Aggarwal, "Constraint Driven Web Service Composition in METEOR-S," Masters Thesis (M.S. in CS Degree) July 2004. Employed by Convergys, Inc., Orlando, FL.
37. Kaarthik Sivashanmugam, "The METEOR-S Framework for Semantic Web Process Composition," Masters Thesis (M.S. in CS Degree) August 2003. Employed by Semagix, Athens, GA.
38. Senthilanand Chadrsekaran, "Composition, Performance Analysis and Simulation of Web Services," Masters Thesis (M.S. in CS Degree) September 2002. Employed by Factset Research Systems, Boston, MA.
39. Sudhanshu Sipani, "Design and Performance of an XML Database Engine: Db4XML," Masters Thesis (M.S. in CS Degree) June 2002. Employed by General Electric (GEPS Energy Products), Schenectady, NY.
40. Minrong Song "RepoX: A Repository for Workflow Designs and Specifications," Masters Thesis (M.S. in CS Degree) August 2001. Enrolled in MBA Program at Michigan State University, Lansing, MI.
41. Xiang Fang "J3DV: A Java-Based 3D Database Visualization Tool," Masters Thesis (M.S. in CS Degree) August 2001. Employed by InVision Technologies, San Francisco, CA.
42. Maria Chinwala, "Algebraic Languages for XML Databases," Masters Thesis (M.S. in CS Degree) July 2001. Employed by ITOS, University of Georgia, Athens, GA.
43. Rakesh Malhotra, "XML Database Engines," Masters Thesis (M.S. in CS Degree) July 2001. Employed by Earthdata, High Point, NC.
44. Xueqin (Lily) Huang, "XML-Based Messaging for the JSIM Simulation Environment," Masters Thesis (M.S. in CS Degree) May 2001. Employed by Portal, Atlanta, GA.
45. Hui Tian, "Storage Management Issues for High Performance Database Visualization," Masters Thesis (M.S. in CS Degree) December 2000. Employed by Radiant Systems, Atlanta, GA.
46. William K. Szaroletta, "Data Mining of Financial Time Series Data to Enhance Portfolio Management," Technical Report (M.A.M.S. Degree) July 2000. Employed by Purdue University (Assistant Professor), West Lafayette, IN.
47. Junxiu Tao, "HLA-Compliant Distributed JSIM," Masters Thesis (M.S. in CS Degree) May 2000. Employed by Intergraph, Corp., Huntsville, AL.
48. Sonali C. Sheth, "Query Languages and Tools for XML Documents," Masters Thesis (M.S. in CS Degree) July 1999. Employed by NightFire Software, Inc., Berkeley, CA.
49. Mei Fan "Security for the METEOR Workflow Management System," Masters Thesis (M.S. in CS Degree) April 1999. Employed by NEA, Inc., Atlanta, GA.
50. Xuewei Xiang, "Use of Agents to Control the Execution of Simulation Components," Masters Thesis (M.S. in CS Degree) April 1999. Employed by Sprint Applied Technology Center, Atlanta, GA.
51. Yongfu Ge, "Development of a Web-Based Simulation Environment Using Java Beans," Masters Thesis (M.S. in CS Degree) December 1998. Employed by CMD Services, Atlanta, GA.
52. Hongwei Zhao, "A Graphical Designer for JSIM," Masters Thesis (M.S. in CS Degree) September 1997. Employed by Nexgen SI, Atlanta, GA.
53. Weixiong (Simon) Xu, "NEOWork: A Reliable CORBA-Based Workflow Enactment System for METEOR₂," Masters Thesis (M.S. in CS Degree) September 1997. Employed by BuildNet, Inc., Raleigh, NC.

54. Devanand Palaniswami, "Development of WebWork: METEOR₂'s Web-based Workflow Management System," Masters Thesis (M.S. in CS Degree) June 1997. Employed by the University of Georgia (OVPAA), Athens, GA.
55. Leonard P. LaConte, Jr., "SWORDD: A Simple Widely-Available Object-Relational Database Design-Tool," Masters Thesis (M.S. in CS Degree) June 1997. Employed by Raytheon Company, Boston, MA.
56. Zhiwei Zhang, "A Java-Based Simulation and Animation Environment: JSIM's Foundation Library," Masters Thesis (M.S. in CS Degree) March 1997. Employed by ICL, Greenville, SC.
57. Rajesh S. Nair, "JSIM: A Java-Based Query Driven Simulation and Animation Environment," Masters Thesis (M.S. in CS Degree) March 1997. Employed by Sun Microsystems, Inc., Mountain View, CA.
58. Aideen M. Dennis, "Simulation of the Time Warp Protocol for Database Transaction Management," Masters Thesis (M.S. in CS Degree) December 1996. Employed by Exploration Resources, Athens, GA.
59. Xuzhong (Richard) Wang, "Implementation and Performance Evaluation of CORBA-Based Centralized Workflow Schedulers," Masters Thesis (M.S. in CS Degree) August 1995. Employed by Datastream Systems Inc., Greenville, SC.
60. Bonnie M. Edwards, "Implementing and Evaluating Common Repository Services," Masters Thesis (M.S. in CS Degree) March 1995. Employed by ActaMed, Atlanta, GA.
61. Ihab Ezzat Abuelenein, "Interoperability, from a Database Perspective," Masters Thesis (M.S. in CS Degree) September 1994. Employed by AT&T, Riyadh, Saudi Arabia.
62. Sumit Roy, "Parallel Implementation and Performance Analysis for the Relational Join Operator," Masters Thesis (M.S. in CS Degree) September 1994. Employed by CAP Gemini America, Atlanta, GA.
63. Wensheng Zhang, "GPOMT: A CASE Design Tool Based on the Object Modeling Technique (OMT)," Masters Thesis (M.S. in CS Degree) June 1994. Employed by OneNet International Communications, Inc., Beachwood, OH.
64. Preeti Somal, "The Hybrid Protocol for Database Concurrency Control," Masters Thesis (M.S. in CS Degree) June 1994. Employed by Oracle Corp., Redwood Shores, CA.
65. Deepa Ramesh, "Hybrid Transaction Management Protocol: Combining Time Warp and Multiversion Timestamp Ordering," Masters Thesis (M.S. in CS Degree) March 1994. Employed by Hewlett-Packard Company, Cupertino, CA.
66. Xilong Chen, "An Expert System for Herbal Medicine Diagnosis and Prescription," Masters Thesis (M.S. in AI Degree) September 1993. Employed by Ospray Systems, Inc., Charlotte, NC.
67. David G. Ason, "Transaction Management: A Simulation of TimeWarp and Multi-Version Timestamp Ordering Concurrency Control Protocols," Masters Thesis (M.S. in CS Degree) March 1993. Employed by AT&T, Atlanta, GA.
68. Krishna Puppala, "Distributed Persistent Object Manager," Masters Thesis (M.S. in CS Degree) July 1992. Employed by IGENESIS, New York, NY.
69. Nilesh R. Parate, "Object-Oriented Databases: The Time Warp Protocols for Concurrency Control," nominated for the James L. Carmon Thesis Research Scholarship, Masters Thesis (M.S. in CS Degree) June 1992. Employed by Oracle Corp., Redwood Shores, CA.
70. Hao Wan, "Efficient Algorithms for Relational Database Normalization," Technical Report (M.A.M.S. Degree) June 1992. Employed by KnowledgeWare, Atlanta, GA.

71. Xiaoying Liu, "Simulation of Multiversion Concurrency Control Protocols," Masters Thesis (M.S. in CS Degree) November 1991. Employed by the H.V. Jones Company, Houston, TX.
72. Ravi V. Gandham, "Evaluation of Hybrids of Hill Climbing and Genetic Algorithms," Masters Thesis (M.S. in CS Degree) September 1991. Employed by Microsoft Corp., Redmond, WA.
73. Minjane Jan, "Comparing Simulation World Views Using SIMODULA," Technical Report (M.A.M.S. Degree) August 1991. Employed by K-RIM, Atlanta, GA.
74. Ravi S. Vemuri, "Indexing Techniques in Relational and Object-Oriented Databases," Masters Thesis (M.S. in CS Degree) September 1990. Employed by West Georgia College (Assistant Professor), Carrollton, GA.
75. Ender Ucar, "Schema Processing in the KDL Object-Oriented Database System," Masters Thesis (M.S. in CS Degree) September 1990. Employed by UniSQL, Austin, TX.
76. Ali A. Keskin, "A Query and Rule Processing System for the KDL Object-Oriented Database System," Masters Thesis (M.S. in CS Degree) August 1990. Employed by UniSQL, Austin TX.
77. Shou-Shan Yeh, "Comparison of Khachiyan's Algorithm with the Simplex Algorithm," Technical Report (M.A.M.S. Degree) June 1988. Employee by Westinghouse Electric Company, Pittsburgh, PA.
78. Kuen-Yuan (David) Suen, "Development of a Modula-2 Simulation System and a Simulation Study of a Virtual Memory System," Technical Report (M.A.M.S. Degree) March 1988. Employed by Advanced Technology Development Center (ATDC), Atlanta, GA.

• **10 PhD + 72 MS + 6 MAMS = 88**

7.3 Service on Graduate Student Committees (25 PhD + 96 MS + 12 MAMS = 133):

- Ph.D. in Computer Science: Total = 21
- Ph.D. in Bioinformatics: Total = 2
- Ph.D. in Business: Total = 2
- M.S. in Computer Science: Total = 88
- M.S. in Artificial Intelligence: Total = 7
- M.S. in Bioinformatics: Total = 1
- Masters in Applied Mathematical Sciences (M.A.M.S.): Total = 12

8 Professional Activity:

8.1 Editorship or Editorial Board Member:

1. *Associate Editor*: SIMULATION: Transactions of the Society for Modeling and Simulation International (SIM), 2009-.
2. *Associate Editor*: ACM Transactions on Modeling and Computer Simulation (TOMACS), 1999-.
3. *Associate Editor*: IEEE Transactions on Systems, Man and Cybernetics (TSMC), 1999-2012.
4. *Editorial Board Member*: Journal of Simulation (JOS), 2005-.
5. *Editorial Board Member*: International Journal of Simulation and Process Modelling (IJSPM), 2004-.
6. *Editor*: Proceedings of the 13th IEEE International Conference on Services Computing (SCC'16), 2016.
7. *Editor*: Proceedings of the 22nd IEEE International Conference on Web Services (ICWS'15), 2015.
8. *Editor*: Proceedings of the 46th ACM/IEEE Winter Simulation Conference (WSC'14), 2014.
9. *Editor*: Proceedings of the 39th ACM Southeast Conference (ACM-SE'01), 2001.
10. *Editor*: Proceedings of the 26th Annual Simulation Symposium (ANSS'93), 1993.
11. *Guest Editor*: IEEE Transactions on Services Computing (TSC), Special Issue on Advances in Web Services Research, 2017. (in press)
12. *Guest Editor*: Journal of Simulation (JOS), Special Issue on Enhancing Simulation Composability and Interoperability using Conceptual/Semantic/Ontological Models, 2011.
13. *Guest Editor*: IEEE Potentials (IEEE-PT), Special Issue on Web-Based Simulation and Modeling, 2000.
14. *Guest Editor*: International Journal in Computer Simulation (IJCS), Special Issue on Object-Oriented Simulation, 1995.

8.2 Conference Organizational Committees:

1. *General Co-Chair*: The 14th IEEE International Conference on Services Computing (SCC'17), Honolulu, Hawaii (June-July 2017).
2. *Program Co-Chair*: The 1st Open Science in Big Data Workshop (OSBD 2016), part of the IEEE International Conference on Big Data (IEEE BigData'16) Washington, DC (December 2016).
3. *Program Co-Chair*: The 13th IEEE International Conference on Services Computing (SCC'16), San Francisco, California (June-July 2016).
4. *Program Co-Chair*: The 22nd IEEE International Conference on Web Services (ICWS'15), New York, New York (June-July 2015).
5. *Panel Moderator*: "Plenary Panel 1: The Arc of Research Activity in Key Areas of Services Computing," The 22nd IEEE International Conference on Web Services (ICWS'15), New York, New York (June-July 2015).
6. *Program Chair*: The 46th ACM/IEEE Winter Simulation Conference (WSC'14), Savannah, Georgia (December 2014).

7. *Track Co-Chair*: The 21st IEEE International Conference on Web Services (ICWS'14), Applications and Industry Track, Anchorage, Alaska (June 2014).
8. *Track Co-Coordinator*: The 45th ACM/IEEE Winter Simulation Conference (WSC'13), Poster Session Track, Washington, D.C. (December 2013).
9. *Track Co-Chair*: The 20th IEEE International Conference on Web Services (ICWS'13), Applications and Industry Track, Santa Clara, California (June 2013).
10. *Track Co-Chair*: The 9th IEEE International Conference on Services Computing (SCC'12), Application and Industry Track, Honolulu, Hawaii (June 2012).
11. *Track Coordinator*: The 41st ACM/IEEE Winter Simulation Conference (WSC'09), Simulation Interoperability Track, Austin, Texas (December 2009).
12. *Organization Chair*: The 4th International Workshop on Semantic Web for Services and Processes (SWSP'07), a workshop in the 2007 IEEE International Conference on Web Services (ICWS'07). Salt Lake City, Utah (July 2007).
13. *Panel Moderator*: "Panel on Academic and Industrial Research: Do Their Approaches Differ in Adding Semantics to Web Services?" Semantic Web Services and Web Process Composition: 1st International Workshop (SWPC'04), San Diego, California (July 2004).
14. *Track Coordinator*: The 34th ACM/IEEE Winter Simulation Conference (WSC'02), Modeling Methodologies Track, San Diego, California (December 2002).
15. *Program Chair and Exhibits Chair*: The 39th ACM Southeast Conference (ACM-SE'01), Athens, Georgia (March 2001).
16. *Panel Moderator*: "Panel on Research and Commercial Opportunities in Web-Based Simulation," The 3rd International Conference on Web-Based Modeling and Simulation (WEBSIM'00), San Diego, California (January 2000).
17. *Local Arrangements Chair*: The 10th International Conference on Industrial & Engineering Applications of Artificial Intelligence and Expert Systems (IEA/AIE'97), Atlanta, Georgia (June 1997).
18. *Track Coordinator*: The 28th ACM/IEEE Winter Simulation Conference (WSC'96), Modeling Methodologies Track, Coronado, California (December 1996).
19. *Local Arrangements and Finance Chair*: NSF Workshop on Workflow and Process Automation in Information Systems (NSF-WF'96), Athens, Georgia (May 1996).
20. *Board of Directors*: The 29th Annual Simulation Symposium (ANSS'96) New Orleans, Louisiana (April 1996).
21. *Board of Directors*: The 28th Annual Simulation Symposium (ANSS'95) Phoenix, Arizona (April 1995).
22. *Track Coordinator*: The 26th ACM/IEEE Winter Simulation Conference (WSC'94), Modeling Methodologies Track, Orlando, Florida (December 1994).
23. *Board of Directors*: The 27th Annual Simulation Symposium (ANSS'94) La Jolla, California (April 1994).
24. *Publications Co-Chair*: The 1994 Workshop on Research Issues in Data Engineering (RIDE'94), Houston, Texas (February 1994).
25. *President/General Chair*: The 26th Annual Simulation Symposium (ANSS'93), Arlington, Virginia (April 1993).

26. *Vice President*: The 25th Annual Simulation Symposium (ANSS'92) Orlando, Florida (April 1992).
27. *Secretary*: The 24th Annual Simulation Symposium (ANSS'91), New Orleans, Louisiana (April 1991).

8.3 Session Chair/Organizer:

1. Applications Session 4: “Big Data Mining,” *The 2017 IEEE International Congress on Big Data*, Honolulu, Hawaii (June 2017), Speakers: Alberto Gonzalez, Huan Chen.
2. Session L2: “Link and Graph Mining I,” *The 2016 IEEE International Conference on Big Data*, Washington, DC (December 2016), Speakers: Nesreen Ahmed, Jianliang Gao, Chun Guo, Xiaokai Wei.
3. Session L5: “High Performance Platforms for Big Data,” *The 2016 IEEE International Conference on Big Data*, Washington, DC (December 2016), Speakers: Yuan Yuan, Zhuozhao Li, Timo Bingmann, Xiaoyi Lu, Nusrat Islam.
4. Full Paper Session: *The 1st Open Science in Big Data Workshop*, part of the IEEE International Conference on Big Data, Washington, DC (December 2016), Speakers: Hatem Monajemi, Ella Peltonen, Zhou Xing, Ruoqian Liu, Vishnu Gowda Harish, Geoffrey Mon.
5. Research Session 1: “Theory Applied to Composition,” *The 2015 IEEE International Conference on Web Services*, New York, New York (June-July 2015), Speakers: F. Alrebeish, R. Ghosh, S. Boubaker.
6. Visionary Session: *The 2015 IEEE International Conference on Web Services*, New York, New York (June-July 2015), Speakers: P.M. Melliar-Smith, I-Ling Yen.
7. Titans II: “Parallel and Distributed Simulation,” *The 2014 ACM/IEEE Winter Simulation Conference*, Keynote and Titans Track, Savannah, Georgia (December 2014), Speakers: Richard Fujimoto
8. Session: “Introduction to Information and Process Modeling,” *The 2014 ACM/IEEE Winter Simulation Conference*, Introductory Tutorials Track, Savannah, Georgia (December 2014), Speakers: Gerd Wagner
9. Session: “Simulation Modeling Tools and Analysis Methodologies,” *The 2013 ACM/IEEE Winter Simulation Conference*, Poster Session Track, Washington, DC (December 2013), Speakers: 12 speakers
10. Session: “Optimization Methods in Modeling,” *The 2011 ACM/IEEE Winter Simulation Conference*, Modeling Methodology Track, Phoenix, Arizona (December 2011), Speakers: M. Seck, G. Zou, A. Gosavi.
11. Session: “Security, Privacy and Trust,” *The 2011 IEEE International Web Services Conference*, Research Track 2, Washington, DC (July 2011), Speakers: S. Suriadi, A. Squicciarini, G. Liu.
12. Session: “Simulation Programming,” *The 2010 ACM/IEEE Winter Simulation Conference*, Modeling Methodology Track, Baltimore, Maryland (December 2010), Speakers: J. Miller, R. Gore, G. Wainer.
13. Session: “Ontological Support for Interoperability,” *The 2009 ACM/IEEE Winter Simulation Conference*, Simulation Interoperability Track, Austin, Texas (December 2009), Speakers: P. Benjamin, M. Johnson, G. Silver/J. Miller.
14. Session: “Business Process Execution Management,” *The 7th IEEE International Conference on Web Services*, Los Angeles, California (July 2009), Speakers: D. Karastoyanova, L. Baresi, M. Tanaka.
15. Session: “Ontology-Based Interoperability II,” *The 2007 ACM/IEEE Winter Simulation Conference*, Washington, DC (December 2007), Speakers: L. Yilmaz, A. Tolk, G. Silver/J. Miller.
16. Session: “Ontology Driven Simulation,” *The 2006 ACM/IEEE Winter Simulation Conference*, Monterey, California (December 2006), Speakers: P. Benjamin, U. Durak, G. Silver/J. Miller.

17. Session: “Web Service Architectures,” *The 4th IEEE International Conference on Web Services*, Chicago, Illinois (September 2006), Speakers: K. Ostrowski, E. Wohlstadter, N. Sadeh.
18. Session: “Verification and Testing,” *The 3rd IEEE International Conference on Web Services*, Orlando, Florida (July 2005), Speakers: T. Bultan, H. Foster, K. Mahbub, Z. Li.
19. Session: “Ontologies for Modeling and Simulation,” *The 2004 ACM/IEEE Winter Simulation Conference*, Washington, DC (December 2004), Speakers: P. Fishwick/J. Miller, K. Morse, L. Lacy.
20. Session 3: it 1st International Workshop on Semantic Web Services and Web Process Composition San Diego, California (July 2004) Speakers: M. Singh, Naveen Srinivasan, Ashok U. Mallya
21. Session: “Distributed Web-Based Component Architectures,” *The 2000 ACM/IEEE Winter Simulation Conference*, Orlando, Florida (December 2000), Speakers: P. Wilsey, P. Benjamin, J. Miller.
22. Session: “Web-Based Simulation I & II,” *The 1999 ACM/IEEE Winter Simulation Conference*, Phoenix, Arizona (December 1999), Speakers: P. Fishwick, C. Salisbury, A. Seila, M. Pidd, P. Wilsey, L. Belfore.
23. Session: “Web-Based Simulation,” *The 1998 ACM/IEEE Winter Simulation Conference*, Washington, DC (December 1998), Speakers: P. Fishwick, M. Pidd, J. Miller.
24. Session: “Simulation Languages, Tools, and Environments I,” *The 30th Annual Simulation Symposium*, Atlanta, Georgia (April 1997), Speakers: K. Lentz, D. Hommais, C. Tong.
25. Session: “Simulation Languages, Tools, and Environments,” *The 29th Annual Simulation Symposium*, New Orleans, Louisiana (April 1996), Speakers: A. van Moorsel, A. Sampogna, C. Lee.
26. Session: “Workflow and Transaction Management II,” *The 12th International Conference on Data Engineering*, New Orleans, Louisiana (February 1996), Speakers: M. Singh and B. Salzberg.
27. Session: “Methodologies for Workflow Modeling,” *The 1995 ACM/IEEE Winter Simulation Conference*, Arlington, Virginia (December 1995), Speakers: P. Benjamin, M. Marazakis, J. Miller.
28. Session: “Simulation Environments,” *The 1994 ACM/IEEE Winter Simulation Conference*, Orlando, Florida (December 1994), Speakers: R. Paul, H. Park, C. Standridge.
29. Session: “Transaction Processing and Active Databases,” *The 3rd International Conference on Parallel and Distributed Information Systems*, Austin, Texas (September 1994), Speakers: D. Lomet, B. Salzberg, A. Thomasian, R. Sivasankaran.
30. Session: “Parallel and Distributed Simulation,” *The 14th Annual IMACS World Congress*, Atlanta, Georgia (July 1994), Speakers: R. Fujimoto, J. Tsai, D. Ason, P. Somal.
31. Session: “Database-Centered Simulation Environments I & II,” *The 1993 ACM/IEEE Winter Simulation Conference*, Los Angeles, California (December 1993), Speakers: L. Delcambre, M. Centeno, S. Navathe, M. Hitz, M. Rovira, M. Lenard.
32. Session: “Computer System Performance Models,” *The 1992 ACM/IEEE Winter Simulation Conference*, Arlington, Virginia (December 1992), Speakers: W. Keezer, J. Miller, C. Knadler.
33. Session: “Simulation Models/Techniques/Tools II,” *The 25th Annual Simulation Symposium*, Orlando, Florida (April 1992), Speakers: W. Loucks, G. Franceschinis, W. Evanco, T. Chen.
34. Session: “Distributed/Concurrent Simulation II,” *The 24th Annual Simulation Symposium*, New Orleans, Louisiana (April 1991), Speakers: P. Konas, J. Steinman, P. Reiher.

8.4 Referee for Journals:

1. ACM Transactions on Modeling and Computer Simulation (TOMACS)
<http://tomacs.acm.org/>
2. SIMULATION: Transactions of the Society for Modeling and Simulation International (SIM)
<http://www.scs.org/simulation>
3. Journal of Simulation (JOS)
<http://www.palgrave-journals.com/jos/>
4. SCS Simulation: The Journal of the Society for Computer Simulation (JSCS)
now SCS M&S Magazine: <http://www.scs.org/msmagazine>
5. International Journal of Simulation and Process Modeling (IJSPM)
<http://www.inderscience.com/jhome.php?jcode=IJSPM>
6. International Journal in Computer Simulation (IJCS)
<http://www.informatik.uni-trier.de/Ley/db/journals/ijcs/index.html>
7. Future Generation Computer Systems Journal (FGCS)
<http://www.journals.elsevier.com/future-generation-computer-systems/>
8. Computers in Industry (COMIND)
<http://www.journals.elsevier.com/computers-in-industry/>
9. IEEE Transactions on Services Computing (TSC)
<http://www.computer.org/portal/web/tsc/>
10. International Journal on Semantic Web and Information Systems (IJSWIS)
<http://www.ijswis.org/>
11. Semantic Web Interoperability, Usability, Applicability (SWJ)
<http://www.iospress.nl/journal/semantic-web/>
12. IEEE Transactions on Systems, Man and Cybernetics (TSMC)
<http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=3477>
13. Information Sciences (INS)
<http://www.sciencedirect.com/science/journal/00200255>
14. Data & Knowledge Engineering (DKE)
<http://www.journals.elsevier.com/data-and-knowledge-engineering/>
15. IEEE Expert: Intelligent Systems and Their Applications (EXPERT)
now IEEE Intelligent Systems: <http://www.computer.org/portal/web/computingnow/intelligentsystems>
16. Expert Systems with Applications: An International Journal (ESWA)
<http://www.journals.elsevier.com/expert-systems-with-applications/>
17. Oxford Journal on Bioinformatics (BIOINF)
<http://bioinformatics.oxfordjournals.org/>

8.5 Program Committee Member/Reviewer for Conferences:

1. Winter Simulation Conference (WSC): 2016, 2015, 2014, 2013, 2011, 2009, 2007, 2006, 2005, 2002, 2000, 1999, 1998, 1996, 1995, 1994, 1993, 1992.
2. Annual Simulation Symposium (ANSS): 2005, 2004, 2003, 2002, 2001, 2000, 1999, 1998, 1997, 1996, 1995, 1994, 1993, 1992.
3. Emerging M&S Applications in Industry and Academia Symposium (EAIA): 2010.
4. IEEE International Conference on Web Services (ICWS): 2015, 2014, 2013, 2012, 2011, 2010, 2005.
5. IEEE International Conference on Services Computing (SCC): 2016, 2012, 2005.
6. IEEE International Conference on Service Economics (SE): 2012.
7. IEEE International Workshop on Scientific Workflows (SWF): 2012.
8. IEEE International Conference on Big Data (IEEE Big Data): 2016.
9. Open Science in Big Data Workshop (OSBD): 2016.
10. World-Wide Web (WWW): 2017, 2006.
11. International Semantic Web Conference (ISWC): 2008.
12. International Workshop on Semantic Web for Services and Processes (SWSP) 2007.
13. International Conference on Cooperative Information Systems (COOPIS): 2016, 2015, 2014, 2013, 2012, 2011, 2010.
14. International Conference on Enterprise Information Systems (ICEIS): 2008, 2007.
15. International Symposium on Collaborative Technologies and Systems (CTS): 2010.
16. International Conference on Data Engineering (ICDE): 1996, 1994.
17. Semantic Web and Databases Workshop (SWBD), held with ICDE: 2006.
18. Workshop on Research Issues in Data Engineering (RIDE), held with ICDE: 1996.
19. International Conference on Object-Oriented & Entity Relationship Modelling (ER): 1996.
20. ISCA International Conference on Parallel and Distributed Computing (ICPDC): 1993.
21. Hawaii International Conference on Systems Sciences (HICSS): 1991.
22. Supercomputing Conference (SC): 1990.
23. Annual ACM Southeast Conference (ACM-SE): 2012, 2001.

8.6 Reviewer for Funding Agencies:

1. National Science Foundation (NSF), Computer & Information Science & Engineering (CISE), 2004.
2. Louisiana Board of Regents, Louisiana Education Quality Support Fund Research and Development Component, 1990.

8.7 Memberships:

1. Association for Computing Machinery (ACM)
2. ACM Special Interest Group on Simulation (SIGSIM)
3. IEEE Computer Society
4. Society for Computer Simulation (SCS)
5. Tau Beta Pi Engineering Honorary Society

9 Presentations at Research Conferences/Meetings:

1. “Adding Support for Theory in Open Science Big Data,” *The 6th IEEE International Congress on Big Data (BigData17)*, Honolulu, Hawaii (June 2017).
2. John A. Miller, Casey N. Bowman, Vishnu Gowda Harish and Shannon Quinn, “Open Source Big Data Analytics Frameworks Written in Scala,” *The 5th IEEE International Congress on Big Data (BigData16)*, San Francisco, California (June-July 2016). MPEG-4 Part 14 (MP4) Presentation.
3. “ICWS 2015 Program Overview,” *The 22nd IEEE International Conference on Web Services (ICWS’15)*, New York, New York (June-July 2015).
4. “Plenary Panel 1: The Arc of Research Activity in Key Areas of Services Computing,” *The 22nd IEEE International Conference on Web Services (ICWS’15)*, New York, New York (June-July 2015).
5. “Research Directions in Big Data Graph Analytics,” *The 4th IEEE International Congress on Big Data (ICBD’15)*, New York, New York (June-July 2015).
6. “WSC 2014 Program Overview,” *The 46th ACM/IEEE Winter Simulation Conference (WSC’14)*, Savannah, Georgia (December 2014).
7. “Final Plans for the 2014 Winter Simulation Conference Program,” Winter WSC Board Meeting, *The 46th ACM/IEEE Winter Simulation Conference (WSC’14)*, Savannah, Georgia (December 2014).
8. “Detailed Plans for the 2014 Winter Simulation Conference Program,” *2014 WSC Summer Board Meeting*, Washington, DC (June 2014).
9. “Supporting a Modeling Continuum in ScalaTion: From Predictive Analytics to Simulation Modeling,” *The 45th ACM/IEEE Winter Simulation Conference (WSC’13)*, Washington, DC (December 2013).
10. “Plans for the 2014 Winter Simulation Conference Program,” Winter WSC Board Meeting, *The 45th ACM/IEEE Winter Simulation Conference (WSC’13)*, Washington, DC (December 2013).
11. “Techniques for Graph Analytics on Big Data,” *The 2nd IEEE International Congress on Big Data (ICBD’13)*, Santa Clara, California (June-July 2013).
12. “Updated Plans for the 2014 Winter Simulation Conference Program,” *2013 WSC Summer Board Meeting*, Washington, DC (June 2013).
13. “Internet-Based Self-Services: From Analysis and Design to Deployment,” *The 1st IEEE International Conference on Services Economics (SE’12)*, in conjunction with the 2012 IEEE International Conference on Web Services (ICWS’12), Honolulu, Hawaii (June 2012).
14. “Preliminary Plans for the 2014 Winter Simulation Conference Program,” *2012 WSC Summer Board Meeting*, Atlanta, Georgia (June 2012).
15. “Ontology Development and Usage for Protozoan Parasite Research,” *2012 National Center for Biomedical Ontology (NCBO) Project Meeting (NCBO’12)*, Stanford University, Stanford, California (March 2012).
16. “SoPT: Ontology for Simulation Optimization for Scientific Experiments,” *The 43rd ACM/IEEE Winter Simulation Conference (WSC’11)*, Phoenix, Arizona (December 2011).
17. “Initial Plans for the 2014 Winter Simulation Conference Program,” Winter WSC Board Meeting, *The 43rd ACM/IEEE Winter Simulation Conference (WSC’11)*, Phoenix, Arizona (December 2011).

18. "Web Service Composition using Service Suggestions," *The 2011 IEEE International Workshop on Formal Methods in Services and Cloud Computing (FM-S&C)* in conjunction with the 2011 IEEE International Conference on Web Services (ICWS), Washington, DC (July 2011).
19. "Using Domain Specific Languages for Modeling and Simulation: ScalaTion as a Case Study," *The 42nd ACM/IEEE Winter Simulation Conference (WSC'10)*, Baltimore, Maryland (December 2010).
20. "Ranking-Based Suggestion Algorithms for Semantic Web Service Composition," *The 2010 IEEE International Workshop on Web X.o (WebX)* in conjunction with the 2010 IEEE International Conference on Web Services (ICWS), Miami, Florida (July 2010)
21. "Supporting Interoperability Using the Discrete-event Modeling Ontology (DeMO)" *The 41st ACM/IEEE Winter Simulation Conference (WSC'09)*, Austin, Texas (December 2009).
22. "What Makes Good Research in Modeling and Simulation: Sustaining the Growth and Vitality of the M&S Discipline," (panel) *The 40th ACM/IEEE Winter Simulation Conference (WSC'08)*, Miami, Florida (December 2008).
23. "WS-BioZard: A Wizard for Composing Bioinformatics Web Services," *The 2nd IEEE International Workshop on Scientific Workflows (SWF'08)*, a workshop in the 5th IEEE International Conference on Services Computing (SCC'08), Honolulu, Hawaii (July 2008).
24. "From Domain Ontologies to Modeling Ontologies to Executable Simulation Models," *The 39th ACM/IEEE Winter Simulation Conference (WSC'07)*, Washington, DC (December 2007).
25. "Opening Remarks: Overview of Program," *The 4th International Workshop on Semantic Web for Services and Processes (SWSP'07)*, a workshop in the 2007 IEEE International Conference on Web Services (ICWS'07), Salt Lake City, Utah (July 2007).
26. "Ontology Based Representations of Simulation Models Following the Process Interaction World View," *The 38th ACM/IEEE Winter Simulation Conference (WSC'06)*, Monterey, California (December 2006).
27. "Workflow and Web Processes in Bioinformatics," *The Microsoft eScience Workshop at the Johns Hopkins University (MeSW'06)*, Baltimore, Maryland (October 2006).
28. "Optimal Adaptation in Web Processes with Coordination Constraints," *The 4th IEEE International Conference on Web Services (ICWS'06)*, Chicago, Illinois (September 2006).
29. "Simulation and the Semantic Web," *The 37th ACM/IEEE Winter Simulation Conference (WSC'05)*, Orlando, Florida (December 2005).
30. "A Semantic Template Based Designer for Semantic Web Processes," *The 3rd IEEE International Conference on Web Services (ICWS'05)*, Orlando, Florida (July 2005).
31. "Ontologies for Modeling and Simulation: Issues and Approaches," *The 36th ACM/IEEE Winter Simulation Conference (WSC'04)*, Washington, DC (December 2004).
32. "Enhancing Web Services Description and Discovery to Facilitate Composition," *The 1st International Workshop on Semantic Web Services and Web Process Composition (SWSWPC'04)*, Part of the 2nd IEEE International Conference on Web Services (ICWS'04), San Diego, California (July 2004).
33. "Academic and Industrial Research: Do Their Approaches Differ in Adding Semantics to Web Services?" (panel) *The 1st International Workshop on Semantic Web Services and Web Process Composition (SWSWPC'04)*, Part of the 2nd IEEE International Conference on Web Services (ICWS'04), San Diego, California (July 2004).

34. "Investigating Ontologies for Simulation Modeling," *The 37th Annual Simulation Symposium (ANSS'04)*, Arlington, Virginia (April 2004).
35. "Web Service Technologies and their Synergy with Simulation," *The 34th ACM/IEEE Winter Simulation Conference (WSC'02)*, San Diego, California (December 2002).
36. "Using Simulation to Facilitate Effective Workflow Adaptation", *The 35th Annual Simulation Symposium (ANSS'02)*, San Diego, California (April 2002).
37. "Building a Web-Based Federated Simulation System with Jini and XML," *The 34th Annual Simulation Symposium (ANSS'01)*, Seattle, Washington (April 2001).
38. "Opening Remarks: Overview of Program" *The 39th Annual ACM Southeast Conference (ACM-SE'01)*, Athens, Georgia (March 2001).
39. "Finding a Substrate for Federated Components on the Web," *The 32nd ACM/IEEE Winter Simulation Conference (WSC'00)*, Orlando, Florida (December 2000).
40. "Research and Commercial Opportunities in Web-Based Simulation," (panel) *The 3rd International Conference on Web-Based Modeling and Simulation (WEBSIM'00)*, San Diego, California (January 2000).
41. "Recovery Issues in Web-Based Workflow," *The 12th International Conference on Computer Applications in Industry and Engineering (CAINE'99)*, Atlanta, Georgia (November 1999).
42. "Component-Based Simulation Environments: JSIM as a Case Study using Java Beans," *The 30th ACM/IEEE Winter Simulation Conference (WSC'98)*, Washington, DC (December 1998).
43. Tutorial: "Workflow Management: Technology, Experiences and Research," *The 14th International Conference on Data Engineering (ICDE'98)*, Orlando, Florida (February 1998).
44. "The METEOR Workflow System," *HIIT Grant Review by NIST*, Washington, DC (February 1998).
45. "Perspectives in Modeling: Simulation, Database and Workflow," *The Workshop on Conceptual Modeling (ER'97 Symposium)*, Los Angeles, California (November 1997).
46. "Healthcare Applications of the WebWork Workflow Management System," *Offsite Meeting of HIIT*, Denver, Colorado (October 1997).
47. "JSIM: A Java-Based Simulation Library and Environment," *The 30th Annual Simulation Symposium (ANSS'97)*, Atlanta, Georgia (April 1997).
48. "Overview of the WebWork Workflow Management System," *Offsite Meeting of HIIT*, Jacksonville, Florida (March 1997).
49. "A Java-Based Query Driven Simulation Environment," *The 28th ACM/IEEE Winter Simulation Conference (WSC'96)*, Coronado, California (December 1996).
50. "Report of Workflow Technical Workgroup," *Offsite Meeting of HIIT*, Chicago, Illinois (October 1996).
51. "A Workflow for Immunization Tracking," *Offsite Meeting of HIIT*, Jekyll Island, Georgia (March 1996).
52. "Simulation Modeling within Workflow Technology," *The 27th ACM/IEEE Winter Simulation Conference (WSC'95)*, Arlington, Virginia (December 1995).
53. "Workflow Automation for Healthcare Delivery," *Offsite Meeting of HIIT*, Monticello, New York (October 1995).

54. "Repository Design with an End-User Emphasis," *The 5th International Users Group Conference: Repository/Architecture/Development (RAD'94)*, Chicago, Illinois (November 1994).
55. "Design of a WSRC Repository with an End-User Emphasis," *WSRC Open Site ERDA Presentations*, Aiken, South Carolina (March 1994).
56. "Opening Remarks for the 26th Annual Simulation Symposium," *The 26th Annual Simulation Symposium (ANSS'93)*, Arlington, Virginia (April 1993).
57. "Simulation of Database Transaction Management Protocols: Hybrids and Variants of Time Warp," *The 24th ACM/IEEE Winter Simulation Conference (WSC'92)*, Arlington, Virginia (December 1992).
58. "Transaction Management for Object-Oriented Databases: Performance Advantages of Using Multiple Versions," *The 25th Annual Simulation Symposium (ANSS'92)*, Orlando, Florida (April 1992).
59. "Query Driven Simulation as a Tool for Genetic Engineers," *International Conference on Simulation in Engineering Education (WSM'92)*, Newport Beach, California (January 1992).
60. "Performance Modeling of Database and Simulation Protocols: Design Choices for Query Driven Simulation," *The 24th Annual Simulation Symposium (ANSS'91)*, New Orleans, Louisiana (April 1991).
61. "Design of a CLOS Version of Active KDL: A Knowledge/Data Base System Capable of Query Driven Simulation," *The 1991 AI and Simulation Conference (SMC'91)*, New Orleans, Louisiana (April 1991).
62. "Model Instantiation for Query Driven Simulation in Active KDL," *The 23rd Annual Simulation Symposium (ANSS'90)*, Nashville, Tennessee (April 1990).
63. "Query Driven Simulation Using SIMODULA," *The 22nd Annual Simulation Symposium (ANSS'89)*, Tampa, Florida (March 1989).
64. "A Software Engineering Oriented Comparison of Simulation Languages," *The 1988 Tools for the Simulationist Conference (SMC'88)*, Orlando, Florida (April 1988).

10 Administrative Services to the University:

10.1 Interdepartmental:

<i>Position</i>	<i>Dates</i>	
University Council	2006-09	
UGA Program Review Committee	2003	
Franklin College Faculty Senate	1993-96	
Franklin College Promotion and Tenure Committee	2 terms	
Faculty Senate Admissions Committee	1993-95	chair: 1994-95
UGA Graduate Faculty (Regular Member)	1990-	
UGA Graduate Faculty (Provisional Member)	1988-90	
Grad. Faculty for Quant. Sciences (GFAQS)	1988-98	
GFAQS Curriculum Committee	1988-98	
Artificial Intelligence Faculty	1993-03	
Artificial Intelligence Research Group	1991-03	
Institute of Bioinformatics (IOB) Member	2007-	
IOB/CS Faculty Search Committee	2011-12	

10.2 Intradepartmental (Computer Science):

<i>Position</i>	<i>Dates</i>	
Graduate Coordinator	1995-03	
Graduate Admissions Committee	1994-	chair: 1995-03
Graduate Programs Committee	1994-	chair: 1995-03
PhD Recruiting Committee	2000-08	
Examination Committee	1996-03	
Tenured Faculty Committee	1993-	
Faculty Search Committee	1993-95, 1999-00, 2003-04, 2015-16	
Head Search Committee	1993	
Curriculum Committee	1987-05	chair: 1987-88
Facilities Policy Committee	1991-08	
Equipment Committee	1987-08, 2010-13	chair: 1987-88
Space Utilization Committee	2010-12	
Teaching Assignment Committee	2011-	
Policy and Bylaws Committee	2012-13	chair: 2012-13
Degree Proposal Committee (MS in CS)	1987-89	approved Winter 89
Degree Proposal Committee (PhD in CS)	1995-96	approved Fall 96
Program Review/PRAC Committee	2013-	