

Curriculum Vitae

John A. Miller

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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>
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) Database Systems, (ii) Modeling & Simulation, and (iii) Web Services/Workflow

2.2 Research Projects/Areas:

- **Web-Based Simulation Environments** (with Andrew Seila). Since the mid 1990's, the JSIM Web-based simulation environment 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. One prototype using the *SIMODULA* simulation language was built on top of an extended relational database system, *OBJECTR*, and a second prototype was built on top of an object-oriented database system, *Active KDL*.
- **Workflow Management and Modeling** (with Amit Sheth and Krys 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. WfMSs coordinate, control, monitor workflows consisting of automated/semi-automated tasks and the information flowing between them. Our project addresses 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 healthcare domain, and multi-paradigm workflows.
- **Object Database Systems** (with Don Potter and Krys 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). More recently, Object-Relational Database technology has been applied to genome research. Currently, effort is under way to develop graphical tools for querying XML documents stored in Object-Oriented Databases. 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.
- **Transaction Management/Time Warp Protocol** (with Nancy Griffith). From the mid 1980's to the mid 1990'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:

<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
CSci 4370 / 6370	Database Management	S99, S00, S01, U01, F01, U02, F02, U03, F03, U04, F04, U05, F06, U07, U08, F08, U09
CSci 4720	Computer Architecture & Organization	U00
CSci 4950 / 6950	Directed Study	numerous offerings
CSci 7000	Master's Research	numerous offerings
CSci 7300	Master's Thesis	numerous offerings
CSci 8370	Advanced Database Systems	F98, F99, F00, F01, S03, S04, S05, S06, S07, S08, S09
CSci 8990	Research Seminar	U99, U00, U01, U02, S03, U03
CSci 9000	Doctoral Research	numerous offerings
CSci 9300	Doctoral Dissertation	numerous offerings

Table 1: Semester Courses Taught

<i>Course Proposed</i>	<i>Title</i>	<i>System</i>
CS 837	Advanced Database Systems	Quarter
CSci 2720	Data Structures	Semester
CSci 4210 / 6210	Simulation and Modeling	Semester
CSci 4370 / 6370	Database Management	Semester
CSci 7000 / 7300	Master's Research / Thesis	Semester
CSci 7007	Internship in Computer Science	Semester
CSci 7100	Technical Report	Semester
CSci 8370	Advanced Database Systems	Semester
CSci 8990	Research Seminar	Semester
CSci 9000 / 9300	Doctoral Research / Dissertation	Semester

Table 2: Courses Proposed

<i>Course Taught</i>	<i>Title</i>	<i>Offerings</i>
ICS 2301	File Processing (Georgia Tech)	U85, W86
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	F86, S87, F87, W89, U89, W90 W91, W93, W95, W97, W98, U98
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 and Networks	S93
CS 495 / 695	Directed Study	numerous offerings
CS 504 / 704	Intro. to UNIX and 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

Table 3: Quarter Courses Taught

4 Publications:

4.1 Books Edited

1. John A. Miller and Jeffery W. Smith, Editors, *Proceedings of the 39-th Annual ACM Southeast Conference (ACM-SE'01)*, Athens, Georgia (March 2001) pp. 1-316. OMNIPRESS, Madison, WI.
2. 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.
3. 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.
4. John A. Miller, Editor, *Proceedings of the 26-th 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 (August, 2009) pp. -. Elsevier: Academic Press, San Diego, CA.
2. Karthik Gomadam, Ajith Ranabahu, Zixin Wu, Amit P. Sheth and John A. Miller, "A Declarative Approach using SASWDL 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 (December 2008) pp. 101-118. Springer-Verlag, Berlin-Heidelberg, Germany.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
8. 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: 1-st 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.
9. 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: 1-st 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.
10. 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.

11. 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.
12. 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 Sequence 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.
13. Andrew F. Seila, John A. Miller and Senthilanand Chandrasekaran, "Java," in *Encyclopedia of Information Systems*, Vol. 2, H. Hossein, Editor (2003) pp. 693-714. Academic Press, San Diego, CA.
14. Jorge Cardoso, Amit P. Sheth and John A. Miller, "Workflow Quality of Service," in *Enterprise Inter- and Intra-Organizational Integration - Building International Consensus*, K. Kosanke, R. Jochem, J. Nell and A. Bas, Editors (November 2002) pp. 303-312. Book Series: IFIP International Federation for Information Processing: Vol. 236, Kluwer Academic Publishers, Boston, MA.
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. Grodon-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*, G.W. Zobrist, J.V. Leonard, Editors (September 1996) pp. 53-88. 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

1. Kunal Verma, Karthik Gomadam, Prashant Doshi, John A. Miller and Amit P. Sheth, "Configuration and Adaptation of Semantic Web Processes," Journal TBA, Vol. z, No. z (2009) pp. -. (submitted)

2. Angela Maduko, Kemafor Anyanwu, Amit P. Sheth, John A. Miller and Paul Schliekelman, "Graph Summaries for Optimizing Graph Pattern Queries on RDF Databases," *Journal TBA*, Vol. z, No. z (2009) pp. -. (to appear subject to revision)
3. Martin Aslett, Cristina Aurrecochea, Matthew Berriman, John Brestelli, Brian P. Brunk, Mark Carrington, 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 (January 2010; Online Version zzz 2009) pp. Dzzz-Dzzz. Oxford Journals, Oxford University Press.
4. 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.
5. 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 (January 2009; Online Version September 2008) pp. D526-D530. Oxford Journals, Oxford University Press.
6. 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 (January 2009; Online Version October 2008) pp. D539-D543. Oxford Journals, Oxford University Press.
7. 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.
8. 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 (January 2007; Online Version November 2006) pp. D427-D430. Oxford Journals, Oxford University Press.
9. 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.
10. Swapna Oundhakar, Kunal Verma. Kaarthik Sivashanmugam, Amit P. Sheth and John A. Miller, “Discovery of Web Services in a 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.
 11. 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.
 12. 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.
 13. 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.
 14. 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.
 15. Kemafor Anyanwu, Amit P. Sheth, Jorge Cardoso, John A. Miller and Krys J. Kochut, “Health-care 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.
 16. Senthilanand Chandrasekaran, John A. Miller, Gregory 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.
 17. 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.
 18. 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.

19. 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)
20. 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.
21. 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.
22. 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.
23. 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.
24. Amit P. Sheth, John A. Miller, Krys J. Kochut and I. Budak Arpinar, "Research in Multi-Organizational Processes and Semantic Information Boking at the LSDIS Lab," *SIGMOD Record (SIGMOD)*, Vol 30, No. 4 (December 2001) pp. 123-128. ACM.
25. 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.
26. 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.
27. 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.
28. 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.
29. 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.
30. 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.

31. 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.
32. 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.
33. 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.
34. 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.
35. 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.
36. 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.
37. 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.
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10. 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.
11. John A. Miller, Mei Fan, Shengli Wu, Ismailcem B. 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.
12. 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.
13. 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.
14. 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.
15. 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 (February 1994) pp. 1-237.
16. 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 (January 1994) pp. 1-75.
17. 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 Foundation, 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 Complex 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 Reality," 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 Asadi (SI), Lance Wells (SI), William S. York (SI), in Comp. Sc.: Krys J. Kochut (I) and John A. Miller (I), "Integrated Technology Resource for Biomedical Glycomics," (Renewal), (Core 4: Bioinformatics of Glycan Expression), National Center for Research Resources (NCRR), National Institutes of Health (NIH).

5.1 Grants Pending:

1. January 2009 to December 2011 - \$204,525 - with match \$204,525. Thiab R. Taha (PI), Shelby Funk (Co-PI), Maria Hybinette (Co-PI), Krys J. Kochut (Co-PI), John A. Miller (Co-PI) "II-NEW: Acquisition of a Multicore System for Research and Training in Simulation and Power Management," National Science Foundation (NSF).

6 Recognitions and Achievements:

- 2009-present: Appointed an Associate Editor for a top Journal in simulation, SIMULATION: Transactions of the Society for Modeling and Simulation International (STSCS).
- 2006-2007: Appointed as an Invited Expert on the W3C Working Group, Semantic Annotation for the Web Services Description Language (SAWSDL).
- 2005-present: Appointed the Editorial Board for a new Journal in simulation, Journal of Simulation (JOS).
- 2004-present: Appointed the Editorial Board for a new Journal in simulation and process modeling, International Journal of Simulation and Process Modelling (IJSPM).
- 2002-present: 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.
- 1999-present: Appointed an Associate Editor for the premier Journal in simulation, ACM Transactions on Modeling and Computer Simulation (TOMACS).
- 1999-present: Appointed an Associate Editor for a top Journal in systems, IEEE Transactions on Systems, Man and Cybernetics (TSMC).
- 1995-2001: Developed the METEOR Workflow Management System (WfMS) (with Drs. Sheth and Kochut) which consists of over 100,000 lines of commercial-quality 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.
- 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.
- 1995-present: 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.
- 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.

- 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.
- 1995-1997: Selected as a Beta Test Site for Sun Microsystems DOE and NEO CORBA products for distributed object management.
- 1995-1996: Played a key role in proposing and developing the Ph.D. in Computer Science Degree.
- 1991-1996: Elected to leadership track for the Annual Simulation Symposium. Secretary of the 24-th (1991), Vice President of the 25-th (1992), President/General Chair of the 26-th (1993), and member of the Board of Directors for 27-th-29-th (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.
- 1983-1994: Consulted with the Franklin College of Arts and Sciences Dean's Office in the development of its Financial Information System.
- 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.
- 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.
- 1990: Received best paper award at simulation conference. The paper entitled "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 23-rd Annual Simulation Symposium, held in Nashville, Tennessee (1990).
- 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.
- Prior to joining the University of Georgia:
 - Graduated with Distinction from Northwestern University's Technological Institute.
 - Graduated with Co-Operative Education Certificate for completing a six 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).
 - Elected to an Honorary Engineering Society as a member of the Northwestern University chapter of Tau Beta Pi.

- Elected Vice President of the Gamma Rho chapter of the Pi Kappa Alpha fraternity at Northwestern University.

7 Supervision of Student Research:

7.1 Theses:

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. Minjane Jan, "Comparing Simulation World Views Using SIMODULA," Technical Report (M.A.M.S. Degree) August 1991. Employed by K-RIM, Atlanta, GA.
7. 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.
8. 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.
9. Hao Wan, "Efficient Algorithms for Relational Database Normalization," Technical Report (M.A.M.S. Degree) June 1992. Employed by KnowledgeWare, Atlanta, GA.
10. 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.
11. Krishna Puppala, "Distributed Persistent Object Manager," Masters Thesis (M.S. in CS Degree) July 1992. Employed by IGENESIS, New York, NY.
12. 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.
13. 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.
14. 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.
15. 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.

16. 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.
17. 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.
18. Ihab Ezzat Abuelenein, "Interoperability, from a Database Perspective," Masters Thesis (M.S. in CS Degree) September 1994. Employed by AT&T, Riyadh, Saudi Arabia.
19. Bonnie M. Edwards, "Implementing and Evaluating Common Repository Services," Masters Thesis (M.S. in CS Degree) March 1995. Employed by ActaMed, Atlanta, GA.
20. 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.
21. 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.
22. 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.
23. 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.
24. 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.
25. 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 (OVPA), Athens, GA.
26. 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.
27. Hongwei Zhao, "A Graphical Designer for JSIM," Masters Thesis (M.S. in CS Degree) September 1997. Employed by Nexgen SI, Atlanta, GA.
28. 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.
29. 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.
30. Mei Fan "Security for the METEOR Workflow Management System," Masters Thesis (M.S. in CS Degree) April 1999. Employed by NEA, Inc., Atlanta, GA.

31. 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.
32. Junxiu Tao, "HLA-Compliant Distributed JSIM," Masters Thesis (M.S. in CS Degree) May 2000. Employed by Intergraph, Corp., Huntsville, AL.
33. 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.
34. 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.
35. 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.
36. Rakesh Malhotra, "XML Database Engines," Masters Thesis (M.S. in CS Degree) July 2001. Employed by Earthdata, High Point, NC.
37. Maria Chinwala, "Algebraic Languages for XML Databases," Masters Thesis (M.S. in CS Degree) July 2001. Employed by the University of Georgia (ITOS) Athens, GA.
38. 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.
39. 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.
40. 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.
41. 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.
42. 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.
43. 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.
44. Preeda L. Rajasekaran, "Enhancing Web Service Descriptions using WSDL-S," Masters Thesis (M.S. in CS Degree) December 2004. Employed by Semagix, Athens, GA.
45. Ranjit Mulye, "METEOR-S Process Design and Development Tool," Masters Thesis (M.S. in CS Degree) March 2005. Employed by Oblix, Inc. Cupertino, CA.
46. Zhijun Zhang, "Ontology Query Languages for the Semantic Web: A Performance Evaluation," Masters Thesis (M.S. in CS Degree) June 2005. Employed by .

47. 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.
48. 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.
49. 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.
50. Kunal Verma, "Configuration and Adaptation of Semantic Web Processes," Doctoral Dissertation (Ph.D. in CS Degree) June 2006. Employed by Accenture, Palo Alto, CA.
51. 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.
52. 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.
53. 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, Khaleed Rasheed, Alan Gingle. Employed by .
54. 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.
55. 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.
56. 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.
57. Angela I. Maduko, "Graph Summaries for Optimizing Graph Pattern Queries on RDF Databases," Masters Thesis (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.
58. Savitha Emani, "A Comparative Evaluation of Semantic Web Service Discovery: Algorithms and Engines," Masters Thesis (M.S. in CS Degree) April 2009. Employed by .
59. 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.

7.2 Publications of Students:

1. Jeff Parrish and Micah Cooper, "A Framework for Integrated Flight Simulation and Design," *Proceedings of the 46-th Annual ACM Southeast Conference (ACM-SE'08)*, Auburn, Alabama (March 2008) pp. 398-403.
2. Kunal Verma and Amit Sheth, "Autonomic Web Processes," *Proceedings of the 3-rd International Conference on Service-Oriented Computing, (ICSOC'05)*, Lecture Notes in Computer Science (LNCS 3826), B. Benatallah, F. Casati, P. Traverso, editors, Amsterdam, The Netherlands (December 2005) pp. 1-11. Springer Verlag.
3. Kunal Verma, Rama Akkiraju and Richard Goodwin, "Semantic Matching of Web Service Policies," *Proceedings of the 2-nd International Workshop on Semantic and Dynamic Web Processes (SDWP'05)*, part of the 3-rd IEEE International Conference on Web Services (ICWS'05), Orlando, Florida (July 2005) pp. 79-90.
4. Kaarthik Sivashanmugam, Kunal Verma, Amit P. Sheth, "Discovery of Web Services in a Federated Registry Environment," *Proceedings of the 2-nd IEEE International Conference on Web Services (ICWS'04)*, San Diego, California (June 2004) pp. 270-278.
5. Kunal Verma, Rama Akkiraju, Richard Goodwin, Prashant Doshi and Juhnyoung Lee, "On Accommodating Inter Service Dependencies in Web Process Flow Composition," *Proceedings of the 2004 AAAI Spring Symposium (AAAI'04)*, Menlo Park, California (March 2004) pp. 37-43.
6. Sudhanshu Sipani, Kunal Verma, Senthilanand Chandrasekaran, Xiao-Qing Zeng, Jianping Zhu, Dongsheng Che, Kai Wang, "Designing an XML Database Engine: API and Performance," *Proceedings of the 40-th Annual ACM Southeast Conference (ACM-SE'02)*, Raleigh, North Carolina (April 2002) pp. 239-245. (Won third place in the Student Paper Competition.)
7. Piyush Burte, Boanerges Aleman-Meza, D. Brent Weatherly and Rong Wu, "Transaction Management for a Main-Memory Database," *Proceedings of the 38-th Annual ACM Southeast Conference (ACM-SE'01)*, Athens, Georgia (March 2001) pp. 263-268.
8. Shuchi Patel, Madhan R. Arumugam and Ritu Dhawan, "Storage Manager in MMODB's Main Memory Object-Oriented Database System," *Proceedings of the 38-th Annual ACM Southeast Conference (ACM-SE'01)*, Athens, Georgia (March 2001) pp. 257-262.
9. Hui Tian, "Storage Management Issues for High Performance Database Visualization," *Proceedings of the 38-th Annual ACM Southeast Conferenc (ACM-SE'01)*, Athens, Georgia (March 2001) pp. 251-256.
10. Xueqin Huang, Hui Tian and Xiangming Xu, "JSIM Database: A Web-Based Database Application with XML," *Proceedings of the 38-th Annual ACM Southeast Conference (ACM-SE'00)*, Clemson, South Carolina (April 2000) pp. 171-178.
11. Andrew F. Seila, Xuewei Xiang and Michael Watson, "Analysis of Web-Based Simulation Data," *IEEE Potentials (IEEE-SMT): Special Issue on Web-Based Simulation and Modeling*, Vol. 19, No. 1 (February/March 2000) pp. 16-19.
12. Devanand Palaniswami, J. Lynch, I. Shevchenko, A. Mattie and L. Reed-Fourque, "Web-Based Multiparadigm Automation For Efficient Health-Care Delivery," *Proceedings of the NSF Workshop on Workflow and Process Automation in Information Systems: State-of-the-Art and Future Directions (NSF-WPA)*, Athens, Georgia (May 1996) pp. 6-11.

13. Preeti Somal and Deepa Ramesh, "On the Implementation of Hybrid Time Warp/MVTO Protocols," *Proceedings of the 14-th IMACS World Congress (IMACS)*, Atlanta, Georgia (July 1994) pp. 1498-1501.
14. David G. Ason, "Simulation of Variants of Time Warp and MVTO Transaction Management Protocols," *Proceedings of the 14-th IMACS World Congress (IMACS)*, Atlanta, Georgia (July 1994) pp. 1084-1087.
15. Ali A. Keskin, "Strategies for Deductive Databases," *Proceedings of the 28-th Annual ACM Southeast Conference (ACM-SE'90)*, Greenville, South Carolina (April 1990) pp. 296-305.

7.3 Service on Graduate Student Committees (other than as major professor):

- **M.A.M.S.:** Total = 12: Ing-San Jean, Siao-Ling Chiang, Jing-Jung Chen, Chihlung Chao, Justus Reidel, Chao-Chun Wang, Yenjo Han, Vance Kessler, Junjin Park, Michael James, Michael Watson (Business), Helen Howell
- **M.S. in Artificial Intelligence:** Total = 6: James Ford, John Ball, Jia Liu, Yilan Li, Fon-Lein Chang, Yousong Chang
- **M.S. in Computer Science:** Total = 61: Anne Morton, Anthony Wright, M.S. Chandrasekaran, Veena Paul Gandham, Rahul Misra, Ramakrishna Polamraju, John Carroll, Anuradha Shivpuri, Jannet Thomas, Ruben Robles, Zhonghong Jiang, Arun Venkatapura, Arunachalam Murugan, Carolyn Giberson, Souvik Das, Devashish Worah, Ke Zheng, Selvam Velmurugan, Yong Jiang, Krishnan Parasuraman, Huaping Luo, Sugithra Somasekar, Aditi Khan, Ketan Bhukhanwala, Subramanian Ragavan, Karthikeyan Balasubramanian, Himabindu Vuppula, Navin Gupta, Zhongqiao Li, Priyank Johri, Susmita Tripathy, Yufeng Chen, Abha Gupta, Nilay Roy, Zheng Xu, Jonathan Myers, Renyi Liu, Daniel Brent Weatherly, Michael Gundlach, Mullai Shanmuan, Weicheng Zhang, Abhijit Patil, Christian Halaschek-Wiener, Gayathri Gatamaneni, Nivedita Kaluskar, Yanqi Su, Nicole Oldham, Jed Hassell, David Hooge, Bilal Gonen, Ravi Pavagada, Hongchao Li, Zixin Wu, Sheron Decker, Amit Matthew, Ravikanth Kolli, Robert McKnight, Archana Meka, Dong Zhang, Yong Wu, Conrad Ibanez
- **Ph.D. in Business:** Total = 2: Abhijit Gopal, Larry D. Young
- **Ph.D. in CS:** Total = 11: ZongWei Luo, GuangMing Xing, Jorge Cardoso, Jinhua Guo, Xiaochuan Yi, Congzhou He, Boanerges Aleman-Meza, Kemafor Anyanwu, Maciej Janik, Samir Tartir, Haibo Zhao

8 Professional Activity:

8.1 Editorship or Editorial Board Member:

- *Associate Editor*: SIMULATION: Transactions of the Society for Modeling and Simulation International (STSCS), 2009-.
- *Associate Editor*: ACM Transactions on Modeling and Computer Simulation (TOMACS), 1999-.
- *Associate Editor*: IEEE Transactions on Systems, Man and Cybernetics (TSMC), 1999-.
- *Editorial Board Member*: Journal of Simulation (JOS), 2005-.
- *Editorial Board Member*: International Journal of Simulation and Process Modelling (IJSPM), 2004-.
- *Editor*: Proceedings of the 39-th ACM Southeast Conference (ACM-SE'01), 2001.
- *Editor*: Proceedings of the 26-th Annual Simulation Symposium (ANSS'93), 1993.
- *Guest Editor*: IEEE Potentials (IEEE-PT), Special Issue on Web-Based Simulation and Modeling, 2000.
- *Guest Editor*: International Journal in Computer Simulation (IJCS), Special Issue on Object-Oriented Simulation, 1995.

8.2 Conference Organizational Committees:

- *Track Coordinator*: The 2009 ACM/IEEE Winter Simulation Conference (WSC'09), Simulation Interoperability Track, Austin, Texas (December 2009). (tentative)
- *Organization Chair*: The 4-th 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).
- *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: 1-st International Workshop (SWPC'04), San Diego, California (July 2004).
- *Track Coordinator*: The 2002 ACM/IEEE Winter Simulation Conference (WSC'02), Modeling Methodologies Track, San Diego, California (December 2002).
- *Program Chair*: The 39-th ACM Southeast Conference (ACM-SE'01), Athens, Georgia (March 2001).
- *Panel Moderator*: Panel on Research and Commercial Opportunities in Web-Based Simulation, The 3-rd International Conference on Web-Based Modeling and Simulation (WEBSIM'00), San Diego, California (January 2000).
- *Local Arrangements Chair*: The 10-th International Conference on Industrial & Engineering Applications of Artificial Intelligence and Expert Systems (IEA/AIE'97), Atlanta, Georgia (June 1997).

- *Track Coordinator*: The 1996 ACM/IEEE Winter Simulation Conference (WSC'96), Modeling Methodologies Track, Coronado, California (December 1996).
- *Local Arrangements and Finance Chair*: NSF Workshop on Workflow and Process Automation in Information Systems (NSF-WF'96), Athens, Georgia (May 1996).
- *Board of Directors*: The 29-th Annual Simulation Symposium (ANSS'96) New Orleans, Louisiana (April 1996).
- *Board of Directors*: The 28-th Annual Simulation Symposium (ANSS'95) Phoenix, Arizona (April 1995).
- *Track Coordinator*: The 1994 ACM/IEEE Winter Simulation Conference (WSC'94), Modeling Methodologies Track, Orlando, Florida (December 1994).
- *Board of Directors*: The 27-th Annual Simulation Symposium (ANSS'94) La Jolla, California (April 1994).
- *Publications Co-Chair*: 1994 Workshop on Research Issues in Data Engineering (RIDE'94), Houston, Texas (February 1994).
- *President/General Chair*: The 26-th Annual Simulation Symposium (ANSS'93), Arlington, Virginia (April 1993).
- *Vice President*: The 25-th Annual Simulation Symposium (ANSS'92) Orlando, Florida (April 1992).
- *Secretary*: The 24-th Annual Simulation Symposium (ANSS'91), New Orleans, Louisiana (April 1991).

8.3 Session Chair/Organizer:

- "Ontology-Based Interoperability II," *The 2007 ACM/IEEE Winter Simulation Conference*, Washington, DC (December 2007), Speakers: L. Yilmaz, A. Tolk, G. Silver/J. Miller
- "Ontology Driven Simulation," *The 2006 ACM/IEEE Winter Simulation Conference*, Monterey, CA (December 2006), Speakers: P. Benjamin, U. Durak, G. Silver/J. Miller
- "Web Service Architectures," *The 4-th IEEE International Conference on Web Services*, Chicago, IL (September 2006), Speakers: K. Ostrowski, E. Wohlstadter, N. Sadeh
- "Verification and Testing," *The 3-rd IEEE International Conference on Web Services*, Orlando, FL (July 2005), Speakers: T. Bultan, H. Foster, K. Mahbub, Z. Li
- "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
- "Session 3," 1-st International Workshop on Semantic Web Services and Web Process Composition San Diego, CA (July 2004) Speakers: M. Singh, Naveen Srinivasan, Ashok U. Mallya
- "Distributed Web-Based Component Architectures," *The 2000 ACM/IEEE Winter Simulation Conference*, Orlando, FL (December 2000), Speakers: P. Wilsey, P. Benjamin, J. Miller.

- “Web-Based Simulation I & II,” *The 1999 ACM/IEEE Winter Simulation Conference*, Phoenix, AZ (December 1999), Speakers: P. Fishwick, C. Salisbury, A. Seila, M. Pidd, P. Wilsey, L. Belfore.
- “Web-Based Simulation,” *The 1998 ACM/IEEE Winter Simulation Conference*, Washington, DC (December 1998), Speakers: P. Fishwick, M. Pidd, J. Miller.
- “Simulation Languages, Tools, and Environments I,” *The 30-th Annual Simulation Symposium*, Atlanta, Georgia (April 1997), Speakers: K. Lentz, D. Hommais, C. Tong
- “Simulation Languages, Tools, and Environments,” *The 29-th Annual Simulation Symposium*, New Orleans, Louisiana (April 1996), Speakers: A. van Moorsel, A. Sampogna, C. Lee.
- “Workflow and Transaction Management II,” *The 12th International Conference on Data Engineering*, New Orleans, Louisiana (February 1996), Speakers: M. Singh and B. Salzberg.
- “Methodologies for Workflow Modeling,” *The 1995 ACM/IEEE Winter Simulation Conference*, Arlington, Virginia (December 1995), Speakers: P. Benjamin, M. Marazakis, J. Miller.
- “Simulation Environments,” *The 1994 ACM/IEEE Winter Simulation Conference*, Orlando, Florida (December 1994). Speakers: R. Paul, H. Park, C. Standridge.
- “Transaction Processing and Active Databases,” *The 3-rd International Conference on Parallel and Distributed Information Systems*, Austin, Texas (September 1994). Speakers: D. Lomet, B. Salzberg, A. Thomasian, R. Sivasankaran.
- “Parallel and Distributed Simulation,” *The 14-th Annual IMACS World Congress*, Atlanta, GA (July 1994), Speakers: R. Fujimoto, J. Tsai, D. Ason, P. Somal.
- “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.
- “Computer System Performance Models,” *The 1992 ACM/IEEE Winter Simulation Conference*, Arlington, Virginia (December 1992), Speakers: W. Keezer, J. Miller, C. Knadler.
- “Simulation Models/Techniques/Tools II,” *The 25-th Annual Simulation Symposium*, Orlando, Florida (April 1992), Speakers: W. Loucks, G. Franceschinis, W. Evanco, T. Chen.
- “Distributed/Concurrent Simulation II,” *The 24-th Annual Simulation Symposium*, New Orleans, Louisiana (April 1991), Speakers: P. Konas, J. Steinman, P. Reiher.

8.4 Referee for Journals:

- ACM Transactions on Modeling and Computer Simulation (TOMACS)
- Simulation: Transactions of the Society for Modeling and Simulation International (TMS)
- SCS Simulation: The Journal of the Society for Computer Simulation (JSCS)
- International Journal in Computer Simulation (IJCS)
- Future Generation Computer Systems Journal (FGCS)

- International Journal on Semantic Web and Information Systems (IJSWIS)
- IEEE Transactions on Systems, Man and Cybernetics (TSMC)
- Data & Knowledge Engineering (DKE)
- IEEE Expert: Intelligent Systems and Their Applications (Expert)
- Expert Systems With Applications: An International Journal (ESWA)

8.5 Program Committee Member/Reviewer for Conferences:

- Winter Simulation Conference (WSC): 2007, 2006, 2005, 2002, 2000, 1999, 1998, 1996, 1995, 1994, 1993, 1992.
- Annual Simulation Symposium (ANSS): 2005, 2004, 2003, 2002, 2001, 2000, 1999, 1998, 1997, 1996, 1995, 1994, 1993, 1992.
- IEEE International Conference on Web Services (ICWS): 2005.
- IEEE International Conference on Services Computing (SCC): 2005.
- World-Wide Web (WWW): 2006.
- International Semantic Web Conference (ISWC): 2008.
- International Conference on Enterprise Information Systems (ICEIS): 2008, 2007.
- International Conference on Data Engineering (ICDE): 1996, 1994.
- Semantic Web and Databases Workshop (SWBD), held with ICDE: 2006.
- Workshop on Research Issues in Data Engineering (RIDE), held with ICDE: 1996.
- International Conference on Object-Oriented & Entity Relationship Modelling (ER): 1996.
- ISCA International Conference on Parallel and Distributed Computing (ICPDC): 1993.
- Hawaii International Conference on Systems Sciences (HICSS): 1991.
- Supercomputing Conference (SC): 1990.
- Annual ACM Southeast Conference (ACM-SE): 2001.

8.6 Reviewer for Funding Agencies:

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

8.7 Memberships:

- Association for Computing Machinery (ACM)
- IEEE Computer Society
- Society for Computer Simulation (SCS)
- Tau Beta Pi Engineering Honorary Society

9 Presentations at Research Conferences:

1. “What Makes Good Research in Modeling and Simulation: Sustaining the Growth and Vitality of the M&S Discipline,” (panel) *The 2008 ACM/IEEE Winter Simulation Conference (WSC’08)*, Miami, Florida (December 2008).
2. “WS-BioZard: A Wizard for Composing Bioinformatics Web Services,” *The 2-nd IEEE International Workshop on Scientific Workflows (SWF’08)*, a workshop in the 2008 IEEE International Conference on Services Computing (SCC’08), Honolulu, Hawaii (July 2008).
3. “From Domain Ontologies to Modeling Ontologies to Executable Simulation Models,” *The 2007 ACM/IEEE Winter Simulation Conference (WSC’07)*, Washington, DC (December 2007).
4. “Opening Remarks: Overview of Program,” *The 4-th 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).
5. “Ontology Based Representations of Simulation Models Following the Process Interaction World View,” *The 2006 ACM/IEEE Winter Simulation Conference (WSC’06)*, Monterey, California (December 2006).
6. “Workflow and Web Processes in Bioinformatics,” *The Microsoft eScience Workshop at the Johns Hopkins University (MeSW’06)*, Baltimore, Maryland (October 2006).
7. “Optimal Adaptation in Web Processes with Coordination Constraints,” *The 4-th IEEE International Conference on Web Services (ICWS’06)*, Chicago, Illinois (September 2006).
8. “Simulation and the Semantic Web,” *The 2005 ACM/IEEE Winter Simulation Conference (WSC’05)*, Orlando, Florida (December 2005).
9. “A Semantic Template Based Designer for Semantic Web Processes,” *The 3-rd IEEE International Conference on Web Services (ICWS’05)*, Orlando, Florida (July 2005).
10. “Ontologies for Modeling and Simulation: Issues and Approaches,” *The 2004 ACM/IEEE Winter Simulation Conference (WSC’04)*, Washington, DC (December 2004).
11. “Enhancing Web Services Description and Discovery to Facilitate Composition,” *The 1-st International Workshop on Semantic Web Services and Web Process Composition (SWSWPC’04)*, Part of the 2-nd IEEE International Conference on Web Services (ICWS’04), San Diego, California (July 2004).
12. “Academic and Industrial Research: Do Their Approaches Differ in Adding Semantics to Web Services?” (panel) *The 1-st International Workshop on Semantic Web Services and Web Process Composition (SWSWPC’04)*, Part of the 2-nd IEEE International Conference on Web Services (ICWS’04), San Diego, California (July 2004).
13. “Investigating Ontologies for Simulation Modeling,” *The 37-th Annual Simulation Symposium (ANSS’04)*, Arlington, Virginia (April 2004).
14. “Web Service Technologies and their Synergy with Simulation,” *The 2002 ACM/IEEE Winter Simulation Conference (WSC’02)*, San Diego, California (December 2002).

15. "Using Simulation to Facilitate Effective Workflow Adaptation", *The 35-th Annual Simulation Symposium (ANSS'02)*, San Diego, California (April 2002).
16. "Building a Web-Based Federated Simulation System with Jini and XML," *The 34-th Annual Simulation Symposium (ANSS'01)*, Seattle, Washington (April 2001).
17. "Opening Remarks: Overview of Program" *The 39-th Annual ACM Southeast Conference (ACM-SE'01)*, Athens, Georgia (March 2001).
18. "Finding a Substrate for Federated Components on the Web," *The 2000 ACM/IEEE Winter Simulation Conference (WSC'00)*, Orlando, Florida (December 2000).
19. "Research and Commercial Opportunities in Web-Based Simulation," (panel) *The 3-rd International Conference on Web-Based Modeling and Simulation (WEBSIM'2000)*, San Diego, California (January 2000).
20. "Recovery Issues in Web-Based Workflow," *The 12th International Conference on Computer Applications in Industry and Engineering (CAINE-99)*, Atlanta, Georgia (November 1999).
21. "Component-Based Simulation Environments: JSIM as a Case Study using Java Beans," *The 1998 ACM/IEEE Winter Simulation Conference (WSC'98)*, Washington, DC (December 1998).
22. Tutorial: "Workflow Management: Technology, Experiences and Research," *The 14-th International Conference on Data Engineering (ICDE'98)*, Orlando, FL (February 1998).
23. "The METEOR Workflow System," *HIIT Grant Review by NIST*, Washington, DC (February 1998).
24. "Perspectives in Modeling: Simulation, Database and Workflow," *The Workshop on Conceptual Modeling (ER'97 Symposium)*, Los Angeles, CA (November 1997).
25. "Healthcare Applications of the WebWork Workflow Management System," *Offsite Meeting of HIIT*, Denver, Colorado (October 1997).
26. "JSIM: A Java-Based Simulation Library and Environment," *The 30-th Annual Simulation Symposium (ANSS'97)*, Atlanta, Georgia (April 1997).
27. "Overview of the WebWork Workflow Management System," *Offsite Meeting of HIIT*, Jacksonville, Florida (March 1997).
28. "A Java-Based Query Driven Simulation Environment," *The 1996 ACM/IEEE Winter Simulation Conference (WSC'96)*, Coronado, California (December 1996).
29. "Report of Workflow Technical Workgroup," *Offsite Meeting of HIIT*, Chicago, Illinois (October 1996).
30. "A Workflow for Immunization Tracking," *Offsite Meeting of HIIT*, Jekyll Island, Georgia (March 1996).
31. "Simulation Modeling Within Workflow Technology," *The 1995 ACM/IEEE Winter Simulation Conference (WSC'95)*, Arlington, Virginia (December 1995).
32. "Workflow Automation for Healthcare Delivery," *Offsite Meeting of HIIT*, Monticello, New York (October 1995).

33. "Repository Design with an End-User Emphasis," *The 5-th International Users Group Conference: Repository/Architecture/Development (RAD'94)*, Chicago, Illinois (November 1994).
34. "Design of a WSRC Repository with an End-User Emphasis," *WSRC Open Site ERDA Presentations*, Aiken, South Carolina (March 1994).
35. "Opening Remarks for the 26-th Annual Simulation Symposium," *The 26-th Annual Simulation Symposium (ANSS'93)*, Arlington, Virginia (April 1993).
36. "Simulation of Database Transaction Management Protocols: Hybrids and Variants of Time Warp," *The 1992 ACM/IEEE Winter Simulation Conference (WSC'92)*, Arlington, Virginia (December 1992).
37. "Transaction Management for Object-Oriented Databases: Performance Advantages of Using Multiple Versions," *The 25-th Annual Simulation Symposium (ANSS'92)*, Orlando, Florida (April 1992).
38. "Query Driven Simulation as a Tool for Genetic Engineers," *International Conference on Simulation in Engineering Education (WSM'92)*, Newport Beach, California (January 1992).
39. "Performance Modeling of Database and Simulation Protocols: Design Choices for Query Driven Simulation," *The 24-th Annual Simulation Symposium (ANSS'91)*, New Orleans, Louisiana (April 1991).
40. "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).
41. "Model Instantiation for Query Driven Simulation in Active KDL," *The 23-rd Annual Simulation Symposium (ANSS'90)*, Nashville, Tennessee (April 1990).
42. "Query Driven Simulation Using SIMODULA," *The 22-nd Annual Simulation Symposium (ANSS'89)*, Tampa, Florida (March 1989).
43. "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-	
UGA Program Review Committee	2003	
Franklin College Faculty Senate	1993-96	
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	

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-	
Examination Committee	1996-03	
Tenured Faculty Committee	1993-	
Faculty Search Committee	1993-95, 1999-00, 2003-04	
Head Search Committee	1993	
Curriculum Committee	1987-2005	chair: 1987-88
Facilities Policy Committee	1991-	
Equipment Committee	1987-	chair: 1987-88
Degree Proposal Committee (MS in CS)	1987-89	approved Winter 89
Degree Proposal Committee (PhD in CS)	1995-96	approved Fall 96