Professor Amit P. Sheth

Amit Sheth is an Educator, Researcher and Entrepreneur. He is the LexisNexis Ohio Eminent Scholar, an IEEE Fellow, and the director of Kno.e.sis- The Ohio Center of Excellence in Knowledge-enabled Computing. Kno.e.sis currently has one of the largest academic research groups in the area of Semantic Web among USA. It also has very high publication impact in World Wide Web in recent years (http://j.mp/www-Mar13).

Sheth is working towards a vision of Computing for Human Experience incorporating semantics-empowered Physical-



Cyber-Social computing. His is recent work has focused on semantics empowered Web 3.0 involving enterprise, social, sensor/IoT data and applications, as well as services and cloud interoperability. In the past he extensively work on federated databases, semantic interoperability and workflow management. He has had extensive collaborations with clinicians as well as biomedical researchers, leading to research and commercial tools, systems and applications (<u>http://knoesis.org/amit/hcls</u>). Sheth's most prized achievement is the exceptional success of his past advisees.

Earlier, Dr. Sheth was a professor at the University of Georgia, where he started the LSDIS lab in 1994, and he served in R&D groups at Bellcore, Unisys, and Honeywell. His h-index of 80 and the 25,000+ citations to his publications places him among the top 100 in Computer Science, top few in WWW (based on 5, 10 or all-years) and top 20 in databases (all years) [based on h-index data from Microsoft Academic Search: <u>http://j.mp/MAS-a</u>]. His research has led to several commercial products, many deployed applications and two successful companies. He serves as technology and business advisor to startups and additional commercialization of his research continues. He is on several journal editorial boards, is the EIC of the International Journal on Semantic Web and Information Systems (IJSWIS), joint EIC of Distributed and Parallel Databases (DAPD), and a co-editor of two Springer book series (Semantic Web and Beyond: computing for Human Experience, and Advanced Database Systems). <u>http://knoesis.org/amit</u>

Education

PhD	1985	Ohio State University Computer & Information Science
MS	1983	Ohio State University Computer & Information Science
BE	1981	Birla Institute of Tech. & Science Electrical & Electronics Engineering
		(Hons) Pilani, India

Ph.D.	1985	Ohio State University Computer & Information Science
M.S	1983	Ohio State University Computer & Information Science
B.E.	1981	Birla Institute of Tech. & Science Electrical & Electronics Engineering (Hons)
		Pilani, India

Academic Positions/Appointments

2009 -	Director, Ohio Center of Excellence on Knowledge-enabled Computing at	
	Wright State University; Professor, Biomedical Sciences (BMS) PhD program.	
Jan 2007 –	LexisNexis Ohio Eminent Scholar, Wright State University, Dayton, OH	
	Professor, Computer Science & Engineering. Director and Founder, Kno.e.sis	
	Center	
2001-2007	Member/Professor, Faculty of Engineering, University of Georgia	
1994 – Dec	Director, Large Scale Distributed Information Systems (LSDIS) Lab, Athens,	
2006	GA	
1998 – Dec	Professor, Department of Computer Science, University of Georgia, Athens, GA	
2006	(on partial sabbatical during 2000 and 2001). Also, Member, Institute of	
	Bioinformatics, UGA (2004–2006), Member, Biomedical & Health Sciences	
	Institute, UGA (2005–2006), and Member/Professor, Faculty of Engineering,	
	University of Georgia (2001–2006)	
1994 – 1998	Associate Professor, Department of Computer Science, University of Georgia,	
	Athens, GA	
May 93 –	Visiting Faculty, Institute of Information Systems, ETH (Swiss Federal Institute	
June 93	of Technology), Zurich, Switzerland	
1983 - 1984	Graduate Research Associate, Computer & Information Science Dept., Ohio	
	State University	
1981 – 1983	Graduate Teaching Associate, Computer & Information Science Dept., Ohio	
	State University	

Entrepreneurship and Industry Employment

Aug 2002 – May 2006	Co-founder/CTO (part time) Semagix, Inc.
Jun 2001 – Aug 2002	Co-founder/CTO/Exec.VP/, Voquette, Inc. (Merger led to Semagix)
Aug 1999 – May 2001	Founder, Chairman and CEO, Taalee, Inc. (Acquired by
	Voquette)

1997 – Present	Founder and President, Infocosm Inc., S-Corporation, Georgia
1989 – 1994	Member of Technical Staff, Systems Principles & Research,
	Morristown, NJ and Computer Systems Integration, Bell
	Communications Research, Bell Communications Research (Bellcore)
	Inc., Piscataway, NJ
1987 – 1989	Staff Research Scientist, UNISYS West Coast Research Center
	(formerly SDC), Santa Monica, CA
1985 – 1987	Principal Research Scientist, Computer Sciences Center, Honeywell,
	Minneapolis, MN

Research Statement

Research Areas

Knowledge-enabled Computing and Computing for Human Experience: creation, extraction and application of knowledge and knowledge-based techniques for cyber-physical and socio-technical systems, including improved perception and semantic techniques

Semantics-enabled services, sensor and social computing on the Web 3.0 (includes Semantic Sensor Web, mobile semantic services (analysis of tweets and social networking), Citizen Sensor Networking and its combination with multi-level sensing for situational awareness, collective intelligence, advertisement on social networking site, smart/semantic mashups, annotation of enterprise/WSDL and light-weight/RESTful/WebAPI services, cloud computing middleware-semantic approaches to leveraging multiple clouds)

Semantic Web and Semantic Applications (domain model enhanced NLP and statistical techniques for information extraction, mining social content such as Wikipedia, spatio-temporal-thematic analytics, knowledge discovery and intermediation, multi-ontology and complex relations, semantic search/directory/personalization/analytics, Relationship Web, etc.)

Key application domains: biomedicine and human effectiveness, health care informatics, defense and intelligence (including sensor), social computing

Past

Information Integration; Pan-Web and Enterprise Information Interoperability (incl. Federated Information Systems, Multi-agent and information brokering architectures, ontology and metadata management)

Web and Business Processes (Work Coordination and Collaboration Systems, Dynamic Trading Processes in E-Commerce, Multi-organization Business Processes and Workflow Management, Web-based Asynchronous and Synchronous Collaboration)

Management of Rich Media Content and Information Sources; Digital Libraries

Significant collaborations and applications in Bioinformatics, GIS, Healthcare, Financial, and National Security domains.

Research Funding / Grants

Federal Funds (with additional matching funds in some cases)

- SoCS: Collaborative Research: Social Media Enhanced Organizational Sensemaking in Emergency Response, National Science Foundation, \$480,000, September 2011. Supplement granted, \$16,000.
- EAGER: Expressive Scalable Querying over Linked Open Data, National Science Foundation \$125,828, September 2011-August 2013. Supplement granted: \$16,000.
- A Study of Social Web Data on Buprenorphine Abuse Using Semantic Web Technology, Department of Health and Human Services, National Institute on Drug Abuse (NIDA), \$401,500, through July 2013.
- T040: LVC Sensors Integration for Data Fusion in Operations and Training, funded by the Air Force Research Lab through Ball Aerospace, \$306,000, November 2010-October 2013.
- Trusted Semantic Sensor Network funded by the Air Force Research Lab, \$176,890, February 2009-July 2010.
- Architectures for secure semantic sensor networks for multi-layered sensing, The Air Force Research Lab, OGC/DAGSI, \$63,281, June 1, 2008-May 31, 2009.
- Education Partnership Agreement for joint work on "Distributed Systems for Psychological Modeling," 711th Human Performance Wing, Air Force Research Laboratory, \$61,000.
- Unidentified Sponsor, "<u>Trusted Semantic Sensor Network Phase I</u>," \$300,000, February 2009 - July 2011.
- Ontology and Semantic-Aided Human Cognition Knowledge Discovery funded by The Air Force Research Lab's Human Effectiveness Directorate, WPAFB, \$300,000, April 2010-March 2011.
- Unidentified Sponsor, "Trusted Semantic Sensor Web," \$120,000, July 2008 March 2009.
- Human Performance Ontology funded by The Air Force Research Lab's Human Effectiveness Directorate, WPAFB, \$100,000, June 2008-March 2009.
- Semantics and Services Enabled Problem Solving Environment for Trypanosoma cruzi funded by National Heart, Lung and Blood Institute, \$1,509,540, May 2008-June 2012.
- Spatio-Temporal-Thematic Queries of Semantic Web Data A Study of Expressivity and Efficiency, National Science Foundation, \$146,952, August 2008-August 2010.
- AFRL/DAGSI Ohio Student-Faculty Research Fellowship (with matching funds from the State of Ohio), "Architectures for Secure Semantic Sensor Networks for

Multi-Layered Sensing" (stipend plus fellowship for PhD student Cory Henson), \$87,437, April 2008-March 2009.

- Sensor Data Management, Principal Investigator of subcontract (subcontract to daytaOhio in Sensor-Aided Vigilance (SAVig), funded by Air Force Research Laboratory), \$32,000, April-August 2007.
- SemGrid: Semantic Discovery on Adaptive Services Grid, Principal Investigator (UGA Co-PIs: Arpinar, Kochut, Miller), National Science Foundation (IIS 0545243), October 15, 2005 - December 31, 2007, \$100,000.
- An Ontological Approach to Financial Analysis & Monitoring, Principal Investigator, ARDA funded project (subcontract to CTA, Inc.), \$325,000, April 2005-September 2006.
- Ontology, Metadata and Semantic Association Support for Semantic Agent Based Document Protection, Principal Investigator, ARDA funded project (subcontract to CTA, Inc.), \$38,716, November 2004-Febraury 2005.
- SemDis: Discovering Complex Relationships in Semantic Web, Principal Investigator (of joint UGA–UMBC project; UGA co-PIs: Arpinar, Kochut, Miller; UMBC co-PIs: Joshi, Finin, Yesha), National Science Foundation (IIS-based 325464–ITR Medium Projects), \$800,000–UGA component (Project Manager of \$1,250,000 overall project with UMBC component), October 1, 2003–September 30, 2007.
- Bioinformatics of Glycan Expression (part of Integrated Technology Resource for Biomedical Glycomics, Grant No. P41 RR018502), Investigator (Computer Science Coordinator; other CS investigators: K. Kochut, J. Miller), National Institute of Health, \$709,401 (Computer Science Component), July 1, 2003–June 30, 2008. (Partial funds transferred to Wright State U. upon move).
- System-Level Techniques for Energy Aware Computing (focus area: Enabling Personal Networked and Home Computing Applications with Metadata, PI: D. Lowenthal, co-PIs: Bhandarkar, Sheth, Li, Waterson), \$27,150, July 1, 2003–June 30, 2004.
- Semantic Association Identification and Knowledge Discovery for National Security Applications, Principal Investigator, National Science Foundation, CISE-ITR-0219649 (co-PIs: I.B. Arpinar, K. Kochut), \$200,000. REU Supplement for 2004, \$12,000, July 1, 2002–June 30, 2005.
- Database and Information Systems Research for Semantic Web and Enterprises, National Science Foundation (CISE-IIS-based 211606), \$15,000. EU Thematic Network OntoWeb, \$5,000. University of Georgia Foundation and CS Department, \$6,250, April 1, 2002–March 31, 2003.
- Extending METEOR with workflow reuse, adaptation, and collaboration, Principal Investigator, awarded by Naval Research Laboratory and ITT, \$200,000, January 1, 2000–September 30, 2000.
- The Alexandria Digital Earth Modeling System (Semantic Interoperability and Collaboration), Principal Investigator of the UGA subcontract to UCSB, National Science Foundation-IIS-9817432 (co-PI: K. Kochut), \$600,000 in federal funds, plus \$25,000 in UGARF equipment matching, September 1999–August 2004.
- Workflow Management for Advanced DoD Applications, Principal Investigator, awarded by Naval Research Lab/Department of Navy-N00173-98-2-L005 (co-PIs:K.

Kochut, J. Miller), \$315,542 in federal funds, plus \$15,000 in UGARF equipment matching funds, July 1, 1998–December 31, 1999.

- METEOR: Healthcare Information Infrastructure Program—Enterprise Workflow Automation, Principal Investigator for University of Georgia, awarded by National Institute of Standards and Technology (NIST)-ATP initiative on Information Infrastructure for Healthcare-70ANB5H1011 (co-PIs:K. Kochut, J. Miller), total project, \$1,674,729+: \$725,000 in federal funds over 4.5 years (3/95–2/96: \$116,364; 3/96–2/97: \$173,365; 3/97–2/98: \$188,348; 3/98–3/99: \$166,221; 3/99–8/99: \$80,701); more than \$949,727 in additional matching funds (from University of Georgia, University of Georgia Research Foundation, and industry donations; includes some of the funds listed under Industry Donations, below), March 1995– August 1999.
- Collaborative Tele-Consulting for Healthcare (CaTCH), Principal investigator to South Carolina Research Authority awarded as a subcontract in HITECC funded by the NIST-ATP initiative (co-PIs for first year: K. Kochut, J. Miller, co-PIs for the second year: K. Kochut and K. Shah), total federal, \$166,129: \$112,480 for the first year, \$47,149 for second year (partial) (additional second year and third year funds TBD, University of Georgia Research Foundation Matching in first year \$12,500, June 1996-May 1999.
- InfoHarness: A Scaleable System for Searching Heterogeneous Information, Principal Investigator (of the overall project, joint project with Bellcore), awarded under the Massive Digital Data Systems initiative of the Community Management Staff, Contract no. 95-FI38400-000, over \$600,000; University of Georgia component \$197,030 (year 1: \$87,327; year 2: \$109,703) plus University of Georgia Research Foundation equipment matching grant of \$14,500, April 15, 1995–August 30, 1997.
- NSF Workshop on Workflow and Process Automation, Principal Investigator, awarded by the National Science Foundation (Award no. IRI-9528870, Division of Information, Robotics, and Intelligent Systems, and the Division of Computer and Computational Research), \$24,795, plus \$6000 donation by the University of Georgia Research Foundation, September 1995–September 1996.
- NATO Award for Advanced Study Institute on Workflow Systems and Interoperability, Co-Director (jointly with A. Dogac, L. Kalinichenko, T. Ozsu), Istanbul, Turkey, 2,400,000 BFr (US\$76,000), December 1996-August 1997.

Industry/Consortia Funds

- Homeland Security Workshop, Principle Investigator (with co-PIs E. Lynn Usery, I. Budak Arpinar, Xiaobai Yao), UCGIS, \$15,000, August 2003–July 2004.
- Video Data Management System, Principal Investigator, awarded by L G Electronics Research Center of America, \$50,004, 1998. University of Georgia Research Foundation Matching in first year \$2,500, January 1, 1998–December 31.

State and University Funds

Advanced Data Management Resource, Ohio's Research Challenge, \$210,000, June 1, 2006-June 30, 2010.

- Cloud Computing Collaboratory, Wright State University, \$48,000, Amit Sheth (PI), John Gallagher, Keke Chen, Young Pei, Michael Raymer, TK Prasad, Bin Wang, Mateen Rizki, Shaojun Want, Prabhaker Mateti, Meilin Liu
- Major Collaboration/Infrastructure Grant, "Advanced Data Management Resource for Biomedical Research," Principal Investigator (WSU Co-PIs: M.L. Raymer, N.V. Reo), awarded through the Research Incentive Program of the Ohio Board of Regents by Wright State University, \$30,000, May 1, 2007–June 30, 2008.
- Faculty Research Commercialization Program, Principal Investigator, awarded by the Advanced Technology Development Center in conjunction with Georgia Research Alliance, \$50,000, July 1, 1998–June 30, 1998.
- UGA Office of Instructional Development (OID), A. Sheth, D. Everett, J. Miller, K. Kochut, J. Smith, R. Robinson, and H. Arabnia, "Mobile Multimedia Instruction Environment," \$8,500, April 1, 1996-March 30, 1997.
- Course Approval Process Automation (CAPA), Principal Investigator, funded by the Vice President for Academic Affairs, University of Georgia, \$150,065 (budget) July 1, 1996-June 30, 1997.
- CareWeb for the Family Connection Program, Principal Investigator, cooperative agreement funded by Medical College of Georgia, \$30,000, May 1997-April 1998.
- GradWeb for the reengineering of the entire information system of UGA's Graduate School with Web-based graduate applications and processing of graduate student related information within the Grad School and with all departments, LSDIS lab award of approx. \$32,430, July 1997–July 1998.

Competitive Awards and Industry Cash Gifts Received

- Trusted Semantic Sensor Web to Support Decision making over Massive Amounts of Sensor and Social Data, Riverside Research, \$81,539, June 2011 – December 2012.
- Cardiology Semantic Analysis System, ezdataintelligence (ezDI) LLC, \$50,000, June 2011
- Janya, Inc., \$25,150, "Enhancing Information Extraction with Linked Open Data," April, 2011.
- Department of Community Health, \$30,000, "A Study of Social Web Data on Oxycontin Abuse Using Semantic Web Technology," January, 2011.
- > **Microsoft**, \$75,000 unrestricted gift, July, 2010.
- Hewlett Packard, \$45,000 for "Model Generation and Model Extension for Information and Knowledge Management," June, 2010.
- Competitive Award, Ralph Woolpert Company, \$148,000 for "Information Operations/Cyber Exploitation Research (ICER)," May, 2010.
- Competitive Award, Microsoft Research, \$60,000 for "Chatter, Intent, Good Karma, and Contextual Advertisements in Social Networks," February 2008.
- Competitive Award, IBM UIMA Innovation Award, \$23,000 for "UIMA-based Infrastructure for Summarizing Casual, Unstructured Text," November 2007.
- Gift from HP Research, \$50,000, for research in unstructured text extraction, starting January 2008.
- **Gift/donation**, Athens Heart Center, \$32,000, May 2005.

- **Competitive Award**, IBM Eclipse Innovation Grant 2005, \$27,000, January 2005.
- Gift/donation, 2004 IBM Faculty Award, \$30,000, 2004.
- Competitive Award, IBM Eclipse Innovation Award 2004, \$28,000, January 2004.
- Gift from the Boeing Company as a LSDIS industry sponsor, \$55,000 (annual gifts), December 1996, January 1998, January 2001.
- Gift from Microelectronic and Computer Technology Corporation (MCC) as a LSDIS industry sponsor, \$20,000, June 1997.
- Gift from Hewlett-Packard Labs as a LSDIS industry affiliate, \$12,500 (annual gifts for 1995, '96, '97, '98).
- Gift from LG Electronics Research Center of America as a LSDIS industry sponsor, \$25,000, February 1998.

Industry Donations Received (total value over \$650,000)

- Microsoft Windows Azure Cloud-free access for the Kno.e.sis Center, March 2011.
- Semagix Freedom, \$255,000, 2005.
- Microsoft Research, donation of all requested software and training for Computer Science department (to support teaching) and LSDIS lab (for use in research), 1999.
- Informix Universal Server and other software (first receipt of grant program), Informix, \$120,000, since April 1997. Renewed in 1998 and 1999.
- Also from PictureTel live 200P and Developer's Tool kit, donated by PictureTel Corp., \$6,775, June 1996, Virage's Visual Information Retrieval System (value not assigned) March 1997, MARGI's MPEG-to-GO (value not assigned) June 1997, POET (December 1998), Object Design Inc. (December 1998).
- ▶ I-Kinetics DataBroker and Open JDBC, \$19,396, September 1997.
- Persistence, donated by Persistence Software Inc. \$61,275, July 1995. Also, May 1997.
- ORBeline 2.0 and BlackWidow licenses (6), donated by PostModern Computing (first grant recipient of CORBA2.0 product), \$83,700, March 1996.
- ORBIX and related products, donated by IONA Technologies, \$45,295, October 1996. Again in 1998 (value undertermined).
- Illustra Server licenses (5) and several databases, awarded through a competitive grant program, Illustra Information Technology, Inc., \$17,373.50, August 22, 1995.

[1] PI of research grants/contracts of over four million dollars from DARPA and other sources before joining UGA. Also, raised significant funds for commercial activities from Venture Capital and other sources for non-academic activities.

Speeches and Talks

Keynote and Plenary Invited Talks at International Conferences/Workshops and Significant National/International Meetings

- "Computing for Human Experience: Semantics empowered Cyber-Physical, Social and Ubiquitous Computing beyond the Web," Keynote at <u>OnTheMove Federated Conferences</u> <u>& Workshops (OTM 2011)</u>, Crete, Greece, October 17-21, 2011.
- <u>"Spatial Semantics For Better Interoperability and Analysis: Challenges and Experiences In Building Semantically Rich Applications In Web 3.0,</u>" Keynote at 3rd Annual Spatial Ontology Community of Practice Workshop (SoCoP 2010), in conjunction with USGS Reston, VA, December 3, 2010.
- 3. "Semantic Web, Powering Intelligent Web Applications," Luncheon Keynote at <u>Technology First's Technology Landscape 2013</u>, May 16, 2010, Dayton, Ohio
- 4. "<u>Computing for Human Experience: Semantics empowered Sensors, Services, and Social</u> <u>Computing on Ubiquitous Web</u>," Keynote at Fourth International Conference on Digital Information Management (<u>ICDIM'09</u>), Ann Arbor, Michigan, November 1-4, 2009.
- "Computing for Human Experience: Semantics empowered Sensors, Services, and Social Computing on ubiquitous Web," Keynote at 4th European Conference on Smart Sensing and Context (EuroSSC 2009), Guildford, United Kingdom, September 16-18, 2009.
- 6. "<u>Extending SPARQL to Support Spatially and Temporally Related Information</u>," Keynote at Semantic Technology Conference, San Jose, CA, June 16, 2009.
- "Computing for Human Experience: Sensing, Perception, Semantics, Social Computing, Web 3.0, and beyond," Keynote at 20th Midwest Artificial Intelligence and Cognitive Science Conference (MAICS2 2009), Fort Wayne, Indiana, April 18-19, 2009.
- 8. "<u>Computing for Human Experience: Sensors, Perception, Semantics, Web N.0, and</u> <u>Beyond</u>," Keynote at the 3rd Asian Semantic Web Conference (<u>ASWC 2008</u>), Bangkok, Thailand, February 2-5, 2009.
- 9. "<u>Relationship Web: Trailblazing, Analytics and Computing for Human Experience</u>," Keynote at 27th International Conference on Conceptual Modeling (<u>ER 2008</u>), Barcelona, Spain, October 20-23, 2008.
- 10. "Empowering Translational Research using Semantic Web Technologies," Plenary Invited talk at the Ohio Collaborative Conference on Bioinformatics (OCCBIO), Toledo, OH June 2-4, 2008.
- "Semantic Web for Health Care and Biomedical Informatics," Keynote at <u>NSF</u> <u>Biomedical Informatics Workshop: Expanding Secondary Use of Health Data</u>, December 4–5, 2007.
- 12. "<u>Semantic Web techniques empower perception and comprehension in Cyber Situational</u> <u>Awareness?</u> Invited talk at the, <u>ARO Cyber Situational Awareness Workshop</u>, Fairfax, VA, November 14–15, 2007.
- 13. "<u>Realizing the Relationship Web: Morphing information access on the Web from today's document- and entity-centric paradigm to a relationship-centric paradigm</u>," Keynote Address, ACM Multimedia 2007 International Workshop: The Many Faces of Multimedia Semantics, Augsburg, Germany, September 28, 2007.
- 14. "Semantics to Empower Services Science: Using Semantics at Middleware, Web Services and Business Levels," Keynote Address, 9th International Conference on Enterprise Information Systems (ICEIS2007), Funchal, Portugal, June 12–16, 2007.
- "Driving Deep Semantics in Middleware and Networks: What, why and how?" Keynote Address, <u>Semantic Sensor Networks Workshop</u>, 5th International Semantic Web Conference (ISWC-2006), Athens, GA, November 6, 2006.

- 16. "<u>{Ontology: Resource} x {Matching : Mapping} x {Schema : Instance} :: Components of the same challenge</u>," Keynote Address. <u>International Workshop on Ontology Matching (OM-2006</u>), 5th International Semantic Web Conference (ISWC-2006), Athens, GA, November 5, 2006,
- 17. "Semantics to energize the full Services Spectrum: Ontological approach to better exploit services at technical and business levels," Keynote Address at 2nd Biennial Beta Conference, 2006: Management of Service Operations, Eindhoven, Netherlands, September 14–15, 2006.
- 18. "Semantics to energize the full Services Spectrum: Ontological approach to better exploit services at technical and business levels," Invited Talk for inauguration invitational event for Research School on Service-Oriented Systems Engineering, Hasso-Plattner-Institute, Potsdam, Germany, June 22, 2006.
- 19. "Semantic Web applications in Financial Industry, Government, Health Care and Life Sciences," Keynote Address at AAAI Spring Symposium on <u>Semantic Web Meets</u> <u>eGovenment</u>, Stanford University, Palo Alto, CA, March 28, 2006.
- 20. "<u>Semantics Enabled Industrial and Scientific Applications: Research, Technology and</u> <u>Deployed Applications</u>," Keynote Address at <u>1st Online Metadata and Semantic Research</u> <u>Conference</u>, November 21–30, 2005.
- "Semantics for Scientific Experiments and the Web: the implicit, the formal and the powerful," Featured talk, <u>BISCSE 2005</u>: Forging New Frontiers, Berkeley CA, November 2–6, 2005.
- 22. "Semantic Web Applications in Industry: Examples in Risk & Compliance" Part I, & "Semantic Web & Semantic Web Services: Applications in Health Care and Scientific <u>Research</u>," Part II Keynote Address, IFIP Working Conference on Industrial Applications of Semantic Web (IASW-2005), Jyväskylä, Finland, August 25–27, 2005.
- 23. "Web Services to Semantic Web Processes: Investigating Synergy between Practice and <u>Research</u>," Keynote Address, 1st European Young Researchers Workshop on Service Oriented Computing, Leicester, UK, April 21, 2005. (<u>Abstract</u>, <u>Presentation</u>)
- 24. "Semantics Powered Bioinformatics: Semantic Search, Integration, Processes and Analytics," Plenary Invited Talk at 2003 BISC FLINT-CIBI International Joint Workshop on Soft Computing for Internet and Bioinformatics, Berkeley, CA, December 16, 2003.
- 25. "<u>What can Semantic do for Bioinformatics</u>," Keynote Address, Russian Conference on Digital Libraries (RCDL 2003), Saint Petersburg, Russia, October 29, 2003.
- 26. "Semantics-Powered Bioinformatics: What, Why and How of Semantic Search, <u>Integration, Processes and Analytics</u>," Invited Talk at Semantic Web Technologies for Science and Engineering Workshop, Sanibel Island, FL, October 20, 2003.
- 27. "Semantic Web in Action (also known as Ontology-driven information search, integration and analysis)," Keynote Address at Net Object Days 2003 and MATES03, Erfurt, Germany, September 23, 2003.
- 28. "From Semantic Search to Analytics and Discovery on heterogeneous content: Changing focus from Documents and Entities to Relationships," Keynote Address, 1st International Workshop on Semantic Web and Databases, September 8, 2003.
- 29. "<u>Semantic Web Process Lifecycle: Role of Semantics in Annotation, Discovery,</u> <u>Composition and Orchestration</u>," Invited Talk, <u>WWW 2003 Workshop on E-Services and</u> <u>the Semantic Web</u>, Budapest, Hungary, May 20, 2003.

- 30. "Ontology Driven Information Systems in Action (Capturing and Applying Existing Knowledge to Semantic Applications)," Invited talk, <u>Sharing the Knowledge</u>-International CIDOC CRM Symposium, Washington, DC, March 26–27, 2003,
- 31. "<u>Relationships at the Heart of Semantic Web: Modeling, Discovering, Validating and Exploiting Complex Semantic Relationship</u>," Keynote Address, 29th Annual Conference on Current Trends in Theory and Practice of Informatics (SOFSEM 2002), Czech Republic, November 25, 2002.
- 32. "Semantic Content Management for Enterprises and National Security," Keynote Address at invited session: Content and Semantic-based Information Retrieval, 6th World Multi-conference on Systemics, Cybernetics, and Informatics (SCI 2002), Orlando, FL, July 14, 2002.
- 33. "Content Management, Metadata, and Semantic Web," Inaugural Keynote Address, NetObjectDAYS, Erfurt, Germany, September 11, 2001.
- 34. "Semantic Web and Information Brokering: Opportunities, Early Commercialization, and <u>Challenges</u>," Keynote Address, Workshop on Semantic Web: Models, Architectures and Management, Lisbon, Portugal, September 21, 2000
- 35. "Information Brokering in Digital Media," Keynote Address, 3rd International Workshop on Cooperative Information Agents CIA-99, Uppsala, Sweden, July 31–August 2, 1999.
- 36. "Processes in the Networked Economy: Portals, Vortex and Dynamic Trading Processes," Keynote Address, SAPBM Workshop at the 11th Conference on Advanced Information Systems Engineering Heidelberg, Germany June 14-18, 1999
- 37. "Semantic Interoperability and Information Brokering in Global Information Systems," Keynote Address, 3rd IEEE Metadata Conference, Bethesda, MD, April 6–7, 1999.
- 38. "Workflow Process Management and Enterprise Application Integration in Healthcare," Keynote Address, IEEE Workshop on Enterprise Networking and Computing in Healthcare Industry (Healthcom 99), Sydney Australia, January 11, 1999.
- 39. "Real-world Relevant Research Challenges in Workflow," Keynote Address, EDBT Workshop on Workflow Management Systems, Valencia, Spain, March 27–28, 1998.
- 40. "Pragmatics Driven Research Issues in Data and Process Integrity in Enterprises," Keynote Address, IFIP WG 11.5 Conference on Integrity and Control in Information Systems, Zurich, Switzerland, December 4–5, 1997.
- 41. "Semantic Interoperability in Infocosm: Moving Beyond Infrastructural and Data Interoperability in Federated Information Systems," Keynote Address, International Conference on Interoperating Geographical Information Systems (Interop '97), Santa Barbara, CA, December 3, 1997.
- 42. "From Contemporary Workflow Process Automation to Adaptive and Dynamic Work Activity Coordination and Collaboration," Keynote Address, Workshop on Workflows in Scientific and Engineering Applications, Toulouse, France, September 1997.
- 43. "Schemata for Interoperable Database Systems" and "So Far (Schematically) yet So Near (Semantically)," Keynote Address, IFIP DS-5 Conference on Semantics of Interoperable Database Systems, Lorne, Australia, November 1992.

Conference and Workshop Invited Talks

- "Semantics of Perception: Towards a Semantic Web Approach to Machine Perception", Invited talk given at the Dagstuhl Seminar on Cognitive Approaches for the Semantic Web, Schloss Dagstuhl, May 28 – June 01, 2012.
- "Citizen Sensing Opportunities and Challenges in Mining Social Signals and Perceptions," <u>2011 Microsoft Research Faculty Summit</u>, Redmond, WA, July 18-20, 2011. [PPT, PDF].
- 3. "Active Perception Over Machine and Citizen Sensing," with Cory A. Henson, <u>2011</u> <u>Semantic Technology Conference (SemTech)</u>, San Francisco, CA, June 7, 2011.
- 4. "<u>How To Make Linked Data More than Data</u>," 2010 Semantic Technology Conference (SemTech2010), San Francisco, CA, June 21-25, 2010.
- "Monetizing User Activity on Social Networks-Challenges and Experiences," with Meenakshi Nagarajan, Kamal Baid, and Shaojun Wang, The Beyond Search-Semantic Computing and Internet Economics 2009 Workshop, Redmond, Washington, June 10, 2009.
- 6. <u>"Challenges of Creating a Knowledge-based Society: Education & Research for India & Gujarat</u>," Invited talk at World Gujarat Conference: Chaalo Gujarat, August 30, 2008.
- 7. "Empowering Translational Research using Semantic Web Technologies," Ohio Collaborative Conference on Bioinformatics (OCCBIO), Toledo, OH, June 2-4, 2008.
- 8. "<u>Semantic Sensor Web</u>," with Cory Henson, Semantic Technology Conference, San Jose, CA, May 18-22, 2008.
- 9. "SA-REST: Using Semantics to Empower RESTful Services and Smashups with Better Interoperability and Mediation," with Karthik Gomadam, Semantic Technology Conference, San Jose, CA, May 18–22, 2008.
- 10. "Dynamic and Agile SOA using SAWSDL," with Karthik Gomadam, and Kunal Verma, Semantic Technology Conference, San Jose, CA, May 18, 2008.
- 11. "Semantic Sensor Web," Sensor Web Enablement (SWE) Working Group of the Open Geospatial Consortium (<u>OGC</u>), St. Louis, MO, March 26, 2008.
- 12. "<u>Semantic Sensor Web</u>," Special SICoP Conference, Building Semantic Interoperability Solutions for Information Sharing and Integration, Falls Church, VA, February 5, 2008.
- 13. "<u>Strategic Importance of Higher Education and Research in Positioning Gujarat for</u> <u>Global Competitiveness</u>," Plenary Invited Talk, Global Gujarat & Its Diaspora, Hemchandracharya North Gujarat University, Patan, India, January 17–19, 2008.
- "Trailblazing, Complex Hypothesis Evaluation, Abductive Inference and Semantic Web— exploring possible synergy," <u>ARO Workshop on Abductive Reasoning:</u> <u>Evidence and Intelligent Systems</u>, Adelphi, MD, August 23–24, 2007.
- 15. "<u>Relationship Web: Realizing the Memex vision with the help of Semantic Web</u>," SemGrail 2007, Redmond, WA, June 21–22, 2007.
- 16. "Semantic Annotations for WSDL," with Jacek Kopecky (DERI Innsbruck), W3C Track at the 16th World Wide Web Conference (WWW2007), Banff, Canada, May 10, 2007.
- 17. "Semantic empowerment of Life Science Applications," Microsoft eScience Workshop, Cincinnati Children Hospital & Medical Center, October 14, 2006.
- "Semantic empowerment of Health Care and Life Science Applications," W3C track at the 15th International World Wide Web Conference (WWW2006), Edinburgh, Scotland, May 26, 2006. (Presentation)

- 19. "Semantic Web applications in Financial Industry, Government, Health care and Life Sciences," Taxonomies and Semantic Technologies for S&T Analysis Conference, The MITRE Corporation, March 17, 2006.
- 20. "Active Semantic Electronic Patient Records," Semantic Technology Conference, San Jose, CA, March 7, 2006.
- 21. "Autonomic Web Process," vision paper presented at the 3rd International Conference on Service Oriented Computing, Amsterdam, Netherlands, December 13, 2005.
- 22. "Semantic Technology in the Real World: Experiences and Lessons based on Enterprise Semantic Applications," Semantic Technology Conference 2005, San Francisco, CA, March 8, 2005.
- 23. "<u>Semantic Web Technology in Support of Bioinformatics for Glycan Expression</u>," W3C Workshop on Semantic Web for Life Sciences, Cambridge, MA, October 28, 2004.
- 24. "From Semantic Search & Integration to Analytics," KMWorld 2004, Santa Clara, CA, October 26–28, 2004.
- 25. "Semantic Technology in the Real World: Experiences and Lessons based on Commercialization of Academic Research & Industry Applications," Dagstuhl Seminar on Semantic Interoperability and Integration, Dagstuhl, Germany, September 21, 2004.
- 26. "Semantic Web Technology Ontology Testbed," Ontology in Action Workshop, Banff, Canada, June 21, 2004.
- 27. "Semantic Visualization: Interfaces for exploring and exploiting ontology, knowledgebase, heterogeneous content and complex relationships, NASA Virtual Iron Bird Workshop, Monterey, CA, April 2, 2004.
- "Ontology-driven Integration and Analysis for Semantic Applications in Business Intelligence and National Security," Ontology and Semantic Web Technical Exchange Meeting, MITRE Corporation, McLean, VA, June 12–13, 2003.
- 29. "Database and Information Systems Research for Semantic Web and Enterprises: Review of the Amicalola Workshop," and "Snapshot of the Semantic Web Commercial State of the Art," Invited Talk, <u>Science on the Semantic Web, Building a New Generation of Environmental Information Systems</u>, Rutgers University, Newark, NJ, October 24, 2002.
- 30. "Process Composition: Quality of Service Specification Semantics, and Adaptation," Invited Talk, EI3-IC workshop on Interoperability of Business Processes and Enterprise Models, Gaithersburg, MD, February 6–8, 2002.
- 31. "Semantic Content Annotation and Applications: Semantic Web Now and Challenges Ahead," Invited talk, 2001 IRC International Conference on Internet Information Retrieval, Seoul, South Korea, October 29, 2001.
- 32. "On Supporting Complex Relationships and Knowledge Discovery in the Semantic Web," Plenary Invited Talk, 2001 BISC International Workshop on Fuzzy Logic and the Internet: New Directions in Enhancing the Power of the Internet, Berkeley, CA, August 16, 2001.
- 33. "Information Scapes: A Paradigm for Knowledge Discovery in Semantic Web," Inaugural session Invited Talk, <u>IJCAI-2001 Workshop on Knowledge Discovery from</u> <u>Distributed, Dynamic, Heterogeneous, Autonomous Data and Knowledge</u>, Sources, Seattle, WA, August 6, 2001.
- 34. "<u>Workflow and Process Automation in Information Systems: A Proposal for a</u> <u>Multidisciplinary Research agenda and Follow-up</u>," Invited Talk, NSF Invitational

Workshop on Distributed Information, Computation, and Process Management for Scientific and Engineering Environments, Virginia, May 15–16, 1998.

- 35. "From Process Modeling to Workflow Automation," Invited Talk, National Institute of Standards and Technology sponsored Process Information Technology Workshop, Gaithersburg, MD, March 13, 1998.
- 36. "Workflow Applications to Research Agenda: Scalable and Dynamic Work Coordination and Collaboration Systems," Invited Talk (with K. Kochut), NATO Workshop on Advances in Workflow Management Systems and Interoperability, Istanbul, Turkey, August 1997.
- 37. "Overview of Workflow Research and Technology," Invited Talk, DARPA Collective Actions Tools Workshop, March 1996.
- 38. "From Data Dirt Roads to Infocosm," Inaugural session invited talk, 7th International Conference on Management of Data, Pune, India, December 1995.

Invited and Colloquia Talks (Partial List, Not Including Conference and Workshop Paper Presentations/Talks)

- 1. "Web 3.0 and beyond: Semantics empowered Cyber-Physical, Social and Ubiquitous Computing beyond the Web," Webinar organized by the Indo US Collaboration for Engineering Education (IUCEE), March 26, 2011.
- 2. "<u>Computing for Human Experience: Semantics empowered Sensors, Services, and Social</u> <u>Computing on ubiquitous Web</u>," SRI International, Menlo Park, CA, May 3, 2010.
- 3. "<u>Semantic (Web) Technologies for Translational Research in Life Sciences</u>," The School of Informatics and Computing Colloquium Series, Indiana University, February 5, 2010.
- 4. "Semantics to Empower Services for Agile Global Business," Indian Institute of Technology- Bombay, Powai, India, August 1, 2009.
- 5. "Semantics, Services, Sensor and Social Computing on the Web," Dhirubhai Ambani Institute of Information and Communication Technology (DAIICT), Gandhinagar, India, July 29, 2009.
- 6. Amit P. Sheth (with Kamlesh Lulla and Sanjay Chaudhary), (presentation to and white paper for the Gujarat CM), Round Table on 'Regulatory & Policy Reform for Higher Education in Gujarat,' in conjunction with the International Conference on 'Reconnecting Gujarati Diaspora with its Homeland: Contribution to its Development with a Focus on Building a Knowledge Society' (Patan-Gandhinagar, Jan 17-19, 2009).
- 'Semantic Sensor Web,' Advancing Digital Watersheds and Virtual Environmental Observatories II session of AGU Fall Meeting, San Franscisco, CA, USA, December 17, 2008
- 8. "Computing For Human Experience," Department of Computer Science (DSIC) of the Technical University of Valencia (UPV), Valencia, Spain, October 24, 2008.
- 9. "Challenges of Creating a Knowledge-based Society: Education & Research for India & Gujarat," invited talk , World Gujarat Conference: Chaalo Gujarat, Edison, NJ, August 30, 2008.
- 10. "Globalization and Knowledge-intensive Economies," AINA/World Gujarat Conference, Edison, NJ, Aug 29-31, 2008.
- 11. "Semantic Web: Promising Technologies, Current Applications and Research Directions," Macquarie University, Sydney, August 14, 2008.

- 12. "Semantics to Empower Services Science: Using Semantics at Middleware, Web Services and Business Levels", School of Computer Science & Engineering, University of New South Wales, Australia, August 13, 2008.
- 13. "Semantics to Empower Services Science: Using Semantics at Middleware, Web Services and Business Levels," CSIRO, Canberra, Australia, August 11, 2008.
- "Semantic Sensor Web,' ARC Research Network on Intelligent Sensors," Sensor Networks and Information Processing - ISSNIP talk, Melbourne, Australia, August 1, 2008.
- 15. "Semantic Web: Promising Technologies, Current Applications & Future Directions," University of Adelaide, Australia, July 23, 2008.
- 16. "Semantic Sensor Web," Semantic Technology Conference, San Jose, CA, May 18-22, 2008.
- "SA-REST: Using Semantics to Empower RESTful Services and Smashups with Better Interoperability and Mediation," Semantic Technology Conference, San Jose, CA, May 18–22, 2008.
- "Dynamic and Agile SOA using SAWSDL," Semantic Technology Conference, San Jose, CA, May 18, 2008.
- 19. "Semantic Sensor Web," Sensor Web Enablement (SWE) Working Group of the Open Geospatial Consortium (<u>OGC</u>), St. Louis, MO, March 26, 2008.
- 20. "Semantic Sensor Web," Special SICoP Conference, Building Semantic Interoperability Solutions for Information Sharing and Integration, Falls Church, VA, February 5, 2008.
- 21. "<u>Strategic Importance of Higher Education and Research in Positioning Gujarat for Global Competitiveness</u>," Plenary Invited Talk, Global Gujarat & Its Diaspora, Hemchandracharya North Gujarat University, Patan, India, January 17–19, 2008.
- 22. "Relationship Web: Spinning the Semantic Web from Trailblazing to Complex Hypothesis Evaluation," Cyber Center Lecture Series, Discovery Park, Purdue University, Lafayette, IN, August 16, 2007.
- 23. "Relationship Web: Spinning the Semantic Web from Trailblazing to Complex Hypothesis Evaluation," presentation, College of Engineering, University of Illinois at Chicago, Chicago, IL, 2007.
- 24. "Semantic empowerment of Life Science Applications," Cincinnati Children Hospital and Medical Center, Cincinnati, OH, October 14, 2006.
- 25. "Career Options, Changing Trends and Emerging Areas in Computer Science and related fields," Birla Institute of Technology & Science, Pilani, India, September 30, 2006.
- 26. "Semantics to energize the full Services Spectrum," IBM Indian Research Lab, New Delhi, India, July 27, 2006.
- 27. "Semantics to energize the full Services Spectrum," DA-IICT, Ahmedabad, India, July 25, 2006.
- 28. "METEOR-S: Using Semantics to energize Services & Processes," DERI, Galway, Ireland, June 19, 2006.
- 29. "Semantic Web applications in Financial Industry, Government, Health care and Life Sciences, " Accenture Technology Labs, Palo Alto, CA, March 29, 2006.
- 30. "Semantic Web applications in Financial Industry, Government, Health care and Life Sciences," and "METEOR-S: Investigations on semantics empowerment of processes," Hewlett–Packard Labs, Palo Alto, CA, March 6, 2006.

- 31. "Web Service Semantics-WSDL-S," W3C Advisory Committee Meeting, Montreal, Canada, November 30, 2005.
- 32. "What can Semantics do for Bioinformatics," Special Seminar, Institute of Bioinformatics, University of Georgia, September 22, 2005.
- 33. "Semantic Web Applications in Enterprises and Scientific Research," W3C Advisory Committee Meeting, Cannes-Mandelieu, France, June 7, 2005.
- 34. "Semantic Web: Technology & Applications in Search, Digital Media/Content Management, Science and National/Homeland Security," Digimarc Corp., Portland, OR, May 3, 2005.
- 35. "Semantics in the Semantic Web–The implicit, the formal and the powerful (with a few examples from Glycomics)," Berkeley Initiative in Soft Computing (BISC) Seminar, University of California, Berkeley, October 26, 2004.
- 36. "Web Services to Semantic Web Process," Tsinghua University, Beijing, China, September 16, 2004.
- 37. "Semantic Web Technology in Action: From Search and Integration to Analytics," Shanghai Jiao Tong University, Shanghai, China, September 15, 2004.
- "Semantic Web Technology Evaluation Ontology (SWETO): A test bed for evaluating tools and benchmarking semantic applications," WWW2004 Developers' Day, New York, NY, May 22, 2004.
- 39. "Semantic Web in Action," NASA Ames Research Center, Menlo Park, CA, April 1, 2004.
- 40. "Semantic Web in Action," IBM Almaden Research Center, January 13, 2004.
- 41. "Semantic Discovery and its applications to Homeland Defense and Bioinformatics," Georgia Technology Institute, Atlanta, GA, November 24, 2003.
- 42. "Ontology-based Information Systems: From Research to Reality," Boeing PhantomWorks, Seattle, WA, September 17, 2003.
- 43. "Semantic Web Process Lifecycle: Role of Semantics in Annotation, Discovery, Composition and Orchestration," IBM T.J. Watson Research Center, Hawthorne, NY, July 10, 2003.
- 44. "Ontology Driven Information Systems in Action: Capturing and Applying Existing Knowledge to Semantic Applications," University of Namur, Belgium, June 24, 2003.
- 45. "Semantic Web Applications and Next Generation Content Management," Hongik University, Seoul, Korea, October 30, 2001.
- 46. "Web, Semantics, OIL and FUEL: Semantic Interoperability and learning on the Web," Stanford University Database Seminar, October 20, 2000.
- 47. "Mapping your job search process while balancing Career Growth, Pay and Security," ACM Student Chapter 1st Annual ACM Dinner, Athens, GA, April 5, 2001.
- 48. "Changing Focus on Interoperability in Global Information Systems," Technical Speaker Series, MITRE, December 3, 1998.
- 49. "Enabling Virtual Teams and Infocosm," Bell Communications Research, December 2, 1998.
- 50. "METEOR System for Distributed, Multi-paradigm Workflow Management," invited technical presentation, CERN, Geneva, Switzerland, March 31, 1998.
- 51. InfoHarness and InfoQuilt: Steps towards enabling Infocosm through Semantic Interoperability," colloquium talk, University of California, Santa Barbara, March 5, 1998.

- 52. "InfoHarness and InfoQuilt Projects," CNN Interactive, Atlanta, GA, April 21, 1997.
- 53. "Information (Super) Highway: New Opportunities for Global Competitive Advantage for Developing Countries," H. M. College, Ahmedabad, India, September 12, 1996.
- 54. "Information (Super) Highway: New Opportunities for Global Competitive Advantage for Developing Countries," IEEE Computer Society, Gujarat, India, September 11, 1996.
- 55. "Media–independent Correlation and Access of Heterogeneous Digital Information," Indian Space Research Organization, Ahmedabad, India, September 9, 1996.
- 56. "Adapt/X Harness System for Managing Heterogeneous Information in Internet and Intranets," Conference on Very Large Databases, Bombay, India, September 4, 1996.
- 57. "Transactional Workflow Management: Research, Technology and Applications," Indian Institute of Management, Ahmedabad, India, December 1994.
- 58. "Issues in Interoperable Information Systems," Indian Institute of Technology, Bombay, India, December 29, 1994.
- 59. "Multi-Database Systems: Research and Reality," ACM Lecture Series Talk, Univ. of Michigan, November 1994.
- 60. "Transactional Workflow Systems," ACM Lecture Series Talk, Wayne State University, Detroit, MI, November 17, 1994.
- 61. "Multi-Database Systems: Research and Reality," ACM Lecture Series Talk, ACM Professional Chapter, Ann Arbor, MI, November 17, 1994.
- 62. "Multi-system Applications and Transactional Workflows," George Mason University, Fairfax, VA, May 1994.
- 63. "Multisystem Applications and Transactional Workflows," University of California, Riverside, April 1994.
- 64. "Transactional Workflow Management: Research, Technology and Applications," State University of New York, Albany, NY, March 1994.
- 65. "Transactional Workflow Management: Research and Applications," Bell Labs, Murray Hill, NJ, July 1993.
- 66. "Transactional Workflow Management: Research and Applications," Matsushita Information Technology Laboratory, Princeton, NJ, June 1993.
- 67. "Management of Interdependent Data: Specification, Enforcement and Applications," University of Zurich, Zurich, Switzerland, May 1993.
- 68. "Schematic and Semantic Heterogeneity," ETH (Swiss Federal Institute of Technology), Zurich, Swi tzerland, May 1993.
- 69. "Multisystem Workflow Applications," University of Munich, April 1993.
- 70. "Management of Interdependent Data: Specification, Enforcement and Applications," George Mason University, Fairfax, VA, March 1993.
- 71. "BERDI: A Schema Design, Analysis and Integration Toolkit," Hewlett Packard Labs, February 1993.
- 72. "The CHIME Project," Microelectronics and Computer Corporation, Austin, TX, January 1993.
- 73. "Multidatabase Systems: Research and Reality," Queensland University of Technology, Brisbane, Australia, November 1992.
- 74. "Federated Databases for Managing Distributed, Heterogeneous, and Autonomous Databases," La Trobe University, Bandoora, Australia, November 1992.
- 75. "Management of Interdependent Data: Specification, Enforcement and Applications," ETH (Swiss Federal Institute of Technology), Zurich, Switzerland, October 1992.

- 76. "Management of Interdependent Data," IBM-European Networking Center and Scientific Research Heidelberg, Heidelberg, Germany, October 1992.
- 77. "Transactional Workflow Management: Specification and Enforcement," IPSI–GMD, Darmstadt, Germany, October 1992.
- 78. "Federated Databases for Managing Distributed, Heterogeneous, and Autonomous Databases," University of Ulm, October 1992.
- 79. "The BrAID System for Integrating AI and DBMS Systems," Fern Universitat, Hagen, Germany, October 1992.
- 80. "Multidatabase Systems: Research and Reality," Simon Fraser University, Vancouver, Canada, August 1992.
- 81. "Management of Interdependent Data in Multidatabase Systems," U of Maryland–BC, May 1992.
- 82. "Management of Interdependent Data," IPSI-GMD, Darmstadt, Germany, March 1992.
- 83. "Semantics Issues in Schema Integration," IPSI–GMD, Darmstadt, Germany, March 1992.
- 84. "Federated Databases for Managing Distributed, Heterogeneous, and Autonomous Databases," CRAI, Italy, March 1992.
- 85. "Data Consistency and Work Flow Management in Multidatabase Systems," VTT (National Research Center of Finland), Helsinki, Finland, March 1992.
- 86. "Management of Interdependent Data in Multidatabase Systems," Matsushita Information Technology Laboratory, Princeton, NJ, February 1992.
- 87. "Management of Interdependent Data: A Case Study at Bellcore," Microelectronics and Computer Corporation, Austin, TX, January 1992.
- 88. "Research Issues in Schema Integration and View Update," University of Houston, TX, October 1991.
- 89. "Federated Database Systems," Boeing, Seattle, WA, October 1991.
- 90. "Federated Database Systems," ACM professional chapters at Piscataway, NJ, April 1991.
- 91. "Schematic and Semantic Issues in Schema Integration," New Jersey Institute of Technology, Newark, March 1991.
- 92. "Federated Database Systems: Architecture and Alternatives," New Jersey Institute of Technology, Newark, January 1991.
- 93. "Integrating Heterogeneous Distributed Databases: Requirements, Concepts and Solutions," New Jersey Institute of Technology, Newark, October 1990.
- 94. "Research Issues in Schema Integration and View Update," Purdue University, West Lafayette, IN, October 1990.
- 95. "Federated Databases for Managing Distributed, Heterogeneous, and Autonomous Databases," IBM-European Networking Center and Scientific Research Heidelberg, Germany, August 1990.
- 96. "View Update Using Knowledge at View Definition and View Update Time," IPSI-GMD, Darmstadt, Germany, August 1990.
- 97. "Federated Databases for Managing Distributed, Heterogeneous, and Autonomous Databases," Fern Universitat, Hagen, Germany, August 1990.
- 98. "Federated Database Systems," Bell Communications Research, Red Bank, NJ, February 1990.

- 99. "Integrating Heterogeneous Distributed Databases: Requirements, Concepts and Solutions," University of California, Los Angeles, October 1988.
- 100. "View Update Using Knowledge at View Definition and View Update Time," Fern Universitat, Hagen, Germany, March 1988.
- 101. "View Update Using Knowledge at View Definition and View Update Time," INRIA, France, March 1988.
- 102. "View Update Using Knowledge at View Definition and View Update Time," Unisys West Coast Research Center, April 1987.
- 103. "Integrating Heterogeneous Distributed Databases," University of Minnesota, September 1986.

Chief Guest/Speaker at Special Events

- <u>"Computing for Human Experience: Semantics empowered Sensors, Services, Social and Ubiquitous Computing in Web 3.0 and beyond</u>," University of Illinois, The National Center for Supercomputing Applications (NCSA), Urbana-Champaign, IL, October 10, 2010.
- 2. "Semantics empowered Understanding, Analysis and Mining of Nontraditional and Unstructured Data," invited talk at the Data Mining Seminar with AFRL, Wright State University, Dayton, OH, August 5, 2009.
- 3. "Semantic Web: Promising Technologies and Current Applications," Invited talk at the Reed Elsevier EPIC Conference, Toronto, Canada, October 9, 2007.
- 4. "Semantic Web applications in Industry, Government, Health Care and Life Sciences," Invited talk at meeting of the Greater Dayton IT Alliance, Dayton, OH, April 18, 2007.
- "Semantic Web applications in Industry, Government, Health Care and Life Sciences," Keynote address at the <u>daytaOhio</u>-organized conference "From Research to Reality," Wright State University, Dayton, OH, October 27, 2006.
- 6. "Semantics to energize the full Services Spectrum: Ontological approach to better exploit services at technical and business levels," Talk at the inauguration invitational event for Research School on Services-oriented Systems Engineering, Hasso-Plattner-Institute, Potsdam, Germany, June 22, 2006.
- 7. "Realizing Semantic Information Brokering and Semantic Web," Invited talk, Perspectives on Agents: Theories and Technologies Seminar Series, Universita degli Studi di Trento, Trento, Italy, April 27, 2000.
- 8. "An Overview of Workflow Management: From Process Modeling to Workflow Automation," CERN-wide Computing Colloquium, CERN, Geneva, Switzerland, March 31, 1998.
- 9. "Workflow Management: Technology, Experiences and Research," special universityindustry seminar, Universidade Nove de Lisboa, Lisbon, Portugal, March 25, 1998.
- "Information (Super) Highway: New Opportunities for Global Competitive Advantage for Developing Countries," city-wide talk organized by Ahmedabad Management Association, India, August 26, 1996.
- 11. "Multidatabase Systems: Research and Reality," Invited guest speaker at the 1st Symposium of the Tsukuba Advanced Research Alliance (TARA), Tsukuba, Japan, March 4, 1995.

- 12. "Information By-Ways, Lanes, and Superhighway," citywide talk organized by the Ahmedabad Management Association, Ahmedabad, India, December 1994.
- 13. Special guest and speaker at the UBILAB Workshop on Data Management Scenarios at Union Bank of Switzerland, Zurich, April 28, 1993.
- 14. Primary speaker for the Workshop on Federated Database Systems (for the members of CRAI consortium), CRAI, Render, Italy, March 23–24, 1992. Presented and led discussions for 21 hours.

Tutorial Presentations at International Conferences

- 1. "Trust Networks" (with Krishnaprasad Thirunarayan, Pramod Anantharam, Cory Henson, presented at The 2012 International Conference on Collaboration Technologies and systems (CTS 2012), Denver Colorado, May 21-25, 2012.
- 2. "Role of Semantic Web in Health Informatics," (with Satya Sahoo, G. Zhang)2012 ACM SIGHIT International Health Informatics Symposium (IHI 2012), January 28-30, 2012.
- "Citizen Sensing, Social Media Analytics, and Applications," (with Karthik Gomadam and Selvam Velmurugan), <u>2011 Semantic Technology Conference (SemTech</u>), San Francisco, CA, June 6, 2011.
- 4. <u>"Citizen Sensor Data Mining, Social Media Analytics and Development Centric Web</u> <u>Applications,</u>" (with Meena Nagarajan and Selvam Velmurugan), 20th World Wide Web Conference (WWW2011), Hyderabad, India, March 28, 2011.
- "How To Make Linked Data More than Data," (with Prateek Jain, Pascal Hitzler, Peter Z. Yeh, and Kunal Verma), Semantic Technology Conference 2010, San Francisco, CA, June 23, 2010.
- "Mobile Semantic Computing," (with Karthik Gomadam, Anupam Joshi) 2nd International Conference on Semantic Computing (ICSC2008), Santa Clara, CA, August 4–7, 2008.
- "Text Analytics for Semantic Computing—The good, the bad and the ugly," (with Meenakshi Nagarajan, Cartic Ramakrishnan), 2nd International Conference on Semantic Computing (<u>ICSC2008</u>), Santa Clara, CA, August 4–7, 2008.
- 8. "Using SAWSDL for Semantic Service Interoperability," (with Kunal Verma), Semantic Technology Conference, San Jose, CA, May 20–24, 2007.
- "Semantic Web: Technologies and Applications for the Real-World" (with Susie Stephens), 16th World Wide Web Conference (WWW2007), Banff, Canada, May 8–12, 2007.
- 10. "WSDL–S: Specification, Tools, Use Cases and Applications" (with Kunal Verma and Karthik Gomadam), Semantic Technology Conference, San Jose, CA, March 7, 2006.
- 11. "Lifecycle of Semantic Web Processes" (with Jorge Cardoso), 17th Conference on Advanced Information Systems Engineering (CAiSE'05), Porto, Portugal, June 13, 2005.
- 12. "Service Oriented Architectures and Semantic Web Processes" (with Francisco Curbera and Kunal Verma), 2004 IEEE International Conference on Web Services (ICWS 2004), San Diego, CA, July 7, 2004.
- "Service Oriented Architectures and Semantic Web Processes" (with Jorge Cardoso and Franscisco Curbera), 13th International World Wide Web Conference, New York, NY, May 17, 2004.

- 14. "Semantic Web Processes: Semantics Enabled Annotation, Discovery, Composition and Orchestration of Web Scale Processes" (with Jorge Cardoso), 4th International Conference on Web Information Systems Engineering (WISE 2003), Rome, Italy, December 10–12, 2003. Abstract
- 15. "Semantic Web Processes: Semantics Enabled Annotation, Discovery, Composition and Orchestration of Web Scale Processes" (with Jorge Cardoso), 4th International Conference on Web Information Systems Engineering (WISE 2003), Rome, Italy, December 10–12, 2003.
- 16. "Semantic Web Processes" (with Jorge Cardoso), 1st German Conference on Multiagent System Technologies and Net Object Days, Erfurt, Germany, September 22–25, 2003.
- "Semantic Web Services and Processes: Semantic Composition and Quality of Service" (with Jorge Cardoso and Christoph Bussler), International Federated Conferences: DOA/ODBASE/CooPIS 2002, Irvine, CA, October 28–29, 2002.
- "On the Move to Meaningful Internet Computing and Ubiquitous Computer 2002," International Federated Conferences: DOA/ODBASE/CooPIS 2002, Irvine, CA, October 28-29, 2002.
- 19. "Workflow Management: Technology, Experiences and Research" (with J. Miller), 1998 IEEE International Conference on Data Engineering, Orlando, FL, February 23, 1998.
- "Workflow Automation: Applications, Technology, and Research," 1995 ACM SIGMOD International Conference on Management of Data, San Jose, CA, May 24, 1995, and the International Conference On Information Systems Engineering (CAiSE '95), Finland, June 14, 1995.
- 21. "Multidatabase Interoperation: Perspective of Researchers & Practitioners," 11th International Conference on Data Engineering, Taiwan, March 1995.
- 22. "Database and Application Interoperability in Industry: Requirements, Technology, Research Issues and Case Studies," 6th International Conference on Management of Data, Bangalore, India, December 1994.
- 23. "Interoperability in Multidatabase Systems" (with Dennis McLeod), 20th International Conference on Very Large Data Bases, Chile, September 1994.
- 24. "Interoperability in Multidatabase Systems," course offered by ETH (Swiss Federal Institute of Technology), Zurich, Switzerland, April 1993.
- 25. "Multidatabase Systems: Technology and Applications" (with M. Rusinkiewicz), 3rd International Conference on Data Engineering, Vienna, Austria, April 1993.
- 26. "Issues and Applications Support in Interoperable Database Systems," IFIP DS-5 Conference on Semantics of Interoperable Database Systems, Melbourne, Australia, November 1992.
- "Multidatabase Applications: Semantics and Systems Issues" (with M. Rusinkiewicz), 18th International Conference on Very Large Data Bases (VLDB 92), Vancouver, Canada, 1992.
- 28. "Federated Databases for Managing Distributed, Heterogeneous, and Autonomous Databases," 17th VLDB, Barcelona, Spain, September 1991, and at the Workshop on Federated Databases, Rende, Italy, March 1992.
- 29. "Heterogeneous Distributed Databases: Issues in Integration," at the ACM SIGMOD Conference, 1989, and the 3rd International Conference on Data Engineering, 1987 and 1990.

- 30. "Integrating Heterogeneous Distributed Databases: Requirements, Concepts, and Solutions." at the Fall Joint Computer Conference, October 1987, Dallas, TX; also at the International Conference on Databases in Parallel and Distributed System (with A. Elmagarmid), 1988, and at the 6th International Conference on Data Engineering, 1990.
- 31. "Issues in Managing Interdependent Data," at the Workshop on Management of Interdependent Data (with A. Elmagarmid and M. Rusinkiewicz), 1990.

Panel Presentations at Conferences and Workshops

- 1. "Meet the Editors," 10th International Semantic Web Conference (<u>ISWC 2011</u>), Bonn, Germany, October 23-27, 2011.
- 2. "<u>Semantic Social Networking Panel</u>," 2010 Semantic Technology Conference (SEMTECH 2010), San Francisco, CA, June 21-25, 2010.
- 3. "Linked Data is Merely More Data," Panel on 'Linked Data and AI: The Big Picture,' Linked AI: AAAI Spring Symposium "Linked Data Meets Artificial Intelligence," March 22-24, 2010, Stanford CA.
- 4. "Context is highly contextual!," 4th European Conference on Smart Sensing & Context 2009, Surrey, UK, September 18, 2009.
- 5. "Analysis and Monetization of Social Data," Panel on 'Semantifying Social Networks,' Semantic Technology Conference, San Jose, CA, June 16, 2009.
- 6. "<u>Semantifying Social Networks</u>," Semantic Technology Conference, San Jose, CA., June 16, 2009.
- 7. "Regulatory & Policy Reform for Higher Education in Gujarat," International Conference on 'Reconnecting Gujarati Diaspora with its Homeland: Contribution to its Development with a Focus on Building a Knowledge Society' (Patan-Gandhinagar, Jan 17-19, 2009.
- "The Semantic Web," ISWC 2008, 7th International Semantic Web Conference, ISWC 2008, Karlsruhe, Germany, October 26-30, 2008. Proceedings Springer 2008
- 9. "Relationship Web: Spinning the Web from Trailblazing to Semantic Analytics," 27th International Conference on Conceptual Modeling (ER 2008), Barcelona, Spain, October 20-23, 2008.
- 10. "Do the current Semantic Web standards and technologies benefit Heath Care and Life Science research today?" 1st International Workshop on Health Care and Life Sciences Data Integration for the Semantic Web (HCLS-DI2007), 16th International World Wide Web Conference (WWW2007), Banff, Canada, May 8, 2007. (Panelist)
- 11. "Semantic Web and Database Conferences," 3rd International Workshop on Semantic Web and Databases, Atlanta, GA, April 8, 2006.
- 12. "Strengths & Weaknesses of Semantic Technology Solutions: View from the Vendor and Research Community," Taxonomies and Semantic Technologies for S&T Analysis Conference, MITRE Corporation, March 17, 2006.
- 13. "<u>Semantic Web Services: Past, Present, and Future</u>," International Workshop in Dynamic Web Processes (DWP, 2005), Amsterdam, Netherlands, December 12, 2005.
- 14. "FLINT and Semantic Web," BISCSE 2005: Forging New Frontiers, Berkeley CA, November 2–6, 2005.
- 15. "<u>Semantic Web Service Ontology Standard</u>," Ontology Conference Call, October 20, 2005.

- 16. "Computing for Human Experience and Wellness," Views from the Labs panel at Emerging Ventures Conference, Boston, MA, October 11, 2005.
- 17. "Future of Semantics," Semantic Technology Conference 2005, San Francisco, CA, March 8, 2005.
- 18. "Get Ready for Semantic Web," KMWorld/Intranets 2004, Santa Clara, CA, October 26, 2004.
- "The Role of Web Services in Semantic Interoperability and Integration," Dagstuhl Seminar on Semantic Interoperability and Integration, Dagstuhl, Germany, September 20, 2004. (Panel Chair)
- 20. "Web Service Choreography," panel at WWW2003, Budapest, Hungary, May 22, 2003. (Panel Chair)
- 21. "Semantic (Web) Technology in Action—today," panel: "The Semantic Web–Scientific American article considered harmful?" WWW2003, Budapest, May 21, 2003.
- 22. "Semantics' in the Semantic Web: Is the Domain/Discipline Important?" ODBASE'02, Irvine, CA, October 29, 2002.
- 23. "Summary of NSF Databases and the Semantic Web Workshop," Science on the Semantic Web: Building a New Generation of Environmental Information Systems, Newark, NJ, October 24, 2002.
- 24. "Research Directions for the Semantic Web," 3rd OntoWeb Meeting, Sardinia, Italy, June 13, 2002.
- 25. "User Experience of Enterprise Semantic Content Management," Symposium on the User Experience of Business Intelligence & Knowledge Management, IBM Almaden Research Center, San Jose, CA, March 18, 2002.
- 26. "Semantic Web—Rehash or Research Goldmine," 6th International Conference on Cooperative Information Systems (CoopIS 2001), Trento, Italy, September 6, 2001. (Panel Chair)
- 27. "Semantic Web—The Road Ahead," 2nd International Workshop on the Semantic Web (SemWeb'2001) at WWW10, Hong Kong, May 1, 2001.
- "Creating Searchable Audio Video Web Sites," Streaming Media West 2000, San Jose, CA, December 14, 2000.
- 29. "Impact of Broadband," Internet Entrepreneur Conference, sponsored by SiliconIndia, Atlanta, GA, May 8, 2000. (Panel Chair)
- 30. "Future Research in Semantics of Multimedia Systems," 8th IFIP 2.6 Working Conference on Database Semantics (DS-8), Rotorua, New Zealand, January 4–8, 1999.
- "Virtual Teams and Infocosm: Challenges for research in cooperative information systems," 3rd Conference on Cooperative Information Systems, New York, NY, August 1998. (Panelist and Co-Chair)
- 32. "Is Healthcare Ready for Internet? Technology Is!" Annual Meeting of the Healthcare Open Systems and Trials Consortium, Washington, DC, November 1997.
- 33. "Cooperative Multiagent Systems for the Web," 2nd IFCIS International Conference on Cooperative Information Systems, Kiawah Island, SC, June 1997. (Panel Chair)
- 34. "Active Databases and Agents in Cooperative Information Systems," 2nd IFCIS International Conference on Cooperative Information Systems, Kiawah Island, SC, June 1997. (Panelist)
- 35. "World Wide What?" 4th International Conference on Parallel and Distributed Information Systems, Miami, FL, December 20, 1996. (Panelist)

- 36. "What Can Database Contribute to Multidisciplinary Research in Work Activities Coordination," International Workshop on Advanced Models and Architectures, Goa, India, September 1, 1996. (Panel Chair)
- 37. "Database Research in Workflow Management Systems, Do We Have Anything to Contribute?" International Conference on Cooperative Information Systems (CoopIS'96), June 20, 1996. (Panelist)
- 38. "How Do We Meet the Challenges of the Global Computing Revolution," International Conference on Cooperative Information Systems (CoopIS'96), June 21, 1996. (Panelist, Plenary session panel)
- 39. "Data Semantics: What, Where and How," 6th IFIP TC-2 Working Conference on Data Semantics (DS-6), Stone Mountain, Georgia, June 1995. (Panel Chair) (see Section 3a, no. 7)
- 40. "Information Resource Discovery: A Torch in the Deep Darkness of the Information Superhighway?" 11th International Conference on Data Engineering, Taiwan, March 1995. (Panel Chair)
- 41. "Where are Distributed Databases headed," 6th International Conference on Management of Data, Bangalore, India, December 1994. (Panelist)
- 42. "Challenges in Global Information Systems," 20th International Conference on Very Large Data Bases, Chile, September 1994. (Panelist)
- 43. "Why do we need Extended Transaction Models?" 16th IEEE-CS Computer Software & Applications Conference (COMPSAC92), September 1992. (Panelist)
- 44. "Dealing with Heterogeneous Databases: Is the Research on Right Track?" 2nd International Conference on Systems Integration, Morristown, PA, June 1992. (Panel Chair)
- 45. "Key Information Management Issues in the Real World," US West-NSF-DARPA Workshop on Heterogeneous Databases and Semantic Interoperability, Boulder, CO, February 1992. (Panelist, Final plenary session panel)
- 46. "Cooperative Database Design," 17th International Conference on Very Large Data Bases, Barcelona, Spain, September 1991. (Panelist)
- 47. "Resolving Semantic Heterogeneity," 6th International Conference on Data Engineering, Los Angeles, CA, February 1990. (Panelist)
- 48. "Does loose AI-DBMS coupling stand a chance?" 5th International Conference on Data Engineering, Los Angeles, CA, February 1989. (Panel Chair)
- 49. "Can we meaningfully integrate drawing, text, image, and voice with structured data?" 4th International Conference on Data Engineering, Los Angeles, CA, February 1988. (Panel Chair)
- 50. "When will we have true Heterogeneous Databases," Fall Joint Computer Conference, October 1987. (Panelist)
- 51. "Improving Concurrency in Distributed Systems," 3rd International Conference on Data Engineering, February 1987. (Session discussant)

Publications

Book Series Editorship

- Ramesh Jain and Amit Sheth (Eds.), Semantic Web and Beyond: Computing for Human Experience, Springer, started 2005. Currently seven volumes in this series. ISSN 1559-7474
- 2. Ahmed Elmagamid and Amit Sheth (Eds.), <u>Advances in Database Systems</u>, Springer. Prof. Sheth joined as co-editor in July 2007.
- 3. Volume 1: Semantic Management of Middleware, Daniel Oberle, 2006.
- 4. Volume 2: <u>Canadian Semantic Web</u>, Mamadou Tadiou Koné and Daniel Lemire (Eds.), 2006.
- 5. Volume 3: <u>Semantic Web Services, Processes and Applications</u>, Jorge Cardoso and Amit P. Sheth (Eds.), 2006.
- 6. Volume 4: Ontology Alignment, Bridging the Semantic Gap, Marc Ehrig, 2006.
- 7. Volume 5: Social Networks and the Semantic Web, Peter Mika, 2007.
- 8. Volume 6: <u>The Semantic Web: Real-World Applications from Industry</u>, Jorge Cardoso, Martin Hepp, and Miltiadis Lytras (Eds.), 2008.
- Volume 7: <u>Ontology Management, Semantic Web, Semantic Web Services, and Business</u> <u>Applications</u>, Martin Hepp, Pieter De Leenheer, Aldo de Moor, and York Sure (Eds.), 2008.
- 10. Volume 8: Semantic Web Services Challenge Charles Petrie, Holger Lausen, Michal Zaremba, and Tiziana Margaria-Steffen (Eds.), 2008.

Books Authored or Co-Authored

- Amit P. Sheth, Krishnaprasad Thirunarayan: <u>Semantics Empowered Web 3.0: Managing Enterprise, Social, Sensor, and Cloud-based Data and Services for Advanced Applications</u>. <u>Synthesis Lectures on Data Management</u>, Morgan & Claypool Publishers, December 2012, 176pp. ISBN-10: 1608457168, ISBN-13: 978-1609457168
- 2. V. Kashyap and A. Sheth, Information Brokering across Heterogeneous Digital Data, Kluwer Academic Publishers, August 2000, 248 pp.

Books Edited and Co-Edited

- A. Sheth and N. Ashish (Eds), <u>Geospatial Semantics and the Semantic Web</u>: <u>Foundations, Algorithms, and Applications, in Series: Semantic Web and Beyond, Vol.</u> <u>12</u>, Springer 2011.
- A. Sheth and M. Lytras (Eds), <u>Semantic Web-Based Information Systems: State-of-the-Art Applications</u>, CyberTech Publishers/Idea Group, 2007, 317 pp. ISBN 1-59904-426-9 (hardcover), 1-59904-427-7 (softcover)
- 3. J. Cardoso and A. Sheth (Eds.), <u>Semantic Web Services</u>, <u>Processes and Applications</u>, Springer, 2006, 405 pp. ISBN 0-38730239-5
- 4. Elmagarmid, M. Rusinkiewicz, and A. Sheth (Eds.), <u>Management of Heterogeneous</u> <u>Distributed Database Systems</u>, Morgan Kaufmann Publishers, 1999, 400 pp.
- 5. Sheth and W. Klas (Eds.), Multimedia Data Management: Using Metadata to Integrate and Apply Digital Data, McGraw Hill, 1998, 385 pp.
- 6. Dogac, L. Kalinechenko, T. Ozsu, and A. Sheth (Eds.), <u>Workflow Management Systems</u> and Interoperability, NATO ASI Series F, vol. 164, Springer, 1998, 524 pp.

Chapters in Books

- 1. K. Verma, A. Sheth, S. Oundhakar, K. Sivashanmugam, and J. Miller, *Allowing the Use of Multiple Ontologies for Discovery of Web Services in Federated Registry Environment*, Advances in Web Services Research: Web Services Research and Practices, vol. 2, IGI Global, 2007.
- C. Pedrinaci, J. Domingue and A. Sheth. Semantic Web Services, in <u>Handbook of</u> <u>Semantic Web Technologies, volume 2</u> - Semantic Web Applications. J. Domingue; D. Fensel; J. Hendler, (eds.). Springer, 2010.
- 3. S. Tartir, I. B. Arpinar, and A. Sheth, "<u>Ontological Evaluation and Validation</u>," in Theory and Applications of Ontology: Computer Applications, Roberto Poli, Michael Healy, and Achilles Kameas (Eds.), Springer, (June 2010) pp. 115-130. ISBN: 978-90-481-8846-8
- K. Aberer, A. Gal, M. Hauswirth, K.U. Sattler, and A.P. Sheth, "<u>Semantic Challenges in</u> <u>Sensor Networks</u>," Dagstuhl Seminar Proceedings. Schloss Dagstuhl-Leibniz-Zentrum fuer Informatik, Germany, (May 2010) ISSN 1862-4405.
- L. Deligiannidis and A. Sheth, "<u>Visualization of Two Parameters in a Three Dimensional</u> <u>Environment</u>," Human-Computer Systems Interaction. Backgrounds and Applications. Editors: Zdzislaw S. Hippe and Juliusz L. Kulikowski. Springer-Verlag, 60, pp. 419-428, October 2009. <u>ISBN: 978-3-642-03201-1</u>
- K. Gomadam, A. Ranabahu, Z. Wu, A. P. Sheth and J. 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 (December 2008) pp. 101-118.
- A. Sheth, S. Agrawal, J. Lathem, N. Oldham, H Wingate, P. Yadav, and K. Gallegher, "Active Semantic Electronic Medical Records," in The Semantic Web: Real World Applications from Industry, Jorge Cardoso, Martin Hepp, and Miltiadis Lytras (Eds.), Springer, 2008, pp. 123–140. ISBN-13: 978-9-387-48530-0
- K. Verma, A. Sheth, S. Oundhakar, K. Sivashanmugam, and J. Miller, Allowing the Use of Multiple Ontologies for Discovery of Web Services in Federated Registry Environment, Advances in Web Services Research: Web Services Research and Practices, vol. 2, IGI Global, 2007.
- 9. F. Hakimpour, B. Aleman-Meza, M. Perry, and A. Sheth, "Spatiotemporal-Thematic Data Processing in Semantic Web," in The Geospatial Web, A. Scharl and K. Tochtermann (Eds.), Springer, May 2007.
- M. Perry, A. Sheth, and I. B. Arpinar, "Geospatial and Temporal Semantic Analytics," in Encyclopedia of Geoinformatics, H. Karimia (Ed.), Idea Group, 2007. ISBN 1-59140-995-0
- S. S. Sahoo, A. Sheth, B. Hunter, and W. York, "SemBOWSER—Semantic Biological Web Services Registry," in Semantic Web: Revolutionizing Knowledge Discovery in the Life Sciences, Christopher Baker and Kei-Hoi Cheung (Eds.), New York: Springer, 2007, pp. 318–339.
- B. Aleman-Meza, A. Sheth, D. Palaniswami, M. Eavenson, and I. B. Arpinar, "Semantic Analytics in Intelligence: Applying Semantic Association Discovery to Determine Relevance of Heterogeneous Documents," in Advanced Topics in Database Research, vol. 5, K. L. Siau (Ed.), Idea Group Publishers, 2006, pp. 401–419.

- J. Cardoso and A. Sheth, "The Semantic Web and its Applications," in Semantic Web Services, Processes and Applications, J. Cardoso and A. Sheth (Eds.), Springer, 2006, pp. 5–36.
- 14. K. Gomadam, K. Verma, A. Sheth, and K. Li, "Keywords, Port Types and Semantics: A Journey in the Land of Web Service Discovery," in Semantic Web Services, Processes and Applications, J. Cardoso and A. Sheth (Eds.), Springer, 2006, pp. 91–108.
- 15. K. Li, K. Verma, R. Mulye, R. Rabbani, J. Miller and A. Sheth, "Designing Semantic Web Processes: The WSDL-S Approach," in Semantic Web Services, Processes and Applications, J. Cardoso and A. Sheth (Eds.), Springer, 2006, pp. 163–198.
- S. S. Sahoo and A. Sheth, "Bioinformatics Applications of Web Services," in Semantic Web Services, Processes and Applications, J. Cardoso and A. Sheth (Eds.), Springer, 2006, p. 305–322.
- A. Sheth, "Enterprise Application of Semantic Web: the Sweet Spot of Risk and Compliance," in Industrial Applications of Semantic Web, M. Bramer and V. Terziyan (Eds.), Springer, 2005, pp. 47–62.
- N. Oldham, C Thomas, A Sheth, and K. Verma, "METEOR-S Web Service Annotation Framework with Machine Learning Classification," in Semantic Web Services and Web Process Composition, Lecture Notes in Computer Science, vol. 3387, Springer, January 2005, pp. 137–146.
- P. Rajasekaran, J. Miller, K. Verma1, and A. Sheth "Enhancing Web Services Description and Discovery to Facilitate Composition," in Semantic Web Services and Web Process Composition: 1st International Workshop, Lecture Notes in Computer Science, vol. 3387, Springer, January 2005, pp. 55–68.
- 20. J. Cardoso and A. Sheth, "Introduction to Semantic Web Services and Web Process Composition," in Semantic Web Services and Web Process Composition, Lecture Notes in Computer Science, vol. 3387, Springer, January 2005, pp. 1–13.
- M. Fisher and A. Sheth, "Semantic Enterprise Content Management," in Practical Handbook of Internet Computing, Munindar P. Singh (Ed.), Baton Rouge, LA: Chapman & Hall & CRC Press, 2004, pp. 9–1:9–21.
- J. Arnold, H.–B. Schuttler, D. Logan, D. Battogtokh, J. Griffith, B. Arpinar, S. Bhandarkar, S. Datta, K. J. Kochut, E. Kraemer, J. A. Miller, A. Sheth, G. Strobel, T. Taha, B. Aleman-Meza, J. Doss, L. Harris, and A. Nyong. "Metabolomics," chapter 22 in Handbook of Industrial Mycology, New York: Marcel Dekker, 2004, pp 597–633.
- 23. A. Sheth, K. Sivashanmugam, J. Miller, K. Vermam R. Aggarwal, and P. Rajasekaran, "Metadata and Semantics for Web Services Processes," in Databanken und Informationssyteme, W. Benn, P. Dadam, S. Kim, and R. Unland (Eds.), Praktische Informatik I, FernUniversitat in Hagen, pp. 245–272.
- 24. A. Sheth, I. Budak Arpinar, and V. Kashyap, "Relationships at the Heart of Semantic Web: Modeling, Discovering, and Exploiting Complex Semantic Relationships," in Enhancing the Power of the Internet Studies in Fuzziness and Soft Computing, M. Nikravesh, B. Azvin, R. Yager, and L. Zadeh (Eds.), Springer, 2003, pp. 63–94.
- 25. 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 (Eds.), New York: Marcel Dekker, 2003, pp. 359– 372.

- 26. Hammond, A. Sheth, and K. Kochut, "Semantic Enhancement Engine: A Modular Document Enhancement Platform for Semantic Applications over Heterogeneous Content," in Real World Semantic Web Applications, V. Kashyap and L. Shklar (Eds.), IOS Press, November 2002, pp. 29–49.
- 27. J. Cardoso, A. Sheth, and J. Miller, "Workflow Quality of Service," in Enterprise Interand Intra-Organizational Integration, K. Kosanke, R. Jochem, J.G. Nell, and A. Ortiz Bas (Eds.), Building International Consensus series, vol. 108, IFIP/Kluwer Academic Publishers, 2002, pp. 303–312.
- S. Thacker, A. Sheth, and S. Patel, "Complex Relationships for the Semantic Web," in Spinning the Semantic Web, D. Fensel, J. Hendler, H. Liebermann, and W. Wahlster (Eds.), MIT Press, 2003, pp. 279–316.
- 29. J. Miller, A. Sheth, and K. Kochut, "Perspectives in Modeling: Simulation, Database and Workflow," in <u>Conceptual Modeling: Current Issues and Future Directions</u>, Selected Papers from the Workshop on Conceptual Modeling, P. Chen et al.(Eds.), <u>Lecture Notes</u> <u>in Computer Science</u>, vol. 1565, Springer, April 1999, pp. 154–167.
- 30. A. Sheth, "Changing Focus on Interoperability in Information Systems: From System, Syntax, Structure to Semantics," in Interoperating Geographic Information Systems, M F. Goodchild et al. (Eds.), Kluwer Academic Publishers, 1999, pp. 5–30.
- 31. V. Kashyap and A. Sheth, "Semantic Similarities between Objects in Multiple Databases," in Heterogeneous Distributed Database Systems, A. Elmagarmid, M. Rusinkiewicz, and A. Sheth (Eds.), Morgan Kaufmann, 1998, pp. 57–89.
- 32. G. Karabatis, M. Rusinkiewicz, and A. Sheth, "Interdependent Database Systems," in Heterogeneous Distributed Database Systems, A. Elmagarmid, M. Rusinkiewicz, and A. Sheth (Eds.), Morgan Kaufmann, 1998, pp. 217–252.
- 33. V. Kashyap and A. Sheth, "Semantic Heterogeneity in Global Information Systems: The Role of Metadata, Context and Ontologies," in Cooperative Information Systems: Current Trends and Directions, M. Papazoglou and G. Schlageter (Eds.), Academic Press, 1998, pp. 139–178.
- 34. S. Boll, W. Klas, and A Sheth, "Overview on Using Metadata to Manage Multimedia Data," in Multimedia Data Management: Using Metadata to Integrated and Apply Digital Data, A. Sheth and W. Klas (Eds.), McGraw Hill, 1998, pp. 1–23.
- 35. E. Mena, V. Kashyap, A. Illarramendi, and A. Sheth, "Domain Specific Ontologies for Semantic Information Brokering on the Global Information Infrastructure," in Formal Ontology in Information Systems: Proceedings of FOIS'98, Trento, Italy, 1998, N. Guarino (Ed.), Amsterdam: IOS Press, 1998, pp. 269–283.
- 36. A. Sheth, "Managing with Less than Absolute Integrity," in Integrity and Internal Control in Information Systems, vol. 1, S. Jajodia, W. List, G. McGregor, and L. Strous (Eds.), Chapman & Hall, December 1997, pp. 195–202.
- D. Worah and A. Sheth, "Transactions in Transactional Workflows," in Advanced Transaction Models and Architectures, S. Jajodia and L. Kerschberg (Eds.), Kluwer Academic Publishers, 1997, pp. 3–34.
- 38. A. Sheth and K. Kochut, "Workflow Applications to Research Agenda: Scalable and Dynamic Work Coordination and Collaboration Systems," in Workflow Management Systems and Interoperability: Proceedings of the NATO Advance Study Insitute on Workflow Management Systmes, Istanbul, Turkey, August 12–21, A. Dogac, L.

Kalinechenko, T. Ozsu, and A. Sheth (Eds.), Springer, 1997, pp. 35–60. ISBN 978-3-540-64411-8

- A. Sheth, "Data Semantics: What, Where, and How?" in Data Semantics (IFIP Transactions), R. Meersman and L. Mark (Eds.), London: Chapman & Hall, 1996, pp. 601–610.
- 40. V. Kashyap, K. Shah, and A. Sheth, "Metadata for Building the MultiMedia Patch Quilt," in Multimedia Database Systems: Issues and Research Directions, S. Jajodia and V.S.Subrahmaniun (Eds.), Springer, 1995, pp. 297–323.
- M. Rusinkiewicz and A. Sheth, "Specification and Execution of Transactional Workflows," in Modern Database Systems: The Object Model, Interoperability, and Beyond, W. Kim (Ed.), Addison-Wesley, 1995, pp. 592–620.
- 42. Sheth, C. Wood, and V. Kashyap, "Q-Data: Using Deductive Database Technology to Improve Data Quality," in Applications of Deductive Databases, R. Ramakrishnan, (Ed.), Kluwer Academic Press, 1994, pp. 23–56.
- 43. G. Karabatis, M. Rusinkiewicz, and A. Sheth, "Issues in Managing Interdependent Data: Correctness and Enforcement of Specification," in Advanced Database Systems, N. Adam and B. Bhargava (Eds.), Lecture Notes in Computer Science, vol. 759, Springer, 1993.
- 44. A. Sheth, M. Rusinkiewicz, and G. Karabatis, "Using Polytransactions to Manage Interdependent Data," in Database Transaction Models for Advanced Applications, A. Elmagamid (Ed.), Morgan Kaufmann, 1992.

Journal Papers

- Delroy Cameron, Olivier Bodenreider, Hima Yalamanchili, Tu Danh, Sreeram Vallabhaneni, Krishnaprasad Thirunarayan, Amit P. Sheth, Thomas C. Rindflesch. "<u>A</u> graph-based recovery and decomposition of Swanson's hypothesis using semantic predications." *Journal of Biomedical Informatics, Available online 28 September* (2012) ISSN 1532-0464, 10.1016/j.jbi.2012.09.004.
- Priti P. Parikh, Todd A. Minning, Vinh Nguyen, Sarasi Lalithsena, Amir H. Asiaee, Satya S. Sahoo, Prashant Doshi, Rick Tarleton, Amit P. Sheth. <u>A Semantic Problem Solving</u> <u>Environment for Integrative Parasite Research: Identification of Intervention Targets for</u> <u>Trypanosoma cruzi</u>. PLOS NEGLECTED TROP DIS, 6(1), (2012).
- Priti P. Parikh, Jie Zheng, Flora Logan-Klumpler, Chrisian J. Stoeckert, Christos Louis, Pantellis Topalis, Anna V. Protasio, Amit P. Sheth, Mark Carrington, Matthew Berriman, and Satya Sahoo. The Ontology for Parasite Lifecycle (OPL): Towards a consistent vocabulary of lifecycle stages in parasitic organisms. Journal of Biomedical Semantics, 3:5, May 23 (2012). doi:10.1186/2041-1480-3-5.
- 4. Raminta Daniulaityte, Robert Carlson, Russel Falck, Delroy Cameron, Sujan Perera, Lu Chen, Amit Sheth. "I just wanted to tell you that loperamide WILL WORK": A webbased study of extra-medical use of loperamide." *Drug and Alcohol Dependence*, Available online November 29 (2012).
- 5. Amit P. Sheth: A new landscape for distributed and parallel data management. <u>Distributed and Parallel Databases 30(2)</u>: 101-103 (2012)

- Cory A. Henson, Amit P. Sheth, Krishnaprasad Thirunarayan: Semantic Perception: Converting Sensory Observations to Abstractions. <u>IEEE Internet Computing 16</u>(2): 26-34 (2012)
- Michael Compton, Payam M. Barnaghi, Luis Bermudez, Raul Garcia-Castro, Óscar Corcho, Simon Cox, John Graybeal, Manfred Hauswirth, Cory A. Henson, Arthur Herzog, Vincent A. Huang, Krzysztof Janowicz, W. David Kelsey, Danh Le Phuoc, Laurent Lefort, Myriam Leggieri, Holger Neuhaus, Andriy Nikolov, Kevin R. Page, Alexandre Passant, Amit P. Sheth, Kerry Taylor: The SSN ontology of the W3C semantic sensor network incubator group. J. Web Sem. 17: 25-32 (2012)
- 8. Prateek Jain, Pascal Hitzler, Kunal Verma, Peter Z. Yeh, Amit P. Sheth: Moving beyond SameAs with PLATO: partonomy detection for linked data. <u>HT 2012</u>: 33-42
- Wenbo Wang, Lu Chen, Ming Tan, Shaojun Wang, and Amit P. Sheth. <u>Discovering Fine-grained sentiment in Suicide Notes.</u> Biomedical Informatics Insights. 2012; 5(Suppl. 1): 137–145, doi: <u>10.4137/BII.S8963</u>.
- Jun Zhao, Satya S. Sahoo, Paolo Missier, Amit Sheth, Carole Goble, <u>'Extending Semantic</u> <u>Provenance into the Web of Data</u>,' IEEE Internet Computing, 15(1), pp. 40-48, Jan./Feb. 2011, doi:10.1109/MIC.2011.7
- Christopher Thomas, Amit P. Sheth. Web Wisdom: An essay on how Web 2.0 and Semantic Web can foster a global knowledge society. Computers in Human Behavior, 27(4), pp. 1285 – 1293 (2011).
- 12. Daniel Gruhl, Meena Nagarajan, Jan Pieper, Christine Robson, Amit Sheth, '<u>Multimodal Social Intelligence in a Real-Time Dashboard System</u>' special issue of the VLDB Journal on 'Data Management and Mining for Social Networks and Social Media', vol. 19, no. 6, pp. 825-848, December 2010.
- 13. Amit Sheth, Ajith Ranabahu, 'Semantic Modeling for Cloud Computing, Part 2,' IEEE Internet Computing, vol. 14, no. 4, pp. 81-84, July/Aug. 2010.
- 14. Amit Sheth, Ajith Ranabahu, 'Semantic Modeling for Cloud Computing, Part 1,' IEEE Internet Computing, vol. 14, no. 3, pp. 81-83, May/June 2010.
- Amit Sheth, "Computing for Human Experience: Semantics-Empowered Sensors, Services, and Social Computing on the Ubiquitous Web," IEEE Internet Computing -Vision Issue (V. Cerf and M. Singh, Eds.), vol. 14, no. 1, pp. 88-91, Jan./Feb. 2010, doi:10.1109/MIC.2010.4
- 16. Amit Sheth and Meenakshi Nagarajan, Semantics-Empowered Social Computing. IEEE Internet Computing Jan/Feb 2009, pages 76-80.
- Cartic Ramakrishnan, Pablo N. Mendes, Rodrigo A. T. S. da Gama, Guilherme C. N. Ferreira, Amit P. Sheth: Joint Extraction of Compound Entities and Relationships from Biomedical Literature. Web Intelligence 2008: 398-401
- Schahram Dustdar, José Luiz Fiadeiro, Amit P. Sheth: Business process management. Data Knowl. Eng. 64(1): 1-2 (2008)
- Satya S. Sahoo, Olivier Bodenreider, Joni L. Rutter, Karen J. Skinner, and Amit P. Sheth, 'An Ontology-Driven Semantic Mash-up of Gene and Biological Pathway Information: Application to the Domain of Nicotine Dependencem,'special issue: Semantic Biomedical Mashups Journal of Biomedical Informatics, 41 (5), October 2008, pp.752-765.

- 20. Djamal Benslimane, Schahram Dustdar, Amit Sheth, "Services Mashups: The New Generation of Web Applications," IEEE Internet Computing, vol. 12, no. 5, pp. 13-15, Sep/Oct, 2008.
- 21. Satya S. Sahoo, Amit Sheth, and Cory Henson, Semantic Provenance for eScience: Managing the Deluge of Scientific Data", IEEE Internet Computing, vol. 12, no. 4, 2008, pp. 46-54."
- 22. Amit Sheth, Cory Henson, and SatyaSahoo, 'Semantic Sensor Web,' IEEE Internet Computing, July/August 2008, p. 78-83.
- 23. Amith Sheth, Karthik Gomadom, Ajith Ranabahu. (Spring 2008). <u>"Semantic Enhanced Services: METEOR-S, SAWSDL, and SA-REST," Bulletin of the Technical Committee on Data Engineering</u>, IEEE Computer Society, 31 (3), pp. 8-12.
- 24. SchahramDustdar, Jos LuizFiadeiro, Amit P. Sheth: Business process management. Data Knowl. Eng. 64(1): 1-2 (2008)
- 25. Amit Sheth and Matthew Perry, 'Traveling the Semantic Web through Space, Time and Theme,' IEEE Internet Computing, 12, (no.2), February/March 2008, pp.81-86.
- 26. B.Aleman-Meza, M. Nagarajan, L. Ding, A. Sheth, I.B.Arpinar, A. Joshi, and T.Finin, "Scalable Semantic Analytics on Social Networks for Addressing the Problem of Conflict of Interest Detection," ACM Transactions on the Web 2 (no. 1), February 2008.
- 27. M. Nagarajan, K. Verma, A.P. Sheth, and J.A. Miller, "Ontology Driven Data Mediation in Web Services," International Journal of Web Services Research 4 (no.4), October– December 2007.
- 28. K. Verma, A. Sheth "<u>Semantically Annotating a Web Service</u>" Internet Computing Vol. 11, No. 2, P.83, April 2007.
- B. Aleman-Meza, F. Hakimpour, I.B. Arpinar, and A.P. Sheth, "SwetoDblp Ontology of Computer Science Publications," Web Semantics 5 (no.3), <u>Online</u>, March 2007, pp. 151-155.
- B. Arpinar, A. Sheth, C. Ramakrishnan, L. Usery, M. Azami, and M. Kwan, "Geospatial Ontology Development and Semantic Analytics," Transactions in GIS, 10 (no. 4), 2006, pp. 551–576. <u>abstract</u>
- Sheth, K. Verma, K. Gomadam, "Semantics to energize the full Services Spectrum," special issue: Services Science, Communications of the ACM (CACM) 49 (no. 7), July 2006, pp. 55–61.
- 32. S.S. Sahoo, C. Thomas, A. Sheth, C. Henson, and W.S. York, "GLYDE–An expressive XML standard for the representation of glycan structure," Carbohydrate Research 340 (no. 18), December 30, 2005, pp. 2802–2807. Epub 2005 Oct 20. PMID: 16242678.
- 33. Ramakrishnan, W. H. Milnor, M. Perry, and A. Sheth, "Discovering Informative Connection Subgraphs in Multi-Relational Graphs," special issue: Link Mining, SIGKDD Exploration 7 (no. 2), December 2005.
- 34. V. Kashyap, C. Ramakrishnan, C. Thomas, and A. Sheth, "TaxaMiner: An Experimentation Framework for Automated Taxonomy Bootstrapping," International Journal of Web and Grid Services 1 (no. 2), 2005, pp. 240–266.
- M. Burstein, C. Bussler, T. Finin, M. Huhns, M. Paolucci, A. Sheth, and S. Williams, "A Semantic Web Services Architecture," IEEE Internet Computing, September–October 2005, pp. 52–61.

- 36. S. Oundhakar, K. Verma. K. Sivashanugam, A. Sheth, and J. Miller, "Discovery of Web Services in a Multi-Ontology and Federated Registry Environment," International Journal of Web Services Research 2 (no. 3), July–September, 2005, pp.1–32.
- Aleman-Meza, C. Halaschek-Wiener, I.B. Arpinar, C. Ramakrishnan, and A. Sheth, "Ranking Complex Relationships on the Semantic Web," IEEE Internet Computing 9 (no. 3), May–June 2005, pp. 37–44.
- 38. K. Verma, K. Sivashanmugam, A. Sheth, A. Patil, S. Oundhakar, and J. Miller, "METEOR-S WSDI: A Scalable Infrastructure of Registries for Semantic Publication and Discovery of Web Services," special issue: Universal Enterprise Integration, Journal of Information Technology and Management 6 (no. 1), January 2005, pp. 17–39. <u>OpenURL</u>
- 39. K. Sivashanmugam, J. A. Miller, A. Sheth and K. Verma, "Framework for Semantic Web Process Composition," special issue: Semantic Web Services and Their Role in Enterprise Application Integration and E-Commerce, International Journal of Electronic Commerce (IJEC) 9 (no. 2), Winter 04–05, pp. 71–106.
- 40. Sheth, C. Ramakrishnan, and C. Thomas, "Semantics for the Semantic Web: The Implicit, the Formal and the Powerful," International Journal on Semantic Web and Information Systems 1 (no. 1), 2005, pp. 1–18. Also published as ch. 2.8 in Online and Distance Learning: Concepts, Methodologies, Tools and Applications, L. Tomei (Ed.), Information Science Reference (IGI), 2008.
- 41. Sheth, B. Aleman-Meza, I. B. Arpinar, C. Ramakrishnan, C. Halaschek, C. Bertram, Y. Warke, C David Avant, F. S. Arpinar, K. Anyanwu, and K. Kochut, "Semantic Association Identification and Knowledge Discovery for National Security Applications," Journal of Database Management 16 (no. 1), January–March 2005, pp. 33–53.
- J. Cardoso, A. Sheth, J. Miller, J. Arnold, and K. Kochut, "Quality of Service for Workflows and Web Service Processes," Journal of Web Semantics 1 (no. 3), 2004, pp. 281–308.
- 43. J. Cardoso, R.P. Bostrom, and A. Sheth, "<u>Workflow Management Systems and ERP</u> <u>Systems: Differences, Commonalities, and Applications</u>," Information Technology and Management Journal 5 (nos. 3–4), July–October 2004, pp. 319–338.
- 44. J. Cardoso and A. Sheth, "Semantic e-Workflow Composition," Journal of Intelligent Information Systems 21 (no. 3), November 2003, pp. 191–225.
- 45. R. Boyd, K. Murdison, J. Baffa, M. Brumund, A. Sheth, W. Karp, and J. Bhatia, "A Low–Cost Web-Based Tool for Pediatric Echocardiographic Consultations," Clinical Pediatrics 23, March 2003, pp. 185–186.
- 46. K. Anyanwu, A. Sheth, J. Cardoso, J. Miller, and K. Kochut, "Healthcare Enterprise Process Development and Integration," Journal of Research and Practice in Information Technology, 35 (no. 2), 2003, pp. 83–98.
- 47. S. Chandrasekaran, J.A. Miller, G. Silver, I.B. Arpinar, and A. Sheth, "Performance Analysis and Simulation of Composite Web Services," special issue: EM—Web Services, L. Heiko, R. Klüber, B.F. Schmid (Eds.), E (Electronic Markets) 13 (no. 2), June 2003, pp. 18–30.
- 48. K. Kochut, J. Arnold, A. Sheth, J. Miller, I.B. Arpinar, and J. Cardoso, "IntelliGEN: A Distributed Workflow System for Discovering Protein-Protein Interactions," special

issue: Bioinformatics, Distributed and Parallel Databases 13 (no. 1), January, 2003, pp. 43–72.

- Sheth, S. Thacker, and S. Patel, "Complex Relationship and Knowledge Discovery Support in the InfoQuilt System," VLDB Journal 12 (no. 1), September 25, 2002. Online publication. ISSN: 0949–877X; print: ISSN: 1060–8888
- 50. Sheth, C. Bertram, D. Avant, B. Hammond, K. Kochut, and Y. Warke, "Managing Semantic Content for the Web," IEEE Internet Computing, July/August 2002, pp. 80–87.
- 51. S. Wu, A. Sheth, J. Miller, and Z. Luo, "Authorization and Access Control of Application Data in Workflow Systems," Journal of Intelligent Information Systems 18 (no. 1), January 2002, pp. 71–94.
- 52. Mena, V. Kashyap, A. Illarramendi, and A. Sheth, "Imprecise Answers in Distributed Environments: Estimation of Information Loss for Multi-Ontology Based Query Processing," International Journal of Cooperative Information Systems 9 (no. 4), 2000, 403–425.
- 53. Mena, A. Illarramendi, V. Kashyap, and A. Sheth, "OBSERVER: An Approach for Query Processing in Global Information Systems based on Interoperation across Preexisting Ontologies," Distributed and Parallel Databases 8 (no. 2), April 2000, pp. 223– 271.
- 54. Z. Luo, A. Sheth, K. Kochut, and J. Miller, "Exception Handling in Workflow Systems," Applied Intelligence 13 (no. 2), September–October 2000, pp. 125–147.
- K. Shah and A. Sheth, "InfoHarness: Managing Distributed, Heterogeneous Information," <u>IEEE Internet Computing</u> 3 (no. 6), November–December 1999, pp. 18–28.
- 56. Sheth, W. Aalst, and I. Arpinar, "Processes Driving the Networked Economy," IEEE Concurrency 7 (no. 3), July–September 1999, pp. 18–31.
- 57. J. Miller, D. Palaniswami, A. Sheth, K. Kochut, and H. Singh "WebWork: METEOR2's Web-based Workflow Management System," Journal of Intelligent Information Systems, 10 (no. 2), March 1998, pp. 186–215.
- 58. M. Singh, P. Cannata, M. Huhns, N. Jacobs, T. Ksiezyk, K. Ong, A. Sheth, C. Tomlinson, and D. Woelk, "The Carnot Heterogeneous Database Project: Implemented Applications," Distributed and Parallel Databases 5 (no. 2), April 1997, pp. 207–225.
- P. Attie, M. Singh, E. Emerson, A. Sheth, and M. Rusinkiewicz, "Scheduling Workflows by Enforcing Intertask Dependencies," Distributed Systems Engineering 3 (no. 4), December 1996, pp. 222–238.
- 60. P. Krychniak, M. Rusinkiewicz, A. Cichocki, A. Sheth, and G. Thomas, "<u>Bounding the Effects of Compensation under Relaxed Multi-Level Serializability</u>," Distributed and Parallel Databases, 4 (no. 4), 1996, pp. 355–374. (DOI: 10.1007/BF00119339)
- V. Kashyap and A. Sheth, "Schematic and Semantic Similarities between Database Objects: A Context-based Approach," VLDB Journal 5 (no. 4), October 1996, pp. 276– 304.
- 62. J. Miller, A. Sheth, K. Kochut, and X. Wang, "CORBA-Based Run Time Architectures for Workflow Management Systems," special issue: Multidatabases, Journal of Database Management 7 (no. 1), Winter 1996, pp.16–27.
- 63. D. Georgakopoulos, M. Hornick, and A. Sheth, "An Overview of Workflow Management: From Process Modeling to Infrastructure for Automation," Distributed and Parallel Databases, 3 (no. 2), April 1995, pp. 119–153.

- 64. N. Krishnakumar and A. Sheth, "Managing Heterogeneous Multi-system Tasks to Support Enterprise-wide Operations," Distributed and Parallel Databases 3 (no. 2), April 1995, pp. 155–186.
- 65. D. Georgakopoulos, M. Rusinkiewicz, and A. Sheth, "Using Tickets to Enforce the Serializability of Multidatabase Transactions," IEEE Transactions on Data and Knowledge Engineering 6 (no. 1), February 1994, pp. 166–180.
- 66. K. Lee, W. Mansfield, and A. Sheth, "A Framework for Controlling Cooperative Agents," Computer 26 (no. 7), July 1993, pp. 8–16.
- Geller, Y. Perl, P. Cannata, A. Sheth, and E. Neuhold, "Structural Integration: Concepts and Case Study," Journal of Systems Integration 3 (no. 2), June 1993, pp.133– 161.
- Sheth, S. Gala, and S. Navathe, "On Automatic Reasoning for Schema Integration," International Journal of Intelligent & Cooperative Information Systems 2 (no. 1), March 1993, pp, 23–50.
- 69. J. Geller, Y. Perl, E. Neuhold, and A. Sheth, "Structural Schema Integration with Full and Partial Correspondence using Dual Model," Information Systems: An International Journal 17 (no. 6), 1992, pp. 443–469.
- 70. M. Rusinkiewicz, A. Sheth, and G. Karabatis, "Specifying Interdatabase Dependencies in a Multidatabase Environment," IEEE Computer 24 (no. 12), December 1991, pp. 46–53.
- 71. J. Larson and A. P. Sheth, "Updating Relational Views Using Knowledge at View Definition and View Update Time," Information Systems: An International Journal 16 (no. 2), 1991.
- 72. Sheth and J. Larson, "Federated database systems for managing distributed, heterogeneous, and autonomous databases," ACM Computing Surveys 22 (no. 3), September 1990, pp. 183–236. Japanese translation appears in special issue of BIT "Computer Science '90," Japan.
- 73. Sheth, A. Singhal, and M. Liu, "An Analysis of the Effect of Network Parameters on the Performance of Distributed Database Systems," IEEE Transactions on Software Engineering, SE-11 (no. 10), 1985.
- 74. Elmagarmid, A. Sheth, and M. Liu, "A Partially Distributed Deadlock Algorithm," International Journal of Computer and Information Sciences 14 (no. 5), 1985.

Conference Publications (Refereed)

- Maryam Panahiazar, Ajith Ranabahu, Vahid Taslimi, Hima Yalamanchili, Arlin Stoltzfus, Jim Leebens-Mack, Amit P. Sheth: PhylOnt: A domain-specific ontology for phylogeny analysis. <u>BIBM 2012</u>: 1-6
- 2. Sujan Perera, Cory A. Henson, Krishnaprasad Thirunarayan, Amit P. Sheth, Suhas Nair: Data driven knowledge acquisition method for domain knowledge enrichment in the healthcare. BIBM 2012: 1-8
- 3. Prateek Jain, Pascal Hitzler, Kunal Verma, Peter Z. Yeh, Amit P. Sheth: Moving beyond SameAs with PLATO: partonomy detection for linked data. <u>HT 2012</u>: 33-42

- Lu Chen, Wenbo Wang, Meenakshi Nagarajan, Shaojun Wang, Amit P. Sheth: Extracting Diverse Sentiment Expressions with Target-Dependent Polarity from Twitter. International Conference on Weblogs and Social Media (<u>ICWSM 2012</u>).
- 5. Hemant Purohit, Jitendra Ajmera, Sachindra Joshi, Ashish Verma, Amit P. Sheth: Finding Influential Authors in Brand-Page Communities. <u>ICWSM 2012</u>
- 6. Ramakanth Kavuluru, Christopher Thomas, Amit P. Sheth, Victor Chan, Wenbo Wang, Alan Smith, Armando Soto, Amy Walters: An up-to-date knowledge-based literature search and exploration framework for focused bioscience domains. IHI 2012: 275-284
- 7. Satya Sanket Sahoo, Amit P. Sheth, Guo-Qiang Zhang: Role of semantic web in health informatics. <u>IHI 2012</u>: 881-882
- Cory A. Henson, Krishnaprasad Thirunarayan, Amit P. Sheth: An Efficient Bit Vector Approach to Semantics-Based Machine Perception in Resource-Constrained Devices. <u>International Semantic Web Conference (1) 2012</u>: 149-164'
- 9. Wenbo Wang, Lu Chen, Krishnaprasad Thirunarayan, Amit P. Sheth: Harnessing Twitter "Big Data" for Automatic Emotion Identification. SocialCom/PASSAT 2012: 587-592
- Lu Chen, Wenbo Wang, Amit P. Sheth: Are Twitter Users Equal in Predicting Elections? A Study of User Groups in Predicting 2012 U.S. Republican Presidential Primaries. SocInfo 2012: 379-392
- 11. Pramod Anantharam, Krishnaprasad Thirunarayan, Amit P. Sheth: Topical anomaly detection from Twitter stream. WebSci 2012: 11-14
- Amir H. Asiaee, Prashant Doshi, Todd Minning, Satya Sanket Sahoo, Priti Parikh, Amit P. Sheth, Rick L. Tarleton: From Questions to Effective Answers: On the Utility of Knowledge-Driven Querying Systems for Life Sciences Data. <u>CoRR abs/1210.0595</u> (2012)
- 13. Hemant Purohit, Yiye Ruan, David Fuhry, Srinivasan Parthasarathy, Amit P. Sheth: On the Role of Social Identity and Cohesion in Characterizing Online Social Communities. CoRR abs/1212.0141 (2012)
- Prateek Jain,Peter Z. Yeh, Kunal Verma, Reymonrod Vasquez, Mariana Damova, Pascal Hitzler and Amit P. Sheth, 'Contextual Ontology Alignment of LOD with an Upper Ontology: A Case Study with Proton.' 8th Extended Semantic Web Conference (<u>ESWC</u> <u>2011</u>), Heraklion, Greece, May 29-June 2, 2011.
- 15. Ashwin Manjunatha, Paul Anderson, Ajith Ranabahu, and Amit Sheth, <u>'Identifying and Implementing the Underlying Operators for Nuclear Magnetic Resonance based Metabolomics Data Analysis</u>,' Third International Conference on Bioinformatics and Computational Biology, New Orleans, Louisiana, USA, March 23 25, 2011.
- 16. Kalpa Gunaratna, Paul Anderson, Ajith Ranabahu and Amit Sheth, 'A Study in Hadoop Streaming with Matlab for NMR Data Processing,' 2nd IEEE International Conference on Cloud Computing Technology and Science, Indianapolis, Indiana, December 3, 2010.
- Ajith Ranabahu and Amit Sheth, 'Semantics Centric Solutions for Application and Data Portability in Cloud Computing,' 2nd IEEE International Conference on Cloud Computing Technology and Science, Indianapolis, Indiana, November 30 - December 3, 2010.
- Prateek Jain, Pascal Hitzler, Amit P. Sheth, Kunal Verma, Peter Z. Yeh, "Ontology Alignment for Linked Open Data." In P. Patel-Schneider, Y. Pan, P. Hitzler, P. Mika, L. Zhang, J. Pan, I. Horrocks, B. Glimm (eds.), The Semantic Web - ISWC 2010. 9th International Semantic Web Conference, ISWC 2010, Shanghai, China, November 7-11,

2010, Revised Selected Papers, Part I. Lecture Notes in Computer Science Vol. 6496. Springer, Berlin, 2010, pp. 401-416.

- Prateek Jain, Pascal Hitzler, Peter Z. Yeh, Kunal Verma, and Amit P.Sheth, "Linked Data Is Merely More Data." In: Dan Brickley, Vinay K. Chaudhri, Harry Halpin, and Deborah McGuinness: Linked Data Meets Artificial Intelligence. Technical Report SS-10-07, AAAI Press, Menlo Park, California, 2010, pp. 82-86. ISBN 978-1-57735-461-1
- 20. Boanerges Aleman-Meza, I. Budak Arpinar, Mustafa V. Nural, <u>Amit P. Sheth: Ranking Documents Semantically Using Ontological Relationships</u>. Proceedings of the <u>2010</u> <u>IEEE International Conference on Semantic Computing</u> (ICSC '10): 299-304. ISBN: 978-0-7695-4154-9, doi: <u>10.1109/ICSC.2010.47</u>
- 21. Prateek Jain, Pascal Hitzler, & Amit Sheth, "Ontology Alignment for Linked Open Data," 6th Workshop on Semantic Web Applications and Perspectives (SWAP2010), Bressanone, Italy, September 21-22, 2010.
- 22. Pablo Mendes, Alexandre Passant, Pavan Kapanipathi, and Amit Sheth, "<u>Linked Open</u> <u>Social Signals</u>" 2010 IEEE/WIC/ACM International Conference, York University, Toronto, Canada, August 31-September 3, 2010.
- 23. Pramod Anantharam, Cory A. Henson, Krishnaprasad Thirunarayan and, Amit P. Sheth, 'Trust Model for Semantic Sensor and Social Networks: A Preliminary Report', National Aerospace & Electronics Conference (NAECON), Dayton Ohio, July 14-16th, 2010.
- 24. Meenakshi Nagarajan, Hemant Purohit, Amit Sheth, "A Qualitative Examination of Topical Tweet and Retweet Practices," 4th Int'l AAAI Conference on Weblogs and Social Media, ICWSM 2010, Washington D.C., May 23-26, 2010, pp. 295-298.
- 25. Wenbo Wang, Christopher Thomas, Amit Sheth, Victor Chan. Pattern-Based Synonym and Antonym Extraction. 48th ACM Southeast Conference, ACMSE2010, Oxford Mississippi, April 15-17, 2010.
- 26. Delroy Cameron, Pablo N. Mendes, Amit P. Sheth, Victor Chan, Semantics-Empowered Text Exploration for Knowledge Discovery, 48th ACM Southeast Conference, ACMSE2010, Oxford Mississippi, April 15-17, 2010.
- 27. Satya S. Sahoo, Olivier Bodenreider, Pascal Hitzler, Amit Sheth and Krishnaprasad Thirunarayan, 'Provenance Context Entity (PaCE): Scalable provenance tracking for scientific RDF data.' In the 22nd International Conference on Scientific and Statistical Database Management (SSDBM), Heidelberg, Germany June 30-July 2, 2010.
- 28. Karl Aberer and Avigdor Gal and Manfred Hauswirth and Kai-Uwe Sattler and Amit P. Sheth, "Semantic Challenges in Sensor Networks," Semantic Challenges in Sensor Networks, Dagstuhl Seminar Proceedings, Karl Aberer and Avigdor Gal and Manfred Hauswirth and Kai-Uwe Sattler and Amit P. Sheth, (Eds.), Schloss Dagstuhl Leibniz-Zentrum fuer Informatik, Germany, Dagstuhl, Germany, February 2010, number 10042. ISSN ={1862-4405}, URL

={http://drops.dagstuhl.de/opus/volltexte/2010/2557

- 29. Prateek Jain, Peter Z. Yeh, Kunal Verma, Cory Henson and Amit Sheth, 'SPARQL Query Re-writing for Spatial Datasets Using Partonomy Based Transformation Rules', Third International Conference on Geospatial Semantics (GeoS 2009), Mexico City, Mexico, December 3-4, 2009.
- 30. Krishnaprasad Thirunarayan, Dharan K. Althuru, Cory A. Henson, and Amit P. Sheth, 'A Local Qualitative Approach to Referral and Functional Trust,' In: Proceedings of the

The 4th Indian International Conference on Artificial Intelligence (IICAI-09), pp. 574-588, December 2009.

- 31. Satya S. Sahoo, D. Brent Weatherly, Raghava Mutharaju, Pramod Anantharam, Amit Sheth, Rick L. Tarleton Ontology-driven Provenance Management in eScience: An Application in Parasite Research" OnTheMove Federated Conferences & Workshops (OTM 2009) - ODBASE'09, Vilamoura, Algarve-Portugal, Nov 03 - 04 - 05, 2009, pp. 992-1009.
- Daniel Gruhl, Meenakshi Nagarajan, Jan Pieper, Christine Robson, Amit Sheth, 'Context and Domain Enhanced Entity Spotting in Informal Text,' The Semantic Web - ISWC 2009, Proceedings of 8th International Semantic Web Conference (ISWC 2009), 260-276, Chantilly, VA, USA, October 25-29, 2009.
- 33. Meenakshi Nagarajan, Karthik Gomadam, Amit Sheth, Ajith Ranabahu, Raghava Mutharaju and Ashutosh Jadhav, Spatio-Temporal-Thematic Analysis of Citizen-Sensor Data - Challenges and Experiences, Tenth International Conference on Web Information Systems Engineering, 539 - 553, Oct 5-7, 2009.
- 34. Meenakshi Nagarajan, Kamal Baid, Amit P. Sheth, and Shaojun Wang, Monetizing User Activity on Social Networks - Challenges and Experiences, 2009 IEEE/WIC/ACM International Conference on Web Intelligence, 92-99, Sep 15-18 2009, Milan, Italy.
- 35. Cory Henson, Holger Neuhaus, Amit Sheth, Krishnaprasad Thirunarayan, Rajkumar Buyya, 'An Ontological Representation of Time Series Observations on the Semantic Sensor Web,' in Proceedings of 1st International Workshop on the Semantic Sensor Web 2009, collocated with the 6th European Semantic Web Conference (ESWC 2009), Herkalion, Greece, June 1, 2009.
- 36. Krishnaprasad Thirunarayan, Cory Henson, Amit Sheth, 'Situation Awareness via Abductive Reasoning for Semantic Sensor Data: A Preliminary Report,' In: Proceedings of 2009 International Symposium on Collaborative Technologies and Systems (CTS 2009), pp. 111-118, May 18-22, 2009.
- Cory Henson, Josh Pschorr, Amit Sheth, KrishnaprasadThirunarayan, 'SemSOS: Semantic Sensor Observation Service,' in Proceedings of the 2009 International Symposium on Collaborative Technologies and Systems (CTS 2009), Baltimore, MD, May 18-22, 2009.
- 38. CarticRamakrishnan, Pablo N. Mendes, Rodrigo A.T.S da Gama, Guilherme C. N. Ferreira & Amit P. Sheth, 'Joint Extraction of Compound Entities and Relationships from Biomedical Literature' IEEE/WIC/ACM International Conference on Web Intelligence (WI-08), Sydney, Australia, December 9-12, 2008.
- 39. C. Ramakrishnan, P. Mendes, S. Wang and A. Sheth, 'Unsupervised Discovery of Compound Entities for Relationship Extraction,' The 16th International Conference on Knowledge Engineering and Knowledge Management Knowledge Patterns (EKAW), Acitrezza, Catania, Italy, September 29-October 3, 2008, 146-155.
- Karthik Gomadam, Ajith Ranabahu, Meenakshi Nagarajan, Amit. P. Sheth and Kunal Verma, "<u>A Faceted Search for Web APIs</u>," International Conference on Web Services (ICWS 2008), Beijing, China, September 23-26, 2008.
- 41. Karthik Gomadam, Ajith Ranabahu, Meenakshi Nagarajan, Amit. P. Sheth and KunalVerma . A Faceted Classification Based Approach to Search and Rank Web APIs, In Proceedings of 6th IEEE International Conference on Web Services (ICWS), 177-184, Beijing, China, Sep. 2008.

- Alba, V. Bhagwan, J. Grace, D. Gruhl, K. Haas, M. Nagarajan, J. Pieper, C. Robson, and N. Sahoo, "Applications of Voting Theory to Information Mashups," 2nd IEEE International Conference on Semantic Computing (<u>ICSC 2008</u>), Santa Clara, CA, August 4-7, 2008.
- 43. Karthik Gomadam, Ajith Ranabahu, Lakshmish.Ramaswamy, Kunal Verma, and Amit. Sheth, "<u>Mediatability: Estimating the Degree of Human Involvement in XML Schema</u> <u>Mediation," in Proceedings of the 2nd IEEE International Conference on Semantic</u> <u>Computing, Santa Clara, CA, August 4–7, 2008.</u>
- 44. P. Mendes, B. McKnight, A. Sheth, and J. Kissinger, "TcruziKB: Enabling Complex Queries for Genome Data Exploration," in Proceedings of the 2nd IEEE International Conference on Semantic Computing, Santa Clara, CA, August 4–7, 2008.
- 45. Angela Maduko, Kemafor Anyanwu, Amit Sheth, and Paul Schliekelman, "Graph Summaries for Subgraph Frequency Estimation," in Proceedings of the 5th European Semantic Web Conference (ESWC2008), Tenerife, Spain, June 1–5, 2008.
- 46. Deligiannidi L, Hakimpour F, Amit Sheth, Event visualization in a 3D environment, Human System Interactions 2008, 25-27 May 2008, Krakow, Poland. p 158-164.
- 47. Quan Z. Sheng, Ullas Nambiar, Amit P. Sheth, Biplav Srivastava, Zakaria Maamr, and Said Elnaffar (Eds.), Proceedings of the 2008 International Workshop on Context enabled Source and Service selection, Integration and Adaptation, organized with the 17th International World Wide Web Conference (WWW 2008), Beijing, China, April 22, 2008, ACM International Conference Proceedings Series, vol 292, 2008. ISBN: 978-1-60558-107-1
- 48. Christopher Thomas, Pankaj Mehra, Roger Brooks and Amit Sheth. Growing Fields of Interest -Using an Expand and Reduce Strategy for Domain Model Extraction. In Proceedings of the 2008 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology, Sydney, 2008, pp. 496-502.
- 49. Matthew Perry, Amit Sheth, Farshad Hakimpour, and Prateek Jain, "Supporting Complex Thematic, Spatial and Temporal Queries over Semantic Web Data," in Proceedings of the 2nd International Conference on Geospatial Semantics (GEOS '07), Mexico City, Mexico, November 29–30, 2007.
- Leonidas Deligiannidis, Krys Kochut, and Amit P. Sheth, "RDF data exploration and visualization," in Proceedings of the 1st Workshop on CyberInfrastructure: Information Management in eScience (CIMS 2007), 16th ACM Conference on Information and Knowledge Management (CIKM 2007), Lisbon, Portugal, November 9, 2007, P. Mitra, C. L. Giles, and L. Carr (Eds.), ACM, 2007, pp. 39–46.
- 51. Christopher Thomas and Amit P. Sheth, "Semantic Convergence of Wikipedia Articles," in Proceedings of the 2007 IEEE/WIC/ACM International Conference on Web Intelligence (WI 2007), Fremont, CA, November 2–5, 2007.
- 52. J. Lathem, K. Gomadam, and A. Sheth, "SA-REST and (S)mashups: Adding Semantics to RESTful Services," in Proceedings of the IEEE International Conference on Semantic Computing (ICSC2007), Irvine, CA, September 17–19, 2007, pp. 469–476.
- 53. S.S. Sahoo, K. Zeng, O. Bodenreider, and A.P. Sheth, "From 'Glycosyltransferase' to 'Congenital Muscular Dystrophy': Integrating Knowledge from NCBI Entrez Gene and the Gene Ontology," in MEDINFO 2007: Proceedings of the 12th World Congress on Health (Medical) Informatics—Building Sustainable Health Systems, Brisbane, Australia, August 20–24, 2007, Studies in Health Technology and Informatics, vol. 129,

K.A. Kuhn, J.R. Warren, and T.-Y. Leong (Eds.), Amsterdam: IOS Press, 2007, pp. 1260–1264. ISBN 978-1-58603-774-1

- 54. <u>Karthik Gomadam</u>, <u>Ajith Ranabahu</u>, <u>Lakshmish Ramaswamy</u>, Amit P. Sheth, and <u>Kunal Verma</u>, A Semantic Framework for Identifying Events in a Service Oriented Architecture, in IEEE International Conference onWeb Services, 2007 (ICWS 2007), IEEE, July 2007, pp. 545–552. Digital Object Identifier 10.1109/ICWS.2007.17.
- 55. <u>Nanjangud C. Narendra, Karthikeyan Ponnalagu, Karthik Gomadam</u>, and Amit P. Sheth, "<u>Variation Oriented Service Composition and Adaptation (VOSCA): A Work in</u> <u>Progress</u>," in IEEE International Conference on Services Computing, 2007 (SCC 2007), IEEE, July 2007, pp. 694-696.
- 56. Z. Wu, K. Gomadam, A. Ranabahu, A. Sheth, and J. Miller, "Automatic Composition of Semantic Web Services Using Process Mediation," in Proceedings of the 9th International Conference on Enterprise Information Systems (ICES 2007), Funchal, Portugal, June 12–16, 2007, pp. 453–461.
- 57. L. Deligiannidis, F. Hakimpour, and A. Sheth, "Visualization of Events in a Spatially and Multimedia Enriched Virtual Environment," in Proceedings of the IEEE Intelligence and Security Informatics (ISI), New Brunswick, NJ, May 23–24, 2007.
- 58. K. Anyanwu, A. Maduko, and A. Sheth, "<u>SPARQ2L: Towards Support for Subgraph Extraction Queries in RDF Databases</u>," in Proceedings of the 16th World Wide Web Conference (WWW2007), Banff, Canada, May 8–12, 2007.
- 59. M. Perry, F. Hakimpour, and A. Sheth, "Analyzing Theme, Space and Time: An Ontology-Based Approach," in Proceedings of the 14th International Symposium on Advances in Geographic Information Systems (ACM-GIS '06), Arlington, VA, November 10–11, 2006.
- C. Thomas, W.S. York, and A. Sheth, "Modular Ontology Design Using Canonical Building Blocks in the Biochemistry Domain," International Conference on Formal Ontology in Information Systems, November 2006, Baltimore, MD, November 9–11, 2006.
- C. Ramakrishnan, K. Kochut, and. A. Sheth, "A Framework for Schema-Driven Relationship Discovery from Unstructured Text," in The Semantic Web - ISWC 2006: 5th Internationalis Semantic Web Conference, ISWC 2006, Athens, GA, November 5– 9, 2006, Proceedings, I. Cruz et al. (Eds.) Lecture Notes in Computer Science, vol. 4273, Springer, 2006. <u>Online version</u>
- A. Sheth, S. Agrawal, J. Lathem, N. Oldham, H. Wingate, P. Yadav, and K. Gallagher, "Active Semantic Electronic Medical Record," in The Semantic Web - ISWC 2006: 5th International Semantic Web Conference, ISWC 2006, Athens, GA, November 5–9, 2006, Proceedings, I. Cruz et al. (Eds.) Lecture Notes in Computer Science, vol. 4273, Springer, 2006, pp. 913–926. Online version
- M. Nagarajan, K. Verma, A. Sheth, J. Miller, and J. Lathem, "Semantic Interoperability of Web Services–Challenges and Experiences," in <u>International Conference on Web</u> <u>Services (ICWS'06)</u>, Chicago, IL, September 2006, Proceedings, IEEE, 2006, pp. 373– 382.
- 64. K. Verma, P. Doshi, K. Gomadam, J. Miller, and A. Sheth, "Optimal Adaptation in Web Processes with Coordination Constraints," in <u>International Conference on Web Services</u> (<u>ICWS'06</u>), Chicago, IL, September 2006, Proceedings, IEEE, 2006, pp. 257–264.

- 65. B. Aleman-Meza, M. Nagarajan C. Ramakrishnan, L. Ding, P. Kolari, A. Sheth, I. B. Arpinar, A. Joshi, and T. Finin, "Semantic Analytics on Social Networks: Experiences in Addressing the Problem of Conflict of Interest Detection," in Proceedings of the 15th International World Wide Web Conference (WWW2006), Edinburg, Scotland, May 2006. Judged <u>best paper in the Semantic Web track</u> and <u>nominated for the Best Paper award</u>.
- 66. N. Oldham, K. Verma, A. Sheth, and F. Hakimpour, "Semantic WS-Agreement Partner Selection," in Proceedings of the 15th International World Wide Web Conference (WWW2006), Edinburg, Scotland, May 2006. <u>Nominated for the Best Student paper</u> <u>award</u>.
- 67. S. S. Sahoo, C. Thomas, A. Sheth, W. York, and S. Tartir, "Knowledge Modeling and its application in Life Sciences: A Tale of two Ontologies," in Proceedings of the 15th International World Wide Web Conference (WWW2006), Edinburg, Scotland, May 2006.
- Mathew, A. Sheth, and L. Deligiannidis, "SemanticSpy: Suspect Tracking Using Semantic Data in a Multimedia Environment," in Intelligence and Security Informatics: IEEE International Conference on Intelligence and Security Informatics (ISI 2006) San Diego, CA, USA, May 23–24, 2006, Proceedings, <u>S. Mehrotra</u> et al. (Eds.), <u>Lecture</u> <u>Notes in Computer Science</u>, vol. 3975, Berlin: Springer, 2006, 492–497.
- L. Deligiannidis, A. Sheth, and B. Aleman-Meza, "Semantic Analytics Visualization," IEEE International Conference on Intelligence and Security Informatics (ISI–2006), San Diego, CA, May 23–24, 2006, pp. 48–59.
- K. Gomadam, K. Verma, A. Sheth, and J. Miller, "Demonstrating Dynamic Configuration and Execution of Web processes," in Service-Oriented Computing -ICSOC 2005: 3rd International Conference, Amsterdam, The Netherlands, December 12–15, 2005, Proceedings, B. Benatallah, F. Casati, and P. Traverso (Eds.), Lecture Notes in Computer Science, vol. 3826, Springer, 2005, pp. 502–507.
- I. Vasquez, J. Miller, K. Verma, and A. Sheth, "OpenWS–Transaction: Enabling Reliable Web Service Transactions," in Service-Oriented Computing - ICSOC 2005: 3rd International Conference, Amsterdam, The Netherlands, December 12–15, 2005, Proceedings, B. Benatallah, F. Casati, and P. Traverso (Eds.), Lecture Notes in Computer Science, vol. 3826, Springer, 2005, pp. 490–494.
- R. Mulye, J. Miller, K. Verma, K. Gomadam, and A. Sheth, "A Semantic Template Based Designer for Web Processes," in International Conference on Web Services, 2005 (ICWS 2005), Orlando, FL, July 12–15, 2005, Proceedings, pp. 461–471.
- 73. P. Rajasekaran, J.A. Miller, K. Verma, and A.P. Sheth, "Enhancing Web Services Description and Discovery to Facilitate Composition," in <u>Semantic Web Services and</u> <u>Web Process Composition</u>: 1st International Workshop on Semantic Web Services and Web Process Composition (SWSWPC 2004), July 6–9, 2004, San Diego, California, USA, Revised Selected Papers, <u>Lecture Notes in Computer Science</u> 3387, Springer, 2005, pp. 55-68.
- 74. K. Anyanwu, A. Maduko, and A. Sheth, "SemRank: Ranking Complex Relationship Search Results on the Semantic Web," in Proceedings of the 14th International World Wide Web Conference (WWW2005), Chiba, Japan, May 2005, pp. 117–127. Judged one of the best papers in the Semantic Web track.

- 75. Aleman-Meza, P. Burns, M. Eavenson, D. Palaniswami, and A. Sheth, "An Ontological Approach to the Document Access Problem of Insider Threat," in Intelligence and Security Informatics: IEEE International Conference on Intelligence and Security Informatics, ISI 2005, Atlanta, GA, USA, May 19–20, 2005, Proceedings, Kantor et al. (Eds.), Lecture Notes in Computer Science, vol. 3495, Springer, April 2005, pp. 486– 491. <u>OpenURL</u>
- 76. N.Sriharee, T. Senivongse, K. Verma, and A. Sheth, "<u>On Using WS–Policy, Ontology, and Rule Reasoning to Discover Web Services</u>," in Intelligence in Communication Systems: IFIP International Conference, INTELLCOMM 2004, Bangkok, Thailand, November 23–26, 2004, Proceedings, Lecture Notes in Computer Science, vol. 3283, 2004, pp. 246–255.
- K. Sivashanmugam, K. Verma, and A. Sheth, "Discovery of Web Services in a Federated Registry Environment," in Proceedings: IEEE International Conference on Web Services (<u>ICWS 2004</u>), San Diego, CA, 6–9 July, 2004, IEEE Computer Society, pp. 270–278. ISBN 0-7695-2167-3
- 78. A. Patil, S. Oundhakar, A. Sheth, and K. Verma, "METEOR-S Web service Annotation Framework," in Proceedings of the World Wide Web Conference, New York, NY, May 2004, ACM Press, pp. 553–562.
- J. Miller, G. Baramidze, A. Sheth, and P. Fishwick, "Investigating Ontologies for Simulation Modeling," in Proceedings of the 37th Annual Simulation Symposium (ANSS'04), Arlington, VA, April 2004, pp. 55–63.
- 80. K. Sivashanmugam, K. Verma, A. Sheth, and J. Miller, "Adding Semantics to Web Services Standards," in Proceedings of the 2003 International Conference on Web Services (ICWS'03), Las Vegas, NV, June 23–26, 2003, pp. 395–401.
- 81. G. Silver, J. Miller, A. Sheth, J. Myers, A. Maduko, and R. Jafri, "Modeling and Simulation of Quality of Service for Composite Web Services," in Proceedings of the 7th World Multiconference on Systemics, Cybernetics and Informatics (SCI'03), Orlando, FL, July 2003, vol. 1, pp. 420–425.
- 82. K. Anyanwu and A. Sheth, "The □ Operator: Discovering and Ranking Associations on the Semantic Web," in Proceedings of the 12th International World Wide Web Conference, Budapest, Hungary, May 2003, ACM Press, 2003, pp. 690–699.
- 83. S. Chandrasekaran, G. Silver, J. Miller, J. Cardoso, and A. Sheth, "XML-based modeling and simulation: Web service technologies and their synergy with simulation," in Proceedings of the 34th Conference on Winter Simulation: Exploring New Frontiers (WSC'02), San Diego, CA, December 2002, pp. 606–615.
- 84. H. T. Goranson, B. Chu, M. Grüninger, N. Ivezic, S. Kulvatunyou, Y. Labrou, R. Masuoka, Y. Peng, A. Sheth, and <u>D. Shorter</u>, "Ontologies as a New Cost Factor in Enterprise Integration," in Proceedings of the IFIP TC5/WG5.12 International Conference on Enterprise Integration and Modeling Technique (<u>ICEIMT 2002</u>), 2002, pp.253–263.
- 85. D. Avant, M. Baum, C. Bertram, M. Fisher, A. Sheth, Y. Warke, "Semantic technology applications for homeland security," Conference on Information and Knowledge Management, Proceedings of the eleventh international conference on Information and knowledge management, 2002, pp. 690. ISBN:1-58113-492-4, Order Number:605020
- 86. S. Patel and A. Sheth, "Planning and Optimizing Semantic Information Requests using Domain Modeling and Resource Characteristics," in Proceedings of the 6th International

Conference on Cooperative Information Systems (CoopIS), Trento, Italy, September 5–7, 2001, pp. 135–149.

- J. Cardoso, Z. Luo, J. Miller, A. Sheth, and K. Kochut, "Survivability Architecture for Workflow Management Systems," in Proceedings of the 39th Annual ACM Southeast Conference (ACMSE'01), Athens, GA, March 2001, pp. 207–216.
- I.B. Arpinar, J. Miller, and A. Sheth, "An Efficient Data Extraction and Storage Utility For XML Documents," in Proceedings of the 39th Annual ACM Southeast Conference (ACMSE'01), Athens, GA, March 2001, pp. 293–295.
- J. Miller, A. Sheth, K. Kochut, and Z. Luo, "Recovery Issues in Web-Based Workflow," in Proceedings of the 12th International Conference on Computer Applications in Industry and Engineering (CAINE-99), Atlanta, GA, November 1999, pp.101–105.
- M. Kang, J. Froscher, A. Sheth, K. Kochut and J. Miller, "A Multilevel Secure Workflow Management System," in Proceedings of the 11th Conference on Advanced Information Systems Engineering (CAiSE'99), Heidelberg, Germany, June 1999, pp. 271–285.
- 91. Sheth, K. Shah, K. Parsuraman and S. Mudumbai, "Searching Distributed and Heterogeneous Digital Media," in Proceedings of the IFIP 2.6 Working Conference on Database Semantics (DS-8): Semantic Issues in Multimedia Systems, Rotorua, New Zealand, January 4–8, 1999.
- 92. E.A. Mena, V. Kashyap, A. Illarramendi, and A. Sheth, "Estimating Information Loss for Multi-Ontology Based Query Processing," workshop on Intelligent Information Integration (III'98), in Proceedings of the 13th Biennial European Conference on Artificial Intelligence (ECAI), Brighton, England, August 1998, John Wiley & Sons, 1998, pp. 93–108.
- 93. Y. Han and A. Sheth, "On Adaptive Workflow Modeling," in Proceedings of the 4th International Conference on Information Systems Analysis and Synthesis, Orlando FL, July 1998, pp. 108–116.
- 94. K. Shah, A. Sheth, and S. Mudumbai, "Black Box approach to Visual Image Manipulation used by Visual Information Retrieval Engines," in Proceedings of 2nd IEEE Metadata Conference, September 1997. (Proceedings primarily on the Web, no page numbers).
- 95. A. Sheth, K. Kochut, J. Miller, D. Worah, S. Das, D. Lin, D. Palaniswami, J. Lynch, and I. Shevchenko, "Supporting State-wide Immunization Tracking Using Multi-Paradigm Workflow Technology," in Proceedings of the 22nd International Conference on Very Large Data Bases, Bombay, India, September 1996, pp. 263–273.
- 96. E. Mena, V. Kashyap, A. Illarramendi, and A. Sheth, "Managing Multiple Information Sources through Ontologies: Relationship between Vocabulary Heterogeneity and Loss of Information," in Proceedings of Knowledge Representation Meets Databases (KRDB'96), ECAI'96 conference, Budapest, Hungary, August 1996, pp. 50–52.
- 97. E. Mena, V. Kashyap, A. Sheth, and A. Illarramendi, "OBSERVER: An Approach for Query Processing in Global Information Systems Based on Interoperation Across Preexisting Ontologies," in Proceedings of the 1st IFCIS International Conference on Cooperative Information Systems (CoopIS'96), Brussels, Belgium, June 1996, pp. 14– 25.
- 98. A. Sheth and V., "Media-Independent Correlation of Information: What? How?" in Proceedings of the 1st IEEE Metadata Conference, April 1996.

- 99. L. Shklar, A. Sheth, V. Kashyap, and K. Shah, "InfoHarness: Use of Automatically Generated Metadata for Search and Retrieval of Heterogeneous Information," in Proceedings of CAiSE'95, June 1995, pp. 217–230.
- 100. J. Miller, A. Sheth, K. Kochut, X. Wang, and A. Murugan, "Simulation Modeling with Workflow Technology," in Proceedings of the 1995 Winter Simulation Conference, December 1995, pp. 612–619.
- 101. V. Kashyap and A. Sheth, "Semantic based Information Brokering," in Proceedings of the 3rd International Conference on Information and Knowledge Management, November 1994, pp. 363–370.
- 102. L. Shklar, S. Thatte, H. Marcus, and A. Sheth, "The InfoHarness Information Integration Platform," in Proceedings of the 2nd International Conference on the World Wide Web, Chicago, IL, October 19–21, 1994.
- 103. P. Attie, M. Singh, A. Sheth, and M. Rusinkiewicz, "Specifying and Executing Intertask Dependencies," in Proceedings of the 19th International Conference on Very Large Data Bases, Dublin, Ireland, August 1993, pp.134–145.
- 104. J. Geller, Y. Perl, P. Cannata, A. Sheth, and E. Neuhold, "A Case Study of Structural Integration," in Proceedings of the 1st International Conference on Information and Knowledge Systems, Baltimore, MD, November 1992.
- 105. M. Ansari, L. Ness, M. Rusinkiewicz, and A. Sheth, "Using Flexible Transactions to Support Multisystem Telecommunication Applications," in Proceedings of the 18th International Conference on Very Large Data–bases, Vancouver, Canada, August 1992, pp. 65–76.
- 106. J. Geller, A. Mehra, Y. Perl. A. Sheth, E. Neuhold, "Algorithms for Structural Schema Integration," in Proceedings of the 2nd International Conference on Systems Integration, Morristown, NJ, June 1992.
- 107. M. Ansari, L. Ness, M. Rusinkiewicz, and A. Sheth, "Executing Multidatabase Transactions," in Proceedings of the 25th Hawaii International Conference on System Sciences, Kauai, HI, January 1992, vol. 2, pp. 335–346. (Best paper of the mini-track on Multi Data/Knowledge Bases).
- 108. Sheth and A. O'Hare, "The Architecture of BRAID: A System for Bridging Al/DB Systems," in Proceedings of the 7th IEEE International Conference on Data Engineering, Kobe, Japan, April 1991, pp. 570–581.
- 109. Georgakopoulos, M. Rusinkiewicz, and A. P. Sheth, "On Serializability of Multidatabase Transactions through Forced Local Conflict," in Proceedings of the 7th IEEE International Conference on Data Engineering, Kobe, Japan, April 1991, pp. 314– 323. (Outstanding Paper Award)
- 110. A. Sheth, "Fault Tolerance in a Very Large Database System: A Strawman Analysis," in Proceedings of the 9th IEEE International Conference on Distributed Computing Systems, Newport Beach, CA, June 1989.
- 111. A. Sheth, J. Larson, E. Watkins, "Tailor, A Tool for Updating Views," in Proceedings of the Extending Data Base Technology Conference, Venice, Italy, March, 1988, Lecture Notes in Computer Science, vol.303, Springer.
- 112. A. Sheth, J. Larson A. Comelio, and S. Navathe, "A Tool for Integrating Conceptual Schemas and User Views," in Proceedings of the 4th IEEE International Conference on Data Engineering, Los Angeles, CA, February, 1988.

- 113. A. Sheth, A. Singhal, M. Liu, "Performance Analysis of Resilience Mechanisms in Distributed Database Systems," in Proceedings of the 3rd IEEE International Conference on Data Engineering, Los Angeles, CA, February 1987.
- 114. A. Sheth and M. Liu, "Integrating Locking and Optimistic Concurrency Control in Distributed Database Systems," in Proceedings of the 6th IEEE International Conference on Distributed Database Systems, Cambridge, MA, May 1986.
- 115. A. Elmagarmid, A. Sheth, and M. Liu, "Deadlock Detection Algorithms in Distributed Database Systems," in Proceedings of the 2nd International Conference on Data Engineering, Los Angeles, CA, February, 1986.
- 116. A. Singhal, A. Sheth, and M. Liu, "An Analysis of the Effect of Network Load and Topology on the Performance of Concurrency Control Algorithms in Distributed Database Systems," in Proceedings of Computer Networking Symposium, Gaithersburg, MD, December 1984. (Distinguished Paper Award)
- 117. A. Sheth, A. Singhal, and M. Liu, "An Adaptive Concurrency Control Strategy for Distributed Database Systems," in Proceedings of the 1st IEEE International Conference on Data Engineering, Los Angeles, CA, April 1984.
- 118. A. Sheth, "Memory Subsystems for Microcomputers," in Proceedings of the 5th All India Seminar on Microprocessors and Their Applications, Hyderabad, India, October 1980.

Workshop and Symposium Publications

- D. Cameron, V. Bhagwan, A. P. Sheth, "Towards Comprehensive Longitudinal Healthcare Data Capture" In The 1st International Workshop on the Role of Semantic Web in Literature-based Discovery, SWLBD2012 (co-located with the IEEE International Conference on Boinformatics and Biomedicine, BIBM2012) Philadelphia, PA, October 4, 2012, pp. 241-247.
- Harshal Patni, Cory Henson, Michael Cooney, Amit Sheth, Krishnaprasad Thirunarayan, "Demonstration: Real-Time Semantic Analysis of Sensor Streams" In: Proceedings of 4th International Workshop on Semantic Sensor Networks 2011 (SSN2011), colocated with the 10th International Semantic Web Conference (ISWC 2011), Bonn, Germany, 2011, pp. 119 – 122,.
- Prateek Jain, Pascal Hitzler, Amit P. Sheth, Flexible Bootstrapping-Based Ontology Alignment In: P. Shvaiko, J. Euzenat, F. Giunchiglia, H. Stuckenschmidt, M. Mao, I. Cruz (eds.), Ontology Matching, OM-2010. Proceedings of the 5th International Workshop on Ontology Matching, at ISWC2010, Shanghai, China, November 2010, pp. 136-137.
- Ajith Ranabahu, Amit Sheth, Ashwin Manjunatha, and Krishnaprasad Thirunarayan, 'Towards Cloud Mobile Hybrid Application Generation using Semantically Enriched Domain Specific Languages', International Workshop on Mobile Computing and Clouds (MobiCloud 2010), Santa Clara, CA, October 28, 2010.
- Paolo Missier, Satya S Sahoo, Jun Zhao, Carole Goble, Amit Sheth (2010) <u>"Janus: from</u> <u>Workflows to Semantic Provenance and Linked Open Data. In Procs</u>." The 3rd International Provenance and Annotation Workshop, Troy NY, USA, June 15-16, 2010.

- 6. HarshalPatni, Satya S. Sahoo, Cory Henson and Amit Sheth, <u>'Provenance Aware Linked</u> <u>Sensor Data'</u>, 2nd Workshop on Trust and Privacy on the Social and Semantic Web, Colocated with ESWC, Heraklion Greece, 30th May - 03 June 2010.
- KrishnaprasadThirunarayan, PramodAnantharam, Cory Henson, Amit Sheth, 'Some Trust Issues in Social Networks and Sensor Networks,' In: Proceedings of 2010 International Symposium on Collaborative Technologies and Systems (CTS 2010), Chicago, IL, May 17-21, 2010.
- 8. HarshalPatni, Cory Henson, Amit Sheth, 'Linked Sensor Data,' In: Proceedings of 2010 International Symposium on Collaborative Technologies and Systems (CTS 2010), Chicago, IL, May 17-21, 2010.
- Michael Compton, Cory Henson, Laurent Lefort, Holger Neuhaus, Amit Sheth 'A Survey of the Semantic Specification of Sensors,' in Proceedings of the 8th International Semantic Web Conference (ISWC 2009), 2nd International Workshop on Semantic Sensor Networks, 25-29 October 2009, Washington DC.
- Satya S. Sahoo, Amit Sheth, 'Provenir ontology: Towards a Framework for eScience Provenance Management', Microsoft eScience Workshop, Pittsburgh, PA Oct 15-17, 2009.
- 11. Cory Henson, Holger Neuhaus, Amit Sheth, Krishnaprasad Thirunarayan, Rajkumar Buyya, 'An Ontological Representation of Time Series Observations on the Semantic Sensor Web,' in Proceedings of 1st International Workshop on the Semantic Sensor Web 2009, collocated with the 6th European Semantic Web Conference (ESWC 2009), Herkalion, Greece, June 1, 2009.
- Prateek Jain, Peter Z. Yeh, Kunal Verma, Alex Kass and Amit P. Sheth; "Enhancing Process-Adaptation Capabilities with Web-Based Corporate Radar Technologies"; in Proceedings of OBI'08, <u>1st Int'l Workshop on Ontology-supported Business Intelligence</u>, co-located with ISWC 2008, Kongresszentrum, Karlsruhe, Germany, October 26-30, 2008, OBI '08, vol. 308. ACM, New York, NY, 1-6.
- 13. S. Sahoo, M. Raymer, C. Henson, A. Sheth and W. York (2008) Ontology driven Semantic Provenance for Heterogeneous Bionomics Experimental Data. Oral presentation at the Ohio Collaborative Conference on Bioinformatics (OCCBIO), University of Toledo, OH, July 2008.
- Pieter De Leenheer, Martin Hepp, Amit P. Sheth: COMBEK 2008 PC Co-chairs' Message. "On the Move to Meaningful Internet Systems," OTM Workshops 2008, Monterrey, Mexico, pp. 181-182.
- 15. Cory Henson, Amit Sheth, Prateek Jain, Josh Pschorr, and Terry Rapoch, "<u>Video on the Semantic Sensor Web</u>," W3C Video on the Web Workshop, San Jose, CA, December 12–13, 2007.
- 16. S. Sahoo, O. Bodenrieder, K. Zeng, and A. Sheth, "<u>An Experiment in Integrating Large Biomedical Knowledge Resources with RDF: Application to Associating Genotype and Phenotype Information</u>," <u>HCLS-DI2007</u>, 16th International World Wide Web Conference (WWW2007), Banff, Canada, May 8–12, 2007.
- 17. F. Hakimpour, B. Aleman-Meza, M. Perry, and A. Sheth, "Data Processing in Space, Time and Semantics Dimensions," International Workshop Terra Cognita: Geospatial Semantic Web, Athens, GA, November 6, 2006.

- V. Chandrasekaran, K. Gomadam, A. Sheth, and J. P. Bowen, "SemDrug: Application of semantic relationship discovery to expedite lead identification," 231st National Meeting of the American Chemical Society (ACS), Atlanta, GA, March 26–30, 2006.
- 19. S. Tartir, I.B. Arpinar, M. Moore, A. Sheth, and B. Aleman-Meza, "OntoQA: Metric-Based Ontology Quality Analysis," in Proceedings of IEEE ICDM 2005 Workshop on Knowledge Acquisition from Distributed, Autonomous, Semantically Heterogeneous Data and Knowledge Sources, Houston, TX, November 27, 2005.
- M. Perry, M. Janik, C. Ramakrishnan, C. Ibanez, B. Arpinar, and A. Sheth, "Peer-to-Peer Discovery of Semantic Associations," in 2nd International Workshop on Peer-to-Peer Knowledge Management (P2PKM 2005), La Jolla, CA, July 17, 2005, CEUR Workshop Proceedings, vol. 139. ISSN: 1612-0073.
- R. Akkiraju, J. Farrell, and J. Miller, M. Nagarajan, M. Schmidt, A. Sheth, K. Verma, "Web Service Semantics-WSDLS," in W3C Workshop on Frameworks for Semantics in Web Services, Innsbruck, Austria, June 9–10, 2005.
- S.S. Sahoo, A. Sheth, W. York, and J. Miller, "Semantic Web Services for Nglycosylation Process," in International Symposium on Web Services, Blacksburg, VA, May 25–27, 2005.
- A. Sheth, K. Verma, J. Miller, and P. Rajasekaran, "Enhancing Web Service Descriptions using WSDL–S, Research–Industry Technology Exchange" at EclipseCon 2005, Burlingame, CA, February 28–March 3, 2005.
- 24. A. Sheth et. al., "<u>Semantic Web Technology in Support of Bioinformatics for Glycan</u> <u>Expression</u>," in W3C Workshop on Semantic Web for Life Sciences, October 28, 2004, Cambridge MA. Online publication.
- 25. N. Oldham, C. Thomas, A. Sheth, and K. Verma, "MWSAF with Machine Learning Classification," in Semantic Web Services and Web Process Composition: 1st International Workshop, SWSWPC 2004, San Diego, CA, July 6, 2004, Revised Selected Papers, Lecture Notes in Computer Science, vol. 3387.
- 26. P. Rajasekaran, J. Miller, K. Verma, and A. Sheth, "Enhancing Web Services Description and Discovery to Facilitate Composition," in Semantic Web Services and Web Process Composition: 1st International Workshop, SWSWPC 2004, San Diego, CA, July 6, 2004, Revised Selected Papers, Lecture Notes in Computer Science, vol. 3387.
- 27. B. Aleman-Meza, C. Halaschek, A. Sheth, I.B. Arpinar, and G. Sannapareddy, "SWETO: Large-Scale Semantic Web Test-bed," in Proceedings of the 16th International Conference on Software Engineering & Knowledge Engineering (SEKE2004): International Workshop on Ontology in Action, Banff, Canada, June 21–24, 2004, pp. 490–493.
- 28. A. Sheth and D. Avant, "Semantic Visualization: Interfaces for exploring and exploiting ontology, knowledgebase, heterogeneous content and complex relationships," in NASA Virtual Iron Bird Workshop, Monterey, CA, March 31 and April 2, 2004.
- 29. B. Aleman-Meza, C. Halaschek-Wiener, I.B. Arpinar, and A.P. Sheth, "Context-Aware Semantic Association Ranking," in Proceedings of SWDB'03, 1st Int'l Workshop on Semantic Web and Databases, co-located with VLDB 2003, Humboldt-Universitaet, Berlin, Germany, September 7-8, 2003, Isabel F. Cruz et al. (Eds.), 2003, pp. 33–50.
- 30. M. Arumugam, A. Sheth, and I. B. Arpinar, "Towards P2P Semantic Web: A Distributed Environment for Sharing Semantic Knowledge on the Web," in WWW2002 Workshop on Real World RDF and Semantic Web Applications, Honolulu, HI, May 7, 2002.

- 31. T. Lima, A. Sheth, N. Ashish, M. Guntamadugu, S. Laxminarayanan, N. Palsena, and D. Singh, "Digital Library Services Supporting Information Integration over the Web," in Proceedings of International Workshop on Information Integration on the Web Technologies and Applications, Rio de Janeiro, Brazil, 2001, pp.19–26.
- 32. Y. Han, A. Sheth, and K. Bussler, "A Taxonomy of Adaptive Workflow Management," in CSCW-98 Workshop Towards Adaptive Workflow Systems, November 14, 1998.
- 33. Z. Luo, A. Sheth, J. Miller, and K. Kochut, "Defeasible Workflow, Its Computation and Exception Handling," in CSCW-98 Workshop Towards Adaptive Workflow Systems, November 14, 1998.
- 34. D. Worah and A. Sheth. "What Do Advanced Transaction Models Have to Offer for Workflows?" in Proceedings of the International Workshop on Advanced Transaction Models and Architectures (ATMA), Goa, India, August 1996, pp. 1–17.
- 35. A. Sheth and V. Kashyap, "Steps towards media–independent search of Web-accessible Heterogeneous Digital Data," in Proceedings of the 2nd International Workshop on Multimedia Information Systems, West Point, NY, Sept. 26–28, 1996, pp. 92–97.
- 36. E. Mena, V. Kashyap, A. Illarramendi, and A. Sheth, "Managing Multiple Information Sources through Ontologies: Relationship between Vocabulary Heterogeneity and Loss of Information," in Proceedings of the Workshop on Knowledge Representation meets Databases in conjunction with European Conference on Artificial Intelligence, Budapest, Hungary, August 1996, pp. 1–3.
- 37. A. Sheth, V. Kashap, and William LeBlanc, "Attribute-based Access of Heterogeneous Digital Data," in Proceedings of the Workshop on Providing Web Access to Legacy Data, 4th International World Wide Web Conference, December 1995.
- 38. A. Savasere, A. Sheth, S. Gala, S. Navathe, and H. Marcus, "On Applying Classification to Schema Integration," in Proceedings of the 1st International Workshop on Interoperability in Multidatabase Systems, Kyoto, Japan, 1991, pp. 258–261.
- 39. L. Ness, J. Cameron, and A. Sheth, "An Executor for Flexible Transactions which Achieves Maximal Parallelism," in Proceedings of the 1st International Workshop on Interoperability in Multidatabase Systems, Kyoto, Japan, 1991, pp. 288–291.
- 40. A. Sheth and M. Rusinkiewicz, "Management of Interdependent Data: Specifying Dependency and Consistency Requirements," in Proceedings of the Workshop on the Management of Replicated Data, Houston, TX, November 1990.
- 41. A. Sheth and S. Gala, "Attribute Relationships: An Impediment in Automating Schema Integration," in Proceedings of the Workshop on Heterogeneous Database System, December 1989.
- 42. A. Sheth, "Developing an Interface Unit for Expanding MCS 6800," in Proceedings of the 3rd Indian Congress of College Going Scientists, Kanpur, India, December 1979.
- 43. A. Sheth, "Solar Energy—Perspective and Applications," in Proceedings of the All India Symposium on Energy Management, Pilani, India, April 1979.

Other Publications: Conference Proceedings (Refereed or Invited Short Papers/Abstracts)

1. Ashwin Manjunatha, Ajith Ranabahu, Paul Anderson, Amit Sheth, 'Getting Code Near the Data: A Study of Generating Customized Data Intensive Scientific Workflows with Domain Specific Language', Conference Poster, 2nd IEEE International Conference on Cloud Computing Technology and Science, Indianapolis, IN, November 30 - December 3, 2010.

- Ashwin Manjunatha, Ajith Ranabahu, Paul Anderson, Satya S. Sahoo, Michael Raymer and Amit Sheth, "Cloud Based Scientific Workflow for NMR Data Analysis," Conference Poster, 18th Annual International Conference on Intelligent Systems for Molecular Biology (ISMB), Boston MA, July 11-13, 2010.
- Vinh Nguyen, Satya Sahoo, Priti Parikh, Todd Minning, Brent Weatherly, Flora Logan, Amit Sheth, Rick Tarleton, "Biomedical Ontologies for Parasite Research," Conference Poster, 18 Annual International Conference on Intelligent Systems for Molecular Biology (ISMB), Boston, MA, July 11-13, 2010.
- 4. Ashwin Manjunatha, Paul Anderson, Satya S. Sahoo, Ajith Ranabahu, Michael Raymer and Amit Sheth, 'Semantically Annotated RESTful Services for Large-scale Metabolomics Data Analysis', Conference Poster, Ohio Collaborative Conference on Bioinformatics 2010, Columbus, Ohio, June 15-17, 2010.
- 5. Vinh Nguyen, Priti Parikh, Satya Sahoo, Amit Sheth, "Managing provenance information in parasite research," Conference Poster, Ohio Bioinformatics Consortium (OCCBIO), Columbus, OH, June 6-8, 2010.
- Meenakshi Nagarajan, Hemant Purohit, Amit Sheth. "A Qualitative Examination of Topical Tweet and Retweet Practices." Conference Poster, 4th Int'l AAAI Conference on Weblogs and Social Media, ICWSM 2010, May 23-26, 2010, Washington, D.C., 295-298.
- Pablo Mendes, Pavan Kapanipathi, Delroy Cameron, & Amit Sheth, "Dynamic Associative Relationships on the Linked Open Data Web." Conference Poster, In: Proceedings of the WebSci10: Extending the Frontiers of Society On-Line, Conference Poster, April 26-27th, 2010, Raleigh, NC.
- Amit Sheth, Rick Tarleton, Prashant Doshi, Mark Musen, Natasha Noy, Satya Sahoo, D. Brent Weatherly and Pablo Mendes, "Collaborative R01 with NCBO Semantics and Services Enabled Problem Solving Environment For TrypanosomaCruzi," Conference Poster, ICSC Asia Expo 2008, October 14-16, 2008, Cotai, Macao.
- 9. Quan Z. Sheng, Ullas Nambiar, Amit P. Sheth, Biplav Srivastava, Zakaria Maamar, Said Elnaffar, International Workshop on Context Enabled Source and Service Selection, Integration and Adaptation: workshop summary, CSSSIA 2008, 1.
- Angela Maduko, Kemafor Anyanwu, Amit P. Sheth, and Paul Schliekelman, "Estimating the cardinality of RDF graph patterns," poster paper, in Proceedings of the 16th International Conference on World Wide Web, WWW 2007, Banff, Alberta, Canada, May 8–12, 2007, C.L. Williamson et al. (Eds.), ACM 2007, pp. 1233–1234.
- Meenakshi Nagarajan, Amit P. Sheth, Marcos Kawazoe Aguilera, Kimberly Keeton, Arif Merchant, and Mustafa Uysal, "Altering Document Term Vectors for Classification: Ontologies as Expectations of Co-occurrence," poster paper, in Proceedings of the 16th International Conference on World Wide Web, WWW 2007, Banff, Alberta, Canada, May 8–12, 2007, C.L. Williamson et al. (Eds.), ACM 2007, pp. 1225–1226.
- 12. Matthew Perry, Farshad Hakimpour, and Amit Sheth. "Analyzing Theme, Space and Time: an Ontology-based Approach," Conference Poster, 5th International Semantic Web Conference (ISWC '06), Athens, GA, November 5–9, 2006.

- R. Akkiraju, J. Farrell, J.Miller, M. Nagarajan, M. Schmidt, A. Sheth, K. Verma, "Web Service Semantics -- WSDL-S," A joint UGA-IBM Technical Note, version 1.0, April 18, 2005. Also <u>W3C acknowledged member submission</u>, Nov. 7, 2005.
- 14. B. Aleman-Meza, C. Haschek-Wiener, S. S. Sahoo, A. Sheth, and I.B. Arpinar, "Template Based Semantic Similarity for Security Applications," in Intelligence and Security Informatics: IEEE International Conference on Intelligence and Security Informatics, ISI 2005, Atlanta, GA, USA, May 19–20, 2005, Proceedings, Kantor et al. (Eds.), Lecture Notes in Computer Science, vol.3495, Springer, April 2005, pp. 621– 622.
- A. Sheth, K. Verma, J. Miller, and P. Rajasekaran, "Enhancing Web Service Descriptions using WSDL–S," a Research-Industry Technology Exchange at EclipseCon 2005, Burlingame, CA, February 28–March 3, 2005.
- 16. Y. Kalfoglou, M. Schorlemmer, M. Uschold, A. Sheth, and S. Staab, "<u>Semantic Interoperability and Integration: Executive Summary</u>," in Semantic Interoperability and Integration, Dagstuhl Seminar Proceedings 04391, Internationales Begegnungs– und Forschungszentrum (IBFI), Schloss Dagstuhl, Germany, March 2005.
- 17. C. Halaschek, B. Aleman-Meza, I.B. Arpinar, and A. Sheth: "Discovering and Ranking Semantic Associations over a Large RDF Metabase," in Proceedings of the 30th International Conference on Very Large Data Bases (VLDB 2004), Toronto, Canada, August 31–September 3, 2004, Morgan Kaufmann, 2004, pp. 1317–1320. ISBN 0-12-088469-0
- 18. A. Sheth, K. Kochut, J. Miller, C. Thomas, K. Gomadam, X. Yi, and M. Nagarajan, "Semantic Integration of Glycomics Data and Information," in Human Disease Glycomics/Proteome Initiative 1st Workshop: Functional Genomics in Disease, Osaka, Japan, August 23–24, 2004, pp. 38–39.
- 19. A. Sheth, "Semantic Content Annotation and Applications: Semantic web now and Challenges Ahead," in Proceedings of 2001 IRC International Conference on Internet Information Retrieval, Seoul, South Korea, October 29, 2001, pp. 99–102. (Vision paper)
- 20. K. Anyanwu and A. Sheth, "Supporting Knowledge Discovery on the Semantic Web by Exploiting the Semantics of Complex Relationships," in Proceedings of the International Semantic Web Working Symposium (SWWS), 2001.
- 21. Z. Luo and A. Sheth, "Supporting Cross-Organizational Business Processes: Challenges and Solutions," Workshop, Beyond Workflow Management: Dynamic Organizational Process Workshop, CSCW 2000, Philadelphia, PA, December 2000. (Position/vision paper)
- 22. Z. Luo, A. Sheth, and K. Kochut, "Checkpointing for Workflow Recovery," ACM Southeast Conference 2000, Clemson, SC, April 2000, pp. 79–80. (Short paper)
- 23. A. Sheth, "The InfoQuilt System for Intelligent Analysis, Mining, Fusion, and Dissemination of Heterogeneous Media Data," Symposium on Advanced Information Processing and Analysis, Tysons Corner, VA, March 1997, p. 46. (Invited talk abstract)
- 24. S. Thatte, A. Sheth, and K. Shah, "Intelligence Information Management and the InfoHarness System," Symposium on Advanced Information Processing and Analysis, Tysons Corner, VA, March 1997, p.78. (Invited talk abstract)
- 25. A. Sheth, "Bellcore's ADAPT/X Harness System for Managing Information on Internet and Intranets," in Proceedings of the 22nd International Conference on Very Large Data

Bases (VLDB 96), Mumbai (Bombay), India, September 3–6, 1996, Morgan Kaufmann, 1996, p. 585. (Invited talk abstract)

- 26. L. Shklar, A. Sheth, V. Kashyap, and S. Thatte, "InfoHarness: A System for Search and Retrieval of Heterogeneous Data," in Proceedings of the 1995 ACM SIGMOD International Conference on Management of Data, San Jose, CA, May 24, 1995, p. 478. (Demonstration abstract)
- 27. N. Krishnakumar and A. Sheth, "Specification of Workflows with Heterogeneous Tasks in METEOR," 20th International Conference on Very Large Databases (VLDB 94), Santiago, Chile, September 1994. (Refereed short paper)
- 28. W. Jin, L. Ness, M. Rusinkiewicz, and A. Sheth, "Concurrency Control and Recovery of Multidatabase Work Flows in Telecommunication Applications," in Proceedings of the ACM SIGMOD Conference on Management of Data, May 1993. (Refereed short paper)
- 29. D. Woelk, P. Attie, G. Meredith, A. Sheth, M. Singh, and C. Tomlinson, "Task Scheduling using Intertask Dependencies in Carnot," in Proceedings of the ACM SIGMOD Conference on Management of Data, May 1993. (Refereed short paper)
- 30. A. Sheth, "Does Loose AI-DBMS Coupling Stand a Chance?" in Proceedings of the 5th International Conference on Data Engineering, Los Angeles, CA, February 1988. (Position paper)
- 31. A. Sheth, "Managing and Integrating Unstructured and Unstructured Data: Problems of Representation, Features, and Abstraction," in Proceedings of the 4th International Conference on Data Engineering, Los Angeles, CA, February 1988. (Position paper)
- 32. A. Sheth, "When will we have true heterogeneous databases?" in Proceedings of the 3rd International Conference on Data Engineering, Los Angeles, CA, February 1987. (Position statement)

Other Publications: Articles in Informal Proceedings or Non-referred Papers

- 1. Pascal Hitzler, Krzystof Janowicz, Gary Berg-Cross, Lee Obrst, Amit Sheth, Tim Finn, Isabel Cruz. *Semantic Aspects of EarthCube*. Technical report, Semantics and Ontology Technical Committee. Available online at: http://knoesis.wright.edu/faculty/pascal/pub/EC-SO-TC-Report-V1.0.pdf, 2012.
- Pramod Anantharam, Krishnaprasad Thirunarayan, Amit P. Sheth: Topical anomaly detection from Twitter stream. WebSci 2012: 11-14
- 3. D. Benslimane, S. Dustdar and A. Sheth; "Services Mashups: The New Generation of Web Applications," IEEE Computer Society, September/October 2008, pp. 13-15.
- 4. A. Sheth, C. Henson, and S. Sahoo, "<u>Semantic Sensor Web</u>," *IEEE Internet Computing*, July-August 2008, p. 78-83.
- A. P. Sheth, K. Gomadam, and J. Lathem, "<u>SA-REST: Semantically Interoperable and Easier-to-Use Services and Mashups</u>," IEEE Internet Computing, November–December 2007, pp. 84–87.
- A. Sheth, "Beyond SAWSDL: A Game Plan for Broader Adoption of Semantic Web Services," in Trends & Controversies: "Semantic Web Services, Part 2," D. Martin and J. Dominique (Eds.), IEEE Intelligent Systems, 22 (no.6), November–December 2007, pp. 8–9.

- J. Davies, M. Lytras, and A. Sheth, <u>"Semantic-Web-Based Knowledge Management</u>," guest editors' introduction to special edition, IEEE Internet Computing 11 (no. 5), September–October 2007.
- 8. A. Sheth and C. Ramakrishnan, "<u>Semantic (Web) Technology in Action: Ontology</u> <u>Driven Information Systems for Search, Integration and Analysis</u>," special issue: <u>Making</u> <u>the Semantic Web Real</u>, IEEE Data Engineering Bulletin, December 2003, pp. 40–48.
- 9. A. Sheth, "<u>Semantic Metadata for Next-Gen Enterprise Information Integration</u>," DM Review, July 2003.
- A. Sheth and J. A. Miller, "Web Services: Technical Evolution yet Practical Revolution?" in "Web Services: Been There, Done That?" S. Staab (Ed.), <u>IEEE Intelligent Systems</u> 18 (no. 1) January–February 2003, pp. 78–80.
- 11. A. Sheth and R. Meersman, "<u>Amicalola Report: Database and Information Systems</u> <u>Research Challenges and Opportunities in Semantic Web and Enterprises</u>," ACM SIGMOD Record 31 (no. 4), December 2002, pp. 98–106.
- 12. K. Anyanwu and A. Sheth, The rho Operator: Discovering and Ranking Associations on the Semantic Web, ACM SIGMOD Record 31 (no. 4), December 2002, pp. 42–47.
- A.P. Sheth, <u>C. Bertram</u>, <u>D. Avant</u>, <u>B. Hammond</u>, <u>K. Kochut</u>, and Y. <u>S. Warke</u>, "Managing Semantic Content for the Web," <u>IEEE Internet Computing</u> 6 (no. 4) July/August 2002, pp. 80-87.
- 14. J. Corley, W. Karp and A. Sheth, "<u>IT at the heart of Healthcare</u>," cover story for the special issue on Healthcare, Silicon India, October 1999.
- 15. K. Kochut, A. Sheth, J.A. Miller, "Optimizing Workflow," Component Strategies 1 (no. 9), March 1999, pp. 45–57.
- 16. Regular column on various issues on Workflow in ACM SIGGROUP Bulletin, quarterly 1997–1998.
- 17. A. Sheth, D. Georgakopoulos, S. Joosten, M. Rusinkiewicz, W. Scacchi, J.C. Wileden, and A.L. Wolf. <u>Report from the NSF workshop on workflow and process automation in information systems</u>, ACM SIGMOD Record 25(no. 4), December 1996, pp. 55–67. Versions of the report also appeared in SIGGROUP and SIGACT bulletins.
- Y. Breitbart, A. Deacon, H.-J. Schek, A. Sheth, and G. Weikum, "Merging Applicationcentric and Data-centric Approaches to Support Transaction-oriented Multi-system Workflows," ACM SIGMOD Record 22 (no. 3), September 1993.
- 19. A. Sheth and M. Rusinkiewicz, "On Transactional Workflows," Data Engineering, 16 (no. 2), June 1993.
- 20. C. Tomlinson, P. Attie, P. Cannata, G. Meredith, A. Sheth, M. Singh, and D. Woelk, "Workflow Support in Carnot," Data Engineering 16 (no. 2), June 1993.
- 21. A. Sheth, "Building Federated Databases," invited paper, Quarterly Journal of IEEE TC on Distributed Processing, November 1988.
- 22. M. Rusinkiewicz and A. Sheth, "Polytransactions for Managing Interdependent Data," Data Engineering 14 (no. 1), March 1991.
- 23. K. Lee, W. Mansfield, and A. Sheth, "An Interactive Transaction Model for Distributed Cooperative Tasks," Data Engineering 14 (no.1), March 1991.
- 24. A. Sheth and A. O'Hare, "An Interpreted Compiled Range for Al/DBMS Integration," ACM SIGMOD Record 18 (no. 1), March 1989.

Editorship of International Conference and Workshop Proceedings

- A. P. Sheth, S. Staab, M. Dean, M. Paolucci, D. Maynard, T. W. Finin, K. Thirunarayan: The Semantic Web - ISWC 2008, 7th International Semantic Web Conference, ISWC 2008, Karlsruhe, Germany, October 26-30, 2008. <u>Proceedings, Lecture Notes in</u> <u>Computer Science Volume 5318, 2008</u>. ISBN: 978-3-540-88563-4
- Q.Z. Sheng, U. Nambiar, Amit Sheth, B. Srivastava, Z. Maamar, and S. Elnaffar (Eds.), <u>Proceedings of the 2008 International Workshop on Context enabled Source and Service</u> <u>Selection, Integration and Adaptation (CSSSIA08</u>), organized with the 17th International World Wide Web Conference (WWW 2008), Beijing, China, April 22, 2008, ACM International Conference Proceedings Series, vol 292, 2008. ISBN: 978-1-60558-107-1
- S. Battle, J. Domingue, D. Martin, D. Roman, and A. Sheth (Eds.), "Workshop: Advances in Semantics for Web Services (semantics4ws 2007)," in Business Process Management Workshops: BPM International Workshops 2007, Brisbane, Australia, September 2007, Revised Selected Papers, Lecture Notes in Computer Science, vol. 4928, Springer, pp. 457–516.
- S. Dustdar, J. Fiadeiro, and A. Sheth (Eds.), <u>Business Process Management</u>: 4th International Conference, BPM2006, Vienna, Austria, September 5–7, 2006, Proceedings, Lecture Notes in Computer Science, vol. 4102, Springer, 486 pp.
- P. Doshi, R. Goodwin, and A. Sheth, AI-Driven Technologies for Services-Oriented Computing: Papers from the 2006 AAAI Workshop, AAAI Press, July 16, 2006, 92 pp. ISBN 978-1-57735-283-9
- A. Abecker, A. Sheth, G. Mentzas, and L. Stojanovic, Semantic Web Meets eGovernment: Papers from the AAAI Spring Symposium, Menlo Park, CA, March 27– 29, 2006, TR SS-06-06, AAAI Press, 2006, 150 pp. ISBN 978-1-57735-267-9
- K. Verma, A. Sheth, M. Zaremba, and C. Bussler, Proceedings of the International Workshop in Dynamic Web Processes (DWP 2005), Amsterdam, Netherlands, December 12, 2005. Available as IBM report RC23822, 96 pp.
- J. Cardoso and A. Sheth (Eds.), "<u>Semantic Web Services and Web Process Composition:</u> <u>First International Workshop, SWSWPC 2004</u>," San Diego, CA, USA, July 6, 2004, Revised Selected Papers, Lecture Notes in Computer Science, Vol. 3386, Springer, March 2005.
- 9. Y. Kalfoglou, M. Schorlemmer, M. Uschold, A. Sheth, and S. Staab, Semantic Interoperability and Integration: Proceedings of the Dagstuhl Seminar 04391, Internationales Begegnungs- und Forschungszentrum (IBFI), Schloss Dagstuhl, Germany, January 1, 2005.
- J. Cardoso and A. P. Sheth (Eds.), Semantic Web Services and Web Process Composition: 1st International Workshop, SWSWPC 2004, San Diego, CA, July 6, 2004, Revised Selected Papers, <u>Lecture Notes in Computer Science</u>, vol. 3387, Springer, 2005, viii, 147 pp. ISBN 3-540-24328-3 (softcover), 978-3-540-24328-1
- 11. A. Sheth, and K. Jeffery (Eds.), 2004 IEEE International Conferences on Services Computing, Shanghai, China, September 15–18, 2004, 653 pp.
- 12. A. Sheth and R. Meersman (Eds.), Proceedings of the NSF-EU Workshop on Database and Information Systems Research for Semantic Web and Enterprises, April 3–5, 2002, 111 pp.

- 13. S. Staab, S. Decker, D. Fensel and A. Sheth (Eds.), Proceedings of the 2nd International Workshop on the Semantic Web (SemWeb 2001), Hong Kong, May 1, 2001, 93 pp.
- J. Hoppenbrouwers, T. Lima, M. Papazoglou, and A. Sheth, Proceedings of the IEEE Advances in Digital Libraries 2000 (ADL2000), May 22–24, 2000, IEEE Computer Society Press, 241 pp.
- 15. A. Sheth (Ed.), Proceedings of the NSF Workshop on Workflow and Process Automation in Information Systems, Athens, GA, May 1996, 164 pp.
- H. Korth and A. Sheth (Eds.), Proceedings of the 3rd International Conference on Parallel and Distributed Information Systems, September 1994, IEEE Computer Society Press, 272 pp.
- 17. H-J. Schek, A. Sheth, and B. Czjedo (Eds.), Proceedings of the 3rd RIDE International Workshop on Interoperability in Multidatabase Systems ((RIDE IMS-93), Vienna, Austria, April 19–20, 1993, IEEE Computer Society Press, 279 pp.
- Y. Kambayashi, M. Rusinkiewicz, and A. Sheth (Eds.), Proceeding of the 1st International Workshop on Interoperability in Multidatabase Systems, Kyoto, Japan, April 1991, IEEE Computer Society Press, 370 pp.
- 19. A. Sheth (Ed.), Proceedings of the Workshop on Management of Interdependent Data in Bellcore and BCCS, Bellcore, September 1990.

Editorship of Special Issues of Journals and Technical Society Magazines

- Geetika T. Lakshmanan, Francisco Curbera, Juliana Freire and Amit Sheth, 'Guest Editors' <u>Introduction: Provenance in Web Applications</u>,' IEEE Internet Computing, vol. 15, no. 1, Jan./Feb. 2011, pp. 17-21, doi:10.1109/MIC.2011.9
- Djamal Benslimane, Schahram Dustdar, Amit Sheth, "Services Mashups: The New Generation of Web Applications," IEEE Computer Society, September/October 2008, pp. 13-15.
- 3. D. Benslimane, S. Dudstar, and Amit P. Sheth (Eds.), special issue: Service Mashups, IEEE Internet Computing, 2008.
- 4. S. Dustdar, J. Fiadeiro, and A. Sheth (Eds.), special issue: Business Process Management, Data & Knowledge Engineering (Elsevier), 2008.
- 5. J. Davies, M. Lytras, and A. Sheth (Eds.), special issue: Semantic-Web-Based Knowledge Management, IEEE Internet Computing 11 (no. 5), September–October 2007.
- N. Ashish, C. Goble, and A. Sheth (Eds.), special section: The Semantic Web and Science Data Interoperation, International Journal on Digital Libraries 5 (no. 2), April 2005.
- 7. R. Meersman and A. Sheth (Eds.), special issue: Semantic Web, Database Management and Information Systems, ACM SIGMOD Record 32 (no. 4), December 2002, pp. 10–70.
- 8. Ouksel and A. Sheth (Eds.), special section, ACM SIGMOD Record 28 (no.1), March 1999.

- H. Korth and A. Sheth (Eds.), special issue: Selected Systems: Papers Based on the 3rd International Conference on Parallel and Distributed Information Systems, VLDB (Very Large Data Bases) Journal 5 (no. 1), January 1996, pp. 1–63.
- 10. W. Klas and A. Sheth (Eds.), special issue: Metadata for Digital Media, ACM SIGMOD Record 24 (no. 4), December 1994, pp. 19–71.
- 11. Sheth (Ed.), special issue: Semantic Issues in Multidatabase Systems, ACM SIGMOD Record 20 (no. 4), December 1991, pp. 5–80.

Recognition, Outstanding Achievements and Honorary Appointments

- 1. 2010 Wright State University Trustee's Award for Faculty Excellence. This is the highest award given by the university. The annual award honors those who serve as the most outstanding of role models for all faculty.
- 2. Kno.e.sis Center, Director on February 19, 2010, when Ted Strickland, Governor of Ohio; and, Eric Fingerhut, Chancellor of the Ohio Board of Regents, recognized the center as a "Center of Excellence."
- 3. IEEE Fellow elected on November 13, 2005 by IEEE Board of Directors with citation "for contributions to information integration and workflow management," Class of 2006.
- 4. Among the highly cited authors in computer science with h-index of 67 and over 15,000 citations (as of December 2010). (A review of Sheth's publication citations record along with examples of Sheth's top-cited publications in several journals and conferences.) Highlights include: Sheth-Larson 1990 (with over 2485 citations) is the all-time most cited paper in information integration, second most cited paper in distributed databases, and one of the top five cited papers in the entire field of databases. Georgakopoulos-Hornick-Sheth (with over 1500 citations) is the most cited paper in the area of workflow management. At least 42 papers have more than 100 citations.
- 5. International Scientific Advisory Committee, BISCSE 2005: Forging New Frontiers, 40th of Fuzzy Pioneers (1965–2005), Berkeley CA, November 2–6, 2005.
- 6. 2004 IBM Faculty Award, March 2004.
- 7. UGA Career Center Recognition/Award for "greatly contributing to the career development of UGA students" (based on post-graduation student surveys), September 2002.
- Patent co-inventor (Sheth, Gomadam, and Nagarajan), "Methods and Systems for Analysis of Real-Time User-Generated Text Messages" (patent application no. 13/028,397), February 16, 2011. Patent co-inventor (Sheth, Avant, and Bertram), "System and Method for Creating Semantic Web and Its Applications in Browsing, Searching, Profiling, Personalization and Advertisement" (no. 6,311,194), October 30, 2001. Patent co-inventor (Marcus, Shah, Kshitij, Sheth, Shklar, Surak,Thatte) "Method and system for providing uniform access to heterogeneous information"(no. 1997/015018), April 24, 1997. Patent co-inventor (Georgakopoulos, Rusinkiewicz, Sheth) "Method for enforcing the serialization of global multidatabase transactions through coming only on consistent subtransaction serialization by the local database managers" (no. 5,241,675), August 31, 1993.
- 9. Advisory Board, Coca-Cola Center for Marketing Studies, Terry College of Business, 2002–2003.

- 10. International Advisory Board, Internet Information Retrieval Research Center (IRC), Hankuk Aviation University, Korea, 2001–2002.
- 11. Board of Directors, Healthcare Open Systems & Trials (HOST) consortium, 1995–1999.
- 12. Member of the two-person International Advisory Board, TARA Project, University of Tsukuba, Japan. 1994–1996.
- 13. Selected and served as an ACM Lecturer, 1991–1992. Again for 1992–1993.
- 14. Outstanding Paper Award (co-author), 7th International Conference on Data Engineering, Kobe, Japan, April 1991.
- 15. Six Recognition of Service Awards/Certificates of Appreciation from the IEEE TC on Data Engineering and the IEEE Computer Society– 1989, '90, '91, '92; from IEEE Technical Community on Services Computing– 2004; from the ACM– 1993.
- Citation for contributions to Bellcore for conceiving, developing, and prototyping the flexible transactional workflow technology, and business opportunity development, 1993. Also a recipient of Bellcore's Vice President team award for outstanding contribution, November 1993. Bellcore Achievement Award, 1989.
- 17. Board of Advisors, Indiana Center for Database Systems, 1991–1993.
- 18. Award from the Federal Computer Conference in recognition of contributions, April 1989.
- 19. Best Paper Award (co-author) Computer Networking Symposium, 1984.
- 20. National Merit Scholar, Government of India, 1975.

Professional or Scholarly Activities

Technology Licensing, Commercialization, and Deployed Systems

Recent software systems developed under supervision as PI of projects (with co-PIs where applicable) that are commercialized, used for R&D by other institutions or used for operational/regular work:

- ASEMR: Active Semantic Electronic Medical Record system, deployed at the Athens Heart Center, 2005. Information at: <u>OpenClinical</u>, <u>STC</u>, <u>SWLS</u>, <u>LSDIS</u>
- SCORE, a technology for automatic metadata extraction and semantic applications, and for A/V search based on an Industry funded research project <u>VideoAnywhere</u> at the <u>LSDIS lab</u>. It has been licensed to Semagix, Inc. (formerly Taalee and Voquette, Inc.) by the University of Georgia research foundation to the first Venture Capital funded Internet–startup in the Athens, GA area. Commercial product from Semagix based on SCORE is named Freedom. This resulted in over \$6 million in payroll and other direct benefit to the economy of Athens, GA, before the company moved to Atlanta, GA.
- AdaptX Harness, a commercial product from Bellcore (Telcordia Technologies) introduced in 1995 and supported through 2000 (lead project at Bellcore, subsequent technology transfer in joint project with UGA; see funded projects below).
- METEOR system (several components) was deployed at Boeing, Microelectronics and Computer Technology Corp., Connecticut Healthcare Research & Education Foundation and its Information Technology subsidiary CHIME, South Carolina Research Authority, National Institute of Standards and Technology's Manufacturing Last Updated: March 22, 2013

Program, etc. It has also been distributed to many higher education institutions for teaching and research and to industrial labs for non-commercial used. It was licensed to Infocosm, Inc., a startup company that has made <u>METEOR</u> available as a commercial product.

- CAPA system was completed and deployed for use throughout the UGA campus by any faculty and staff involved in proposing new courses or changes to the courses, and processing/approval of the proposals. In its first quarter of use, approx. 6000 courses were processed. <u>LSDIS lab</u> developed it and maintained the system for the first year, and is now transferred to the VPAA's office. CAPA system has been operational since 1997.
- GradWeb system overhauls the Graduate Schools information systems to provide a completely Web based environment for use by Staff and Administrators within the Graduate School and all interacting departments, as well as by graduate applicants and students. Application material is available electronically and applications be submitted electronically.
- CareWeb, a Web resource developed in collaboration with <u>Medical College of</u> <u>Georgia</u> under State of Georgia's Family and Children Services department to support health information and education needs of underserved populations.

Interviews and Biographical Profiles

- "Fund nurtures ideas that can be potent job engines," Dayton Daily News Column written by David R. Hopkins, President WSU, April 19, 2010.
- "<u>HP selects WSU professor as research award recipient</u>," Dayton Daily News, June 29, 2009.
- "WSU Developing New Web Technologies," interview in the Dayton Daily News, April 16, 2007.
- "<u>New Ground in Web technology affecting health care</u>" HULIQ, March 29, 2007
- "Wright State researchers pioneer new ground in Web technology affecting health care, terrorism, defense, and financial services," WSU Communications & Marketing. March 27, 2007.
- Commercialization Profile for Semagix in "A Mission Possible: Transforming UGA Research Discoveries Into New Technology Companies," published by the University of Georgia, January 2006, p.7.
- "An Interview with Amit Sheth: The Information Systems Perspective on Semantic Web Research," in the Bulletin of AIS Special Interest Group on Semantic Web and Information Systems, vol. 1 (no. 1), April 2004.
- "When Academicians Become Entrepreneurs," a profile of Dr. Amit Sheth in the Sandpaper, May 2003.
- interview by John Townley: "The Streaming Search Engine That Reads Your Mind," in Streaming Media World, August 10, 2000.
- "Interview: Amit Sheth on Workflow Technology," by Sushil Jajodia, IEEE Concurrency, April–June 1998, pp. 21–23.
- Interview discussing applications of the METEOR system in Healthcare, in Research Reporter, UGA, Winter 1997, and in Healthcare Informatics (<u>http://www.healthcareinformatics.com/issues/2001/02_01/cover.htm#workflow</u>).

- Interviews discussing the future of Internet-related technologies and relevant research at UGA following broad-based talks, published in the Economic Times, January 1995 (several editions), and the Times of India (several editions), January 1996 (national news papers in India with largest circulation in Business and General categories, respectively).
- Biographical profiles published in a Gujarati book (1996) and an English (1997) book.
- Technology Interviews: (a) discussing Semantic Web State of the Art in "Apps Make Semantic Web a Reality," SD Times, April 1, 2005, pp. 5, 17; (b) future in Internet related technologies and relevant research at UGA following broad-based talks, published in the Economic Times, January 1995 (several editions), and the Times of India (several editions), January 1996 (national newspapers in India with largest circulation in Business and General categories, respectively).
- Interview discussing applications of the METEOR system in Healthcare in Research Reporter, UGA, Winter 1997, and in Healthcare Informatics.
- Biographical profiles published in a Gujarati book (1996) and an English (1997) book.

Journal and Book Series Editorship

- 1. **Special Issue Co-Editor**, <u>IEEE Internet Computing Special Issue on Provenance in Web</u> <u>Applications</u>, January 2011.
- 2. Series Editor (with Ahmed Elmagarmid), Advances in Database Systems, Springer, July 2007–. ISSN: 1386-2944
- 3. **Joint Editor-in-Chief** (with Ahmed Elmagarmid), Distributed and Parallel Databases: An International Journal, Springer, June 2007–. ISSN: 0926-8782
- 4. **Editor-in-Chief**, International Journal on Semantic Web and Information Systems (<u>IJSWIS</u>), Idea Group Publishing, 2005–present.
- 5. **Series Editor** (with Ramesh Jain), Book Series on Semantic Web and Beyond: Computing for Human Experience, Springer, 2004–present.
- 6. **Member of the Editorial Advisory Board**, Advances in Web Services Research (AWSR) Book Series, IGI Global, 2007–present.
- 7. Member of the Editorial Board, IEEE Internet Computing, May 2006–present.
- 8. **Member of the Editorial Review Board**, International Journal of Web Services Research, 2005–present.
- 9. Member of the Editorial Board, Journal on Web Semantics: Science, Services and Agents on the World Wide Web, 2003–present.
- 10. **Member of the Editorial Board** (acting Editor-in-Chief from 9/94 to 3/95), the Journal on Distributed and Parallel Databases, 1992–present.
- 11. **Member of the Editorial Board**, the International Journal of Intelligent and Cooperative Information Systems, 1995–present.
- 12. **Member of the Editorial Board**, Information Systems: an International Journal, 1993– present.
- 13. **Member of the Editor Board**, IEEE Multimedia, 1998–2004. Also edited Media Reviews.
- 14. **Member of the Editorial Advisory Board**, International Journal of Engineering Intelligent Systems, 1993–2000.
- 15. Member of the Editorial Board, Distributed Systems Engineering Journal, 1993–1999.

Key Committee/Honorary Memberships

- 1. World Wide Web Consortium (W3C) Advisory Committee Member, 2004–present.
- 2. Director, SSAIE's Summer School on Service Oriented Computing 2011
- 3. Advisory Board of Semantic Web Challenge 2005. Also in 2006.
- 4. Member, Semantic Web Services Initiative Architecture Committee (SWSA), 2004–2005.
- 5. Faculty, Institute of Bioinformatics, UGA, 2004- present.
- 6. Faculty, Biomedical and Health Science Institute, UGA, 2004.
- 7. Associate Editor for SIGMOD Record, 1988–present. Also edited research center reports.
- 8. Advisor on Workflow for SIGGROUP (ACM's SIG for GroupWare and GroupWork), 1996–1999. Also edited a section of the Bulletin.

Industry Courses and Workshops

- 1. "Semantic Web and Semantic Web Services," professional course, University of Ma deira, Funchal, Portugal, June 16–18, 2005. <u>More information</u>
- 2. "Mysteries of Metadata," Content World 2001, Burlingame, CA, May 15, 2001. (3 hours)
- "Workflow Management: Research, Technology, Products, Applications and Experiences," course leaders: A. Sheth and S. Joosten, offered by WARIA, Atlanta, GA, August 12–14, 1996. (3 days)

Technical Meetings (Conferences, Workshop) Organization

- 1. **Program Committee Member**, the 21st International Conference on World Wide Web (<u>WWW2012</u>), in Lyon, France, from April 16-20, 2012.
- 2. **Program Committee Member**, The 10th International Semantic Web Conference (<u>ISWC</u> <u>2011</u>), Bonn, Germany, October 23-27, 2011.
- 3. **Program Committee Member,** The 4th International Workshop on Semantic Sensor Networks 2011 (SSN11), A workshop of the 10th International Semantic Web Conference (ISWC 2011), Bonn, Germany, October 23-27, 2011.
- 4. **Co-Chair,** <u>Mining Data Semantics (MDS'2011)</u> Workshop at <u>SIGKDD2011</u>, San Diego, CA, August 21 24, 2011.
- 5. **Program Committee Member**, Fifth International AAAI Conference on Weblogs and Social Media (<u>ICWSM-11</u>) from July 17-21, 2011 in Barcelona, Spain.
- 6. **Director,** Summer School on Service Oriented Computing (<u>SummerSoc</u>), Hersonissos, Crete, Greece, June 27-July 3, 2011.
- 7. **Program Committee Member,** Workshop on Language in Social Media (LSM 2011), Portland, Oregon, June 23, 2011.
- 8. **Program Committee Member**, 8th Extended Semantic Web Conference (<u>ESWC 11</u>), Heraklion, Greece, May 29-June 2, 2011.
- 9. Advisory Committee Member, WIMS '11, The International Conference on Web Intelligence, Mining and Semantics, Sogndal, Norway, May 25-27, 2011.

- 10. **Program Committee Member**, <u>20th International World Wide Web Conference</u>, Hyderabad, India, March 28-April 1, 2011.
- Technical Program Committee Member, IEEE Conference on Cognitive Methods in Situation Awareness and Decision Support, Miami Beach, Florida, USA, February 22-24, 2011.
- 12. **Program Committee Member,** 6th Conference Professional Knowledge Management, Innsbruck, Austria, February, 21-23, 2011.
- 13. Program Committee Member, <u>Workshop on Sensor-Enabled Situational Awareness</u>, In conjunction with 12th International Conference on Distributed Computing and Networking (ICDCN 2011), Bangalore, India, January 2, 2011.
- 14. **Program Committee Member**, 8th International Conference on Business Process Management (BPM2010), in Hoboken, N.J., September 13-16, 2010.
- 15. **Program Committee Member**, Sixth Conference on Prestigious Applications of Intelligent Systems (PAIS), Lisbon, Portugal, August 16-20, 2010.
- 16. **Program Committee Member**, Twenty-Fourth AAAI Conference on Artificial Intelligence (<u>AAAI2010</u>) Atlanta, Georgia, USA, July 11-15, 2010.
- Program Committee Member, Workshop on The Future of the Web For Collaborative Science (HCLS), co-located at <u>WWW2010</u>, Raleigh Convention Center, Raleigh, NC, USA, April 26-30, 2011.
- 18. **Program Committee Member**, Ninth International Semantic Web Conference (<u>ISWC</u> <u>2010</u>), Shanghai, China, November 7-11, 2010.
- Advisor, Program Committee, The 3rd International Workshop on Semantic Sensor Networks 2010 (<u>SSN10</u>), A workshop of the 9th International Semantic Web Conference (ISWC 2010), Shanghai, China, November 7-11, 2010.
- 20. **Program Committee Member**, <u>8th International Conference on Business Process</u> <u>Management</u> (BPM 2010), Hoboken, N.J., September 13-16, 2010.
- Co-Organizer, First International Workshop on Traceability and Compliance of Semi-Structured Processes (<u>TC4SP2010</u>), co-located with the 8th International Conference on Business Process Management (BPM2010), Hoboken, New Jersey, September 13, 2010.
- Program Committee Member, Twenty-Fourth AAAI Conference on Artificial Intelligence (<u>AAAI2010</u>) will be held at the Westin Peachtree Plaza in Atlanta, Georgia, USA, July 11-15, 2010.
- 23. **Program Committee Member**, <u>4th Int'l AAAI Conference on Weblogs and Social</u> <u>Media</u>, Washington, DC, May 23-26, 2010.
- 24. **Program Committee Member**, 3rd CFP: The Future of the Web for Collaborative Science (FWCS2010) at WWW'10, in Raleigh, N.C., April 26-30, 2010.
- 25. **Co-Organizer**, <u>Semantic Challenges in Sensor Networks</u>, Dagstuhl, Germany, January 24-29, 2010.
- 26. **Co-Chair**, <u>W3C Semantic Sensor Networks Incubator Group</u>, October 2008-March 2010.
- 27. **Program Committee Member**, 7th International Workshop on Middleware for Grids, <u>Clouds and e-Science</u> (MGC2009), in conjunction with 10th International Middleware Conference 2009, Urbana Champaign, IL, December 1, 2009.
- 28. **Program Committee Member**, 28th International Conference on Conceptual Modeling, (ER 2009), Gramado, Brazil, November 9-12, 2009.

- 29. **Program Committee Co-Chair**, International Workshop on Community-Based Evolution of Knowledge-Intensive Systems (<u>COMBEK'09</u>), Vilamoura, Portugal, November 1-6, 2009.
- Steering Committe Chair and Program Committee Member, <u>2nd International</u> <u>Workshop on Semantic Sensor Networks 2009</u>. A workshop of the 8th International Semantic Web Conference (<u>ISWC 2009</u>), Washington, DC, USA. October 25-29, 2009.
- 31. Steering Committee Chair and Program Committee Member, <u>The First International</u> <u>Workshop on the role of Semantic Web in Provenance Management</u> Co-located with the 8th International Semantic Web Conference <u>ISWC 2009</u>), Washington, DC, USA. October 25-29, 2009.
- 32. **Program Committee Member**, <u>3rd International Workshop on Web APIs and Services</u> <u>and Services Mashups @ OOPSLA</u> (Mashups09), Orlando, FL, October 25, 2009.
- 33. Senior Program Committee Member, <u>Business Process Management Conference 2009</u> (BPM 2009), Ulm University, Germany, September 8-10, 2009.
- 34. **Program Committee Member**, 1st International Workshop on the Semantic Sensor Web (SemSensWeb2009), Heraklion, Crete, Greece, June 1, 2009.
- 35. Co-Organizer, Sensor Web Enablement, Baltimore, Maryland, May 18-22, 2009.
- 36. **Program Committee Member**, <u>18th International World Wide Web Conference</u>, Madrid, Spain, April 20-24, 2009.
- 37. **Program Committee Member**, <u>Second International Workshop on Web APIs and</u> Service Mashups (Mashups'08), at ICSOC 2008, Sydney, Australia, December 1, 2008.
- Organizing Committee Member, International Workshop on Community-Based Evolution of Knowledge-Intensive Systems (<u>COMBEK'08</u>), Monterrey, Mexico, November 9–14, 2008.
- 39. **Program Committee Chair**, 7th International Semantic Web Conference (<u>ISWC 2008</u>), Karlsruhe, Germany, October 26-30, 2008.
- 40. **Program Committee Chair**, International Conference on Web Services (ICWS 2008), Beijing, China, September 23-26, 2008.
- 41. **Organizing Committee Member**, Special Session on Mobile Semantic Computing, 2nd IEEE International Conference on Semantic Computing (ICSC 2008), Santa Clara, CA, August 4-7, 2008.
- 42. **Steering Committee Member**, 2nd International Workshop on Web Service Composition and Adaptation (<u>WSCA-2008</u>), in conjunction with 6th IEEE International Conference on Services Computing (<u>SCC-2008</u>), Honolulu, HI, July 8, 2008.
- 43. **Program Committee Member**, 5th European Semantic Web Conference (ESWC2008), Tenerife, Spain, June 1-5, 2008.
- 44. **Program Committee Member**, <u>Semantic Web for Health Care and Life Sciences</u> <u>Workshop</u> (HCLS2008), held in conjunction with 17th International World Wide Web Conference, Beijing, China, April 22, 2008.
- 45. **Co-organizer**, WWW08 International Workshop on Context Enabled Source and Service Selection, Integration, and Adaptation (<u>CSSSIA 2008</u>), Beijing, China, April 22, 2008.
- 46. Co-organizer, Association for the Advancement of Artificial Intelligence (AAAI) 2008 Spring Symposium, "AI Meets Business Rules and Process Management," Stanford University, Palo Alto, CA, March 26–28, 2008.
- 47. **Program Committee Member**, The 8th International Conference on Web Information Systems Engineering (WISE 2007), Nancy, France, December 3-6, 2007.

- 48. **Program Committee Member,** First Workshop on CyberInfrastructure: Information Management in eScience (CIMS), collocated with ACM CIKM 2007, Lisboa, Portugal, November 9, 2007.
- 49. **Co-organizer**, 2d Workshop on Advances in Semantics for Web Services (semantics4ws'07) at BPM 2007, Brisbane, Australia, September 24, 2007.
- 50. **Program Committee Member**, Eleventh International Workshop Cooperative Information Agents (<u>CIA 2007</u>), Delft, The Netherlands, September 19-21, 2007.
- 51. General Chair, 4th International Workshop on Semantic Web for Services and Processes (<u>SWSP 07</u>), in conjunction with 2007 <u>IEEE International Conference on Web</u> <u>Services</u>, Salt Lake City, UT, July 9, 2007.
- Co-organizer, 1st International Workshop on Web Service Composition and Adaptation (WSCA-2007), in conjunction with 2007 IEEE International Conference on Web Services Salt Lake City, UT, July 9–13, 2007.
- 53. **Program Committee Member,** The First International Conference on Web Reasoning and Rule Systems (RR2007), Innsbruck, Austria, June 7-8, 2007.
- 54. **Program Committee Member**, <u>16th International World Wide Web Conference</u> (WWW2007), Banff, Alberta, Canada, May 8-12, 2007.
- 55. Co-organizer, Autonomic Web Services, Dagstuhl_Seminar 07061, February 4-9, 2007
- 56. Industry Track Chair, 5th International Semantic Web Conference, Athens, GA, November 6–9, 2006.
- 57. **General Chair**, 3rd International Workshop on Semantic and Dynamic Web Processes (SWDP2006), Chicago, September 18, 2006.
- 58. **Program Co-chair**, 4th International Conference on Business Process Management (BPM 2006), Vienna, Austria, September 5–7, 2006.
- 59. **Organization Committee Co-chair**, Advances in Semantics for Web services Workshop, (semantics4ws'06), at BPM 2006, Vienna, Austria, September 4, 2006.
- 60. **Co-organizer**, SIG on Semantic Web and Information Systems (mini-track) at the 12th Americas Conference on Information Systems, Acapulco, México August 4–6, 2006.
- 61. **Program Co-chair**, AI-Driven Technologies for Services-Oriented Computing (AAAI-06 Workshop), Boston, MA, July 16–17, 2006.
- 62. **Organization Committee Member**, the International Workshop on Distributed Applications for B2B Integration (DABI 2006), to be held in conjunction with 26th ICDCS, Lisbon, Portugal, July 4–7, 2006.
- 63. **Organizing Committee Member**, ESWC'06 Industry Forum Day Business Applications of Semantic Web technology, Budva, Montenegro, June 11–14, 2006.
- 64. **Steering Committee Member**, Semantic Web Services Challenge 2006: Challenge on Automating Web Services Mediation, Choreography and Discovery, Stanford University & ESWC, 2006.
- 65. **Program Committee Co-chair**, International Workshop on Semantics enabled Networks and Services (<u>ICDE SeNS 2006</u>) at ICDE2006, Atlanta, GA, April 7, 2006.
- 66. **General Chair**, 3rd International Workshop on Semantic Web and Databases (ICDE SWDB'06) at ICDE2006, Atlanta, GA, April 3, 2006.
- 67. **Co-organizer**, "Semantic Web meets eGovernment," AAAI Spring Symposium Series (SSS-based6), Stanford University, Palo Alto, CA, March 27–29, 2006.
- 68. **Co-chair**, Organization Committee, International Workshop in Dynamic Web Processes (DWP 2005) at ICSOC 2005, Amsterdam, Netherlands, December 12, 2005.

- 69. **Co-chair**, 2nd International Workshop on Semantic and Dynamic Web Processes (SDWP2005) Orlando, FL, July, 2005.
- 70. **Co-organizer**, <u>Semantic Interoperability and Integration</u>, Dagstuhl Seminar 04391, Dagstuhl, Germany, September 19–24, 2004.
- 71. **Program Co-chair**, 2004 IEEE International Conference on Services Computing (SCC 2004), Shanghai, China, September 15–18, 2004.
- 72. **Co-organizer**, 1st International Workshop on Semantic Web Services and Web Process Composition (SWSWPC 2004), San Diego, CA, July 6–9, 2004.
- 73. **Co-organizer**, NASA Workshop on the Knowledge Integrating Virtual Iron Bird, March 31–April 2, 2004.
- 74. **Co-chair**, UCGIS Homeland Security Workshop, Amicalola Falls and State Park, GA, November 5–7, 2003.
- 75. **Co-chair**, Workgroup on Semantic Web, NSF 2002 Workshop on Information and Data Management, Arlington, VA, May 5–7, 2002.
- 76. **Organizer/Chair**, NSF-EU Invitational Workshop on Database and Information Systems Research for Semantic Web and Enterprises, (Robert Meersman, Co-organizer), Amicalola State Park, GA, April 3–5, 2002.
- 77. **Co-organizer**, 2nd International Workshop on the Semantic Web (SemWeb'2001) at WWW10, Hong Kong, May 1, 2001.
- 78. **Program Co-chair**, IEEE conference on Advances in Digital Library, Washington DC, May 2000.
- 79. **Co-director**, NATO Advanced Study Institute on Workflow Systems and Interoperability, Istanbul, Turkey, August 12–22, 1997.
- 80. General Co-chair, 1st International Conference on Interoperable and Cooperative Information Systems (CoopIS '96), June 1996.
- 81. **Program Chair and Organizing Committee Chair**, NSF workshop on Workflow and Process Automation: State-of-the-art and Future Directions, May 1996.
- 82. **Program Co-chair**, 3rd International Conference on Parallel and Distributed Information Systems, 1994.
- 83. **Program Vice-chair**, Technology and Applications Track, the 10th International Conference on Data Engineering, 1994.
- 84. **Program Co-chair**, 3rd RIDE-International Workshop on Interoperability in Multidatabase Systems, April 1993.
- 85. **General Chair**, 1st International Conference on Parallel and Distributed Information Systems, 1991.
- 86. Program Vice-chair, 6th IEEE International Conference on Data Engineering, 1990.
- 87. Chair, Workshop on Management of Interdependent Data in Bellcore and BCCS, 1990.
- 88. Program Vice-chair, 5th IEEE International Conference on Data Engineering, 1989.

Other Organization Committee Roles

- 1. Advisory Committee, International Conference on Web Intelligence, Mining and Semantics (<u>WIMS'11</u>), Sognidal, Norway, May 25-27, 2011.
- Advisory Committee, <u>2011 IEEE Conference on Cognitive Methods in Situation</u> <u>Awareness and Decision Support</u> (IEEE CogSIMA 2011), Miami Beach, Florida, USA, February 22-24, 2011.

- 3. Steering Committee Chair and Program Committee Member, <u>The First International</u> <u>Workshop on the role of Semantic Web in Provenance Management</u> Co-located with the 8th International Semantic Web Conference ISWC-2009, Washington, DC, May 18-29-2009.
- Co-organizer, Special Session on Sensor Web Enablement, 2009 International Symposium on Collaborative Technologies and Systems (<u>CTS 2009</u>), Baltimore, Maryland, May 18-22, 2009.
- 5. Senior Program Committee Member, 3rd Asian Semantic Web Conference (<u>ASWC</u> <u>2008</u>), Thailand, December 8-11, 2008.
- 6. Scientific Steering Committee and Organizing Committee, <u>CooPIS and ODBASE</u> <u>Conferences</u>, Monterrey, Mexico, November 9–14, 2008.
- 7. **Steering Committee Chair**, BPM 2.0 —Semantic Web and Web 2.0 Meet BPM: Semantics in Business and Scientific Processes," Milan, Italy, September 1-4, 2008.
- 8. **Steering Committee Chair**, Workshop Series: Advances in Semantics for Web services 2008 (semantics4ws 2008), at the 5th International Conference on Business Process Management (BPM 2008), Milan, Italy, September 1–4, 2008.
- 9. **Steering Committee**, 2nd IEEE International Conference on Semantic Computing (ICSC 2008), Santa Clara, CA, August 4–7, 2008.
- 10. **Steering Committee**, 2nd International Workshop on Web Service Composition and Adaptation (WSCA-2008), in conjunction with 6th IEEE International Conference on Services Computing (SCC-2008), Honolulu, HI, July 8, 2008.
- Co-organizer, Association for the Advancement of Artificial Intelligence (AAAI 2008) Spring Symposium, "AI Meets Business Rules and Process Management," Stanford University, Palo Alto, CA, March 26-28, 2008.
- 12. **Co-organizer**, 2d Workshop on Advances in Semantics for Web Services (semantics4ws'07) at BPM 2007, Brisbane, Australia, September 24, 2007.
- General Chair, 4th International Workshop on Semantic Web for Services and Processes (<u>SWSP 07</u>), in conjunction with 2007 <u>IEEE International Conference on Web Services</u>, Salt Lake City, UT, July 9, 2007.
- Co-organizer, 1st International Workshop on Web Service Composition and Adaptation (WSCA-2007), in conjunction with 2007 IEEE International Conference on Web Services, Salt Lake City, UT, July 9-13, 2007.
- 15. Co-Organizer, Autonomic Web Services, <u>Dagstuhl Seminar 07061</u>, February 4-9, 2007.
- 16. Industry Track and Sponsorship Chair, International Semantic Web Conference, Athens, GA, November 6-9, 2006.
- 17. **General Chair**, 3rd International Workshop on Semantic and Dynamic Web Processes (SWDP2006), Chicago, September 18, 2006.
- Co-organizer and Program Committee Chair, Advances in Semantics for Web Services Workshop (semantics4ws'06), at BMP 2006, Vienna, Austria, September 4, 2006.
- 19. **Co-organizer**, SIG on Semantic Web and Information Systems (mini-track) at the 12th Americas Conference on Information Systems, Acapulco, Mexico August 4-6, 2006.
- 20. **Organization Committee**, International Workshop on Distributed Applications for B2B Integration (DABI 2006), to be held in conjunction with 26th ICDCS, Lisboa, Portugal, July 4-7, 2006.

- 21. **Organizing Committee**, ESWC'06 Industry Forum Day Business Applications of Semantic Web technology, Budva, Montenegro, June 11-14, 2006.
- 22. General Chair, 3rd International Workshop on Semantic Web and Databases (<u>ICDE</u> <u>SWDB'06</u>) at ICDE2006, Atlanta, GA, April 7, 2006.
- Steering Committee, <u>Semantic Web Services Challenge 2006</u>: Challenge on Automating Web Services Mediation, Choreography and Discovery, Stanford University, March 27-29, 2006.
- 24. Co-organizer, "Semantic Web meets eGovernment," AAAI Spring Symposium Series (SSS-06), Sanford University, CA, March 27-29, 2006.
- 25. **Co-chair**, Organization Committee, the International Workshop in Dynamic Web Processes (<u>DWP 2005</u>) at ICSOC 2005, Amsterdam, NL, December 12, 2005.
- 26. **Co-chair**, 2nd International Workshop on "Semantic and Dynamic Web Processes" (SDWP2005) Orlando, FL, USA, July, 2005.
- 27. **Co-organizer**, "Semantic Interoperability and Integration," Dagstuhl Seminar 04391, Dagstuhl, Germany, September 19-24, 2004.
- 28. **Co-organizer**, 1st International Workshop on Semantic Web Services and Web Process Composition (SWSWPC 2004) San Diego, California, USA, July 6-9, 2004.
- 29. **Co-organizer**, NASA Workshop on the Knowledge Integrating Virtual Iron Bird, March 31- Aril 2, 2004.
- 30. **Co-Chair**, UCGIS Homeland Security Workshop, Nov 5-7, Amicalola Falls and State Park, GA, Nov. 5-7, 2003.
- 31. **Co-Chair**, Workgroup on Semantic Web, NSF 2002 Workshop on Information and Data Management:, Arlington, VA, May 5-7, 2002.
- 32. **Organizer/Chair**, NSF-EU Invitational Workshop on Database and Information Systems Research for Semantic Web and Enterprises, (Robert Meersman, Co-Organizer), Amicalola State Park, GA, April 3-5, 2002.
- 33. **Co-Organizer**, 2nd International Workshop on the Semantic Web SemWeb'2001 at WWW10, Hongkong, May 1, 2001.
- 34. **Steering Committee**, Semantic Web Services Challenge 2006: Challenge on Automating Web Services Mediation, Choreography and Discovery, Stanford University, 2006.
- 35. Panel Chair, Federated Conferences ODBASE/CooPIS 2002, Irvine CA, October 2002.
- 36. **Steering Committee**, Science on the Semantic Web: Building the Next Generation of Environmental Information Systems, Rutgers University, NJ, October 24, 25, 2002.
- 37. **Steering Committee Chair and founder**, 1st ACM International Conference on Work Activity Coordination and Collaboration, February 1999, San Francisco, CA.
- 38. **Panel Chair**, 5th International Conference on Information and Knowledge Management (CIKM'96), Rockville, MD, November 12–16, 1996.
- 39. **Panel Co–Chair**, 22nd International Conference on Very Large Data Bases, Bombay, India, September 1996.
- 40. Founding Member and Executive Committee Member/Treasurer, International Foundation on Cooperative Information Systems, 1995–present.
- 41. **Steering Committee Member**, International Conference on Parallel and Distributed Information Systems, 1995–present.
- 42. **Panel Chair and Member of Organization Committee**, 6th IFIP TC-2 Working Conference on Data Semantics (DS-6), Stone Mountain, GA, June 1995.
- 43. Tutorial Chair, ACM SIGMOD Conference, 1993.

- 44. Tutorial Chair, 7th IEEE International Conference on Data Engineering, 1988 and 1991.
- 45. **Secretary and Treasurer** of the executive committee of the IEEE CS TC on Data Engineering, 1992–present.
- 46. **Publication Chair**, 1st International Workshop on Interoperability in Multidatabase Systems (IMS '91), April 1991.
- 47. Associate Editor for SIGMOD Record, 1988–2005.
- 48. Tutorial Chair, 4th IEEE International Conference on Data Engineering, 1988.

Program Committee Member for International Conferences and Workshops

- 1. <u>2011 IEEE Conference on Cognitive Methods in Situation Awareness and Decision</u> <u>Support</u> (IEEE CogSIMA 2011), Miami Beach, Florida, USA, February 22-24, 2011.
- 2. Ninth International Semantic Web Conference (<u>ISWC 2010</u>), Shanghai, China, November 7-11, 2010.
- 3. <u>Sixth Conference on Prestigious Applications of Intelligent Systems</u> (PAIS), collocated to ECAI 2010, Lisbon, Portugal, August 16-20, 2010.
- 4. <u>4th Int'l AAAI Conference on Weblogs and Social Media</u>, Washington, DC, May 23-26, 2010.
- 5. 7th International Workshop on Middleware for Grids, Clouds and e-Science (MGC 2009), In conjunction with ACM/IFIP/USENIX 10th International Middleware Conference 2009, Urbana Champaign, Illinois, November 30 December 4, 2009.
- Second International Workshop on Modeling Mobile Applications and Services (M2AS'09), held in conjunction with the 28th International Conference on Conceptual Modeling (<u>ER 2009</u>), Gramado, Brazil, November 9-12, 2009.
- 7. Third International Workshop on Web APIs and Services Mashups (<u>Mashups'09</u>) at <u>OOPSLA 2009</u>, Orlando, Florida, October 25-29, 2009.
- 8. 8th International Semantic Web Conference (<u>ISWC 2009</u>), Washington, DC, October 25-29, 2009.
- 9. 5th IEEE Workshop on Situation Management (SIMA 2009) in conjunction with IEEE MILCOM 2009, World Trade Center, Boston, MA, October 19-21, 2009.
- Advanced Knowledge-Based Systems, 13th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems (<u>KES 2009</u>), Santiago Chile, September 28-30, 2009.
- 11. <u>Business Process Management 2009</u>, Ulm, Germany, September 7-10, 2009.
- 12. 1st International Workshop of Semantic Sensor Web (<u>SemSenWeb 2009</u>), Haraklion, Crete, Greece, May 31- June 4, 2009.
- 13. WWW2009 18th Intl. World Wide Web Conference- Semantic/Data Web track, April 20-24, 2009.
- 14. 3rd Asian Semantic Web Conference (ASWC 2008), Bangkok, Thailand, February 2-5. 2009.
- 15. Second International Workshop on Web APIs and Services Mashups (Mashups'08) at ICSOC 2008 Sydney, Australia, December 1, 2008
- 16. Multimedia 2008, 2nd International Workshop on the Many Faces of Multimedia Semantics, Vancouver, Canada, October 27–November 1, 2008.
- 17. 10th International Conference on Visual Information Systems (VISUAL2008), Salerno, Italy, September 11–12, 2008.

- Advanced Knowledge-based Systems, Invited Session, 12th International Conference on <u>Knowledge-based and Intelligent Information & Engineering Systems (KES 2008)</u>, Zagreb, Croatia, September 3–5, 2008.
- 19. 5th European Semantic Web Conference (ESWC 2008 Ph.D. Symposium) Tenerife, Spain, June 1-5, 2008.
- 20. Semantic Web for Health Care and Life Sciences Workshop, in conjunction with the 17th International World Wide Web Conference, Beijing, China, April 21–25, 2008.
- Semantic Web for Health Care and Life Sciences Workshop , Beijing, China, April 22, 2008
- 22. Workshop on Information Systems Economics (<u>WISE 2007</u>), Montreal, Quebec, Canada, December 8-9, 2007.
- 23. 1st International Workshop on Networking for Distributed Knowledge Management (NDKM'07), Albufeira, Portugal, November 25–30, 2007.
- 24. 3rd International IFIP Workshop on Semantic Web & Web Semantics (IFIP SWWS 2007), Albufeira, Portugal, November 25–30, 2007.
- 25. 6th International Semantic Web Conference and 2nd Asian Semantic Web Conference, Busan, Korea, November 11–15, 2007
- 26. 1st Workshop CyberInfrastructure: Information Management in eScience (CIMS), Collocated with ACM CIKM 2007, Lisbon, Portugal, November 9, 2007.
- 27. International Conference on Advances in Semantic Processing (SEMAPRO 2007), Papeete, French Polynesia, November 4–9, 2007.
- 28. Workshop on Cyberinfrastucture for e-Science (CyIneS 2007), IEEE/WIC/ACM Joint Conference on Web Intelligence and Intelligent Agent Technology, Silicon Valley, CA, November 2–5, 2007
- 29. Usage of Service Level Agreements in Grids Workshop, in conjunction with the 8th IEEE International Conference on Grid Computing (Grid 2007), Austin, TX, September 19, 2007.
- 30. 11th International Workshop on Cooperative Information Agents (<u>CIA 2007</u>), Delft, Netherlands, September 19–21, 2007.
- 22nd National Conference on Artificial Intelligence: AAAI-based7 (Special track on Artificial Intelligence and the Web), Vancouver, British Columbia, Canada, July 22–26, 2007.
- 32. 9th International Conference on e-Health Networking, Applications and Services, Taipei, Taiwan, June 19-22, 2007.
- 1st International Conference on Web Reasoning and Rule Systems, Innsbruck, Austria, June 7–8, 2007.
- 34. From Concepts & Prototypes to Practical Solutions, 1st International Workshop on Semantic Technology Adoption in Business (STAB'07), in conjunction with ESTC 2007, Vienna, Austria, May 31–June 1, 2007.
- 35. 16th International World Wide Web Conference (WWW2007), Semantic Web track, Banff, Canada, May 10–12, 2007.
- 36. 16th International World Wide Web Conference (WWW2007), E-Applications track, Banff, Canada, May 10–12, 2007.
- 37. 5th International Semantic Web Conference (ISWC 2006), Senior PC member/metareviewer, Research/Academic track, Athens, GA, November 5–9, 2006.
- 38. 4th IEEE International Conference on Web Services, Chicago, IL, September, 2006.

- 39. 1st Asian Semantic Web Conference, Beijing, China, September 5–7, 2006.
- 40. 21st National Conference on Artificial Intelligence (AAAI-06), Boston, MA, July 16–20, 2006.
- 3rd Annual European Semantic Web Conference (<u>ESWC2006</u>), Budva, Montenegro, June 2006. (Senior PC Member)
- 42. 15th International World Wide Web Conference (WWW2006), XML and Web Services track, Edinburgh, Scotland, May 22–26, 2006.
- 43. 15th International World Wide Web Conference (WWW2006), E-Applications track, Edinburgh, Scotland, May 22–26, 2006.
- 44. 15th International World Wide Web Conference (WWW2006), E* track, Edinburgh, Scotland, May 22–26, 2006.
- 45. IEEE Intelligence and Security Informatics (ISI) Conference, San Diego, CA, May 22–24, 2006.
- 46. IEEE International Conference on Granular Computing, Atlanta, GA, May 10–12, 2006.
- 47. 22nd International Conference on Data Engineering, Atlanta, GA, April 3–7, 2006.
- 48. 2nd International Workshop on Database Interoperability (InterDB2006), April 2006.
- 49. 6th International Conference on Web Information Systems (WISE 2005), New York, NY, December 2005.
- 50. 1st International Conference on Geospatial Semantics (GeoS 2005), Mexico City, Nov 29–30, 2005.
- 51. 4th International Semantic Web Conference (ISWC 2005), Senior PC member, Research/Academic track, Galway, Ireland, November 6–10, 2005.
- 52. 4th International Semantic Web Conference (ISWC 2005), Industrial track, Galway, Ireland, November 6–10, 2005.
- 53. 4th International Conference on Ontologies, DataBases, and Applications of Semantics (ODBASE), Agia Napa, Cyprus, Oct 31 Nov 4, 2005.
- 54. K-Cap Workshop on Integrating Ontologies, Banff, Canada, October 2, 2005.
- 55. IFIP Working Conference on Virtual Enterprises (PRO-VE'05), Valencia, Spain, September 26–28, 2005.
- 56. 2005 IEEE Service International Conference on Services Computing (SCC 2005), Orlando, FL, July 12–15, 2005.
- 57. 3rd IEEE International Conference on Web Services, Orlando, FL, July 12–15, 2004.
- 58. 1st International Workshop on Contexts and Ontologies: Theory, Practice and Applications (an AAAI'05 Workshop), Pittsburgh, PA, July 9–10, 2005.
- 59. W3C Workshop on Frameworks for Semantics in Web Services, Innsbruck, Austria, June 9–10, 2005.
- 60. IEEE International Conference on Intelligence and Security Informatics (ISI-2005), Atlanta, GA, May 19–20, 2005.
- 61. 14th International World Wide Web Conference (WWW2005), Semantic Web Track, Chiba, Japan, May 10–14, 2005.
- 62. 21st International Conference on Data Engineering, Tokyo, Japan, April 2005.
- 63. 1st UK Young Researchers Workshop on Service Oriented Computing (YR–SOC), Leicester, UK, April 21–22, 2005.
- 64. 2nd International Conference on Service Oriented Computing (ICSOC'04), New York, NY, November 15–19, 2004.

- 65. 3rd International Conference on Semantic Web, Industry PC, Hiroshima, Japan, November 7–11, 2004.
- 66. 1st International Workshop on Semantic Web Technologies in Electronic Business, Berlin, Germany, October 11–13, 2004.
- 67. AAAI 2004 Workshop on Semantic Web Personalization, San Jose, CA, July 25–26, 2004.
- 68. IEEE International Conference on Web Services (ICWS 2004), San Diego, CA, July 6–9, 2004.
- 69. 13th International World Wide Web Conference (WWW2004): Web Services track, New York, NY, May 17–22, 2004.
- 70. 13th International World Wide Web Conference (WWW2004): Semantic Web track, New York, NY, May 17–22, 2004.
- 71. 2nd Workshop on Semantics in Peer-to-Peer and Grid Computing (at WWW2004), New York, May 17–18, 2004.
- 72. 4th International Conference on Web Information Systems Engineering (WISE'03), Rome, Italy, December 10–12, 2003.
- 73. 2nd International Conference on Ontologies, DataBases, and Applications of Semantics for Large Scale Information Systems (ODBASE'03), Sicily, November 3–7, 2003.
- 12th International Conference on Information and Knowledge Management (CIKM 2003), New Orleans, LA, November 2–8, 2003.
- 75. 2nd International Semantic Web Conference, Sanibel, FL, October 20–24, 2003. (Senior PC Member)
- 76. Semantic Integration Workshop (at ISWC2003), Sanibel Island, FL, October 20, 2003.
- 77. Workshop on Semantic Web Technologies for Searching and Retrieving Scientific Data (at ISWC2003), Sanibel Island, FL, October 20, 2003.
- 78. Workshop on Practical and Scalable Semantic Systems (at ISWC2003), Sanibel Island, FL, October 19, 2003.
- 79. 2003 IEEE/WIC International Conference on Intelligent Agent Technology (IAT 2003), Beijing, China, October 13–17, 2003.
- 80. ICEC Workshop on Semantic Web Services for Enterprise Application Integration and E-Commerce, Pittsburg, PA, September 30–October 3, 2003.
- 81. Semantic Web Services for Enterprise Application Integration and E-Commerce (SWSEE03), Pittsburgh, PA, September 30, 2003.
- 82. 4th Annual International Conference on Object-oriented and Internet-based Technologies, Concepts, and Applications for a Networked World, Thuringia, Germany, September 22–25, 2003
- 83. Workshop on Semantic Web and Databases at the 29th International Conference on Very Large Data Bases (VLDB 2003) Berlin, Germany, September 9–12, 2003.
- 84. 1st International Workshop on Semantic Web and Databases, Berlin, Germany, September 7–8, 2003.
- 85. 7th International Workshop CIA-2003 on Cooperative Information Agents, Helsinki, Finland, August 27–29, 2003.
- 86. IEEE Conference on E-Commerce (CEC03), Newport Beach, CA, June 24–27 2003.
- 87. IEEE International Conference on Electronic Commerce (CEC'03), Newport Beach, CA, June, 2003.

- 12th International World Wide Web Conference (WWW2003), Budapest, Hungary, May 20–24, 2003.
- 89. 1st Workshop on Semantics in Peer-to-Peer and Grid Computing at WWW 2003, Budapest, Hungary, 20 May 2003.
- 90. 1st International Conference on Ontologies, DataBases, and Applications of Semantics for Large Scale Information Systems (ODBASE'02), October 29–31, 2002.
- 91. 3rd International Symposium on Multi-Agent Systems, Large Complex Systems, and E-Businesses (MALCEB'2002), Erfurt, Thuringia, Germany, 8–10 October 2002.
- 92. 3rd Annual International Conference on Object-oriented and Internet-based Technologies, Concepts, and Applications for a Networked World, Thuringia, Germany, October 7–10, 2002.
- 93. Net.Object Days 2002, Erfurt, Germany, October 7–10, 2002.
- 94. 6th International Workshop CIA-2002 on Cooperative Information Agents, Madrid, Spain, September 18–22, 2002.
- 95. 2nd International Workshop on Databases, Documents, and Information Fusion (DBFusion 2002): Information Integration and Mining in Databases and on the Web, University of Karlsruhe, Germany, July 4–5, 2002.
- 96. 1st International Semantic Web Conference (ISWC-2002), Sardinia, Italy, June 10–12, 2002.
- 97. 11th International World Wide Web Conference (WWW2002), Semantic Web Track, Honolulu, HI, May 7–11, 2002.
- 98. 1st WWW 2002 Workshop on Real World RDF and Semantic Web Applications, Honolulu, HI, May 7, 2002.
- 99. 5th International Workshop CIA-2001 on Cooperative Information Agents, Modena, Italy, September 6–8, 2001.
- 100. 6th International Conference on Cooperative Information Systems (CoopIS 2001), Trento, Italy, September 5–7, 2001.
- 101. International Semantic Web Workshop: Infrastructure and Applications for the Semantic Web, Stanford, CA, July 30–31, 2001.
- 102. Autonomous Agents 2001, Montreal, Canada, 28 May-1 June 2001
- 103. 2nd International Workshop on the Semantic Web (SemWeb'2001) at WWW10, Hong Kong, May 1, 2001.
- 104. International Workshop on Information Integration on the Web: Technologies and Applications, Rio de Janeiro, Brazil, April 9–11, 2001
- 105. 5th International Workshop on Groupware (CRIWG'99) September 21–24, 1999, Cancun, Mexico.
- 106. 3rd International Workshop on Cooperative Information Agents (CIA-99), Uppsala, Sweden, July 31–August 2, 1999.
- 107. 9th RIDE International Workshop on Information Technology for Virtual Enterprises, Sydney, Australia, March 23–24 1999.
- 108. 2nd International Conference on Interoperating Geographic Information Systems (Interop'99), Zurich, Switzerland, March 10–12 1999.
- 109. CSCW Workshop on Adaptive Workflow Systems, Seattle, WA, November 14, 1998.
- 110. 5th International Conference of Foundations of Data Organization (FODO'98), Kobe, Japan, November 12–14, 1998.

- 111. 11th International Conference on Parallel and Distributed Computing Systems, Chicago, IL, September 2–4, 1998.
- 112. International Workshop on Workflow Management (WFM'98), Vienna, Austria, August 28, 1998.
- 113. 3rd IFCIS International Conference on Cooperative Information Systems (CoopIS'98), August 1998, New York, NY.
- 114. ACM SIGMOD Conference, Seattle, Washington, June 2–4, 1998.
- 115. 18th International Conference on Distributed Computing Systems, Amsterdam, Netherlands, May 1998.
- 116. 6th International Conference on Extending Data Base Technology (EDBT'98), Valencia, Spain, March 23–27, 1998.
- 117. 2nd International Conference on Visual Information Systems (Visual '97), San Diego, CA December, 15–17, 1997.
- 118. International Conference on Management of Data (COMAD'97), Madras, India, December 1997.
- 119. 7th IFIP 2.6 Working Conference on Database Semantics (DS–7), Leysin, Switzerland, October, 7–10, 1997.
- 120. 8th International Conference on Database and Expert Systems Applications (DEXA'97), Toulouse, France, September 1–5, 1997.
- 121. 2nd IEEE Metadata Conference, Silver Spring, Maryland, September 16–17.
- 122. 1st IFCIS Conference on Cooperative Information Systems (COOPIS'96), Belgium, June 1996.
- 123. 5th International Conference on Extending Database Technology (EDBT'95), Avignon, France, March 1996
- 124. 5th IEEE RIDE Workshop on Interoperability of Nontraditional Databases (RIDE-IND'96), 1996.
- 125. 12th IEEE International Conference on Data Engineering, New Orleans, LA, February 1996.
- 126. 7th International Conference on Management of Data (COMAD'95), Pune, India, December 1995
- 127. 14th Object-oriented and Entity Relationship Modeling'95 (OO–ER95), Gold Coast, Australia, December 1995.
- 128. 4th International Conference on Information and Knowledge Management, Baltimore, MD, November 1995
- 129. 2nd Next Generation Information Technologies and Systems (NGITS–95), Israel, June 1995.
- 130. IFIP DS-6 Database Application Semantics, Georgia, May 1995.
- 131. 11th IEEE International Conference on Data Engineering, Taipei, Taiwan, April 1995.
- 132. 4th International Conference on Extending Database Technology (EDBT 95), Cambridge, UK, March 28–31, 1995.
- 20th International Conference on Very Large Data Bases (VLDB 94), Chile, September 1994.
- 134. 1st International Conference on Application of Databases (ADB 94), Vadstena, Sweden, June 1994.
- 135. 2nd International Conference on Cooperative Information Systems (CoopIS 94), Toronto, Canada, May 17–20, 1994.

- 136. 10th IEEE International Conference on Data Engineering, April 1994.
- 137. 2nd International Conference on Information and Knowledge Management, 1993.
- 138. 9th IEEE International Conference on Data Engineering (ICDE 1993), Vienna, Austria, April 19–23, 1993.
- 139. 2nd International Conference on Parallel & Distributed Information Systems (PDIS 93), San Diego, CA, January 1993.
- 140. IFIP DS-5 Semantics of Interoperable Data Base Systems-92, Australia, November 1992.
- 141. 2nd International Workshop on Research Issues on Data Engineering: Transaction and Query Processing (RIDE-TQP), Tempe, AZ, February 2-3, 1992.
- 142. 8th IEEE International Conference on Data Engineering (ICDE 92), Tempe, AZ, February 1992.
- 143. 1st International Conference on Information and Knowledge Management (1991).
- 144. 21st International Conference on Distributed Computing Systems (ICDCS-21), Phoenix, AZ, April 16–19, 1991.
- 145. 1st International Workshop on Research Issues on Data Engineering: Interoperability in Multidatabase Systems (RIDE-IMS), Kyoto, Japan, April 7–9, 1991.
- 146. 7th IEEE International Conference on Data Engineering (ICDE 91), Kobe, Japan, April 8–12, 1991.
- 147. COMAD/Management of Data, Bombay, India, December 1991.
- 148. 1st International Conference on Databases, Parallel Architectures and their Applications (PARBASE-90), Miami, FL, March 6–9, 1990.
- 149. 2nd International Symposium on Database in Parallel and Distributed Systems, 1990.
- 150. 1st International Symposium on Database in Parallel and Distributed Systems, 1988.
- 151. 4th IEEE International Conference on Data Engineering, Los Angeles, CA, February 1988.

Other Services (Sessions, Reviews, Funding Panels)

Services to National and international funding Agencies as Proposal Reviewer

- USA, National Science Foundation, since 1987 (reviewed numerous research proposals for funding). Served on many panels and provided strategic input (e.g., CISE Area of Study on Web Information Systems in 2005)
- Belgium (Flanders), SBO (Strategic Basic Research) Programme, 2008
- Austria, Fonds zur Förderung der wissenschaftlichen Forschung (FWF), 2006
- German-Israeli Foundation for Scientific Research and Development, 2006
- Switzerland, Swiss National Foundation, 2005
- Singapore, Agency for Science, Technology & Research (A*STAR), 2005
- Canada, National Science and Engineering Research Council, NSF-equivalent national research sponsorship organization (reviewer for several years)
- > Australian Research Council, Expert Assessor of International Standing, 2003
- ▶ Ireland, Science Foundation, 2001
- Austria, Fonds zur Förderung der wissenschaftlichen Forschung (FWF), 1999
- Norway, Research Council of Norway, 1996, 1997, 1998, 2002, 2003

- The Netherlands, Netherlands Organization for Scientific Research (NOW), 2003, 2005
- ➢ Israel, Israel Science Foundation, 1996
- Hong Kong, National Research Grants Council, 1996

	USA, National Science Foundation, since 1987 (reviewed numerous research		
	proposals for funding). Served on many panels and provided strategic input		
	(e.g., CISE Area of Study on Web Information Systems in 2005)		
2008	Belgium (Flanders), SBO (Strategic Basic Research) Programme		
2006	Austria, Fonds zur Förderung der wissenschaftlichen Forschung (FWF)		
2006	German-Israeli Foundation for Scientific Research and Development		
2005	Switzerland, Swiss National Foundation		
2005	Singapore, Agency for Science, Technology & Research (A*STAR)		
	Canada, National Science and Engineering Research Council, NSF-equivalent		
	national research sponsorship organization (reviewer for several years)		
2003	Norway, Research Council of Norway, 1996, 1997, 1998, 2002, 2003		
2002			
1998			
1997			
1996			
2003	Australian Research Council, Expert Assessor of International Standing		
2001	Ireland, Science Foundation		
1999	Austria, Fonds zur Förderung der wissenschaftlichen Forschung (FWF)		
2005	The Netherlands, Netherlands Organization for Scientific Research (NOW)		
2003			
1996	Israel, Israel Science Foundation		
1996	Hong Kong, National Research Grants Council		

Chaired Technical Sessions

DWP2005, WWW2004 (5/2004), WWW2003 (5/2003), 2nd International Workshop on the Semantic Web (5/2001), 8th IFIP 2.6 WC on Database Semantics (DS–8) (01/1999), IFIPWG 11.5 Conference on Integrity and Control in Information Systems (12/1997), 12th ICDE (02/1996), 11th ICDE (04/1995), 4th IEEE RIDE (03/1995), 10th ICDE (05/1995), 9th ICDE (04/1993), 7th ICDE (04/1991), 6th ICDE (02/1990), Etc.

2005	DWP2005
2004	WWW2004 (5/2004)
2003	WWW2003 (5/2003)
2001	2nd International Workshop on the Semantic Web (5/2001)
1999	8th IFIP 2.6 WC on Database Semantics (DS-8) (01/1999)
1997	IFIPWG 11.5 Conference on Integrity and Control in Information Systems
	(12/1997)
1996	12th ICDE (02/96)
1995	11th ICDE (04/1995)

1995	4th IEEE RIDE (03/1995)
1995	10th ICDE (05/1995)
1993	9th ICDE 04/1993)
1991	7th ICDE (04/1991)
1990	6th ICDE (02/1990)

Services to Journals as Referee

IEEE TKDE, VLDB Journal, ACM TODS, ACM TOIT, ACM TOIS, ACM Computing Surveys, Information Systems, Intelligent Information Systems, Distributed Systems Engineering, IEEE Transaction on Computers, Computer, IEEE Transaction on Software Engineering, BMC Bioinformatics, Journal of Selected Areas in Communication, Information Sciences, Journal of Web Semantics, Software-Practice and Experiences, Information and Software Technology, Information Technology & Management, and practically all journals in the area of work.

IEEE TKDE
VLDB Journal
ACM TODS
ACM TOIT
ACM TOIS
ACM Computing Surveys
Information Systems
Intelligent Information Systems
Distributed Systems Engineering
IEEE Transaction on Computers
Computer
IEEE Transaction on Software Engineering
BMC Bioinformatics
Journal of Selected Areas in Communication
Information Sciences
Journal of Web Semantics
Software-Practice and Experiences
Information and Software Technology
Information Technology & Management

Society Memberships

2006 -	Fellow	IEEE and IEEE Computer Society including Technical	
		Committee on Database Engineering	
2003-2005	Senior Member	IEEE and IEEE Computer Society including Technical	
		Committee on Database Engineering	

1981 -	Member	Association for Computing Machinery, including SIGMOD
1997-2002		SIGGROUP

Curriculum Development (Initiatives and Courses)

Initiatives

- On the steering committee of the New Media Institute, approved starting Fall 2000. It is a campus-wide initiative covering many disciplines.
- On the steering committee of Masters in Internet Technology program, expected to be approved starting Fall 2000. An interdisciplinary professional degree program proposed by Management Sciences (Business School), Computer Science, and School of Journalism.

New Courses Defined/Offered

- Information Integration and Analysis, CS 790-03, offered at Wright State University starting Spring Quarter 2007.
- Semantic Web Services and Processes, CSCI 8351, defined and offered Spring 2004, (formerly Semantic Enterprise, defined and offered Fall 2002). For advanced graduate students, the earliest offering of a course on this topic in the world.
- Semantic Web, defined and offered Spring 2002. For advanced graduate students, one of the earliest offerings of a course on this topic in the world.
- Global Information Systems: Promises and Challenges, defined and offered since 1995. For Computer Science seniors and graduate students; often taken by students in other disciplines. One of the earliest Internet-based courses, with innovative mix of internet technologies and information systems.
- Enterprise Integration, defined and offered from 1995 to 2000. A one-of-a-kind course for Computer Science graduate students, sometimes taken by students in management. Covers issues in complex enterprise-wide solutions in the real world. Main emphasis is on distributed computing and information systems and e-commerce technologies, but also shares real-world experiences.
- > Internet Programming, 2000. For the new Masters in Internet Technology program.
- Internet Information Systems, 2000. For the new Masters in Internet Technology program.

External Curriculum Advising/Accreditation:

Program Evaluator/Accreditation Visitor for the Computer Sciences Accreditation Board (sponsored by IEEE and ACM), 1993–1998.

Instruction and Academic Services (since 1994)

Courses taught

CS 475/675	Web Information Systems	F '11
CS 475/075	Semantic Web	S '11
		F '10
CS 475/675	Web Information Systems	
CS 875	Semantic Web	S '10
CS 790	Web3.0: Social, Services, Sensor Semantic Web	W '09
CS 790	Web3.0: Social, Services, Sensor Semantic Web	S '09
CS 475/675	Web Information Systems	S '09
CS 795	Independent Study	F '08
CS 875	Semantic Web	F '08
CSCI8351	Semantic Web Services & Processes	S '06
CSCI4350/6350	Global Information Systems	S '05
CSCI8350	Semantic Web	F '05
CSCI8351	Semantic Web Services & Processes	S '04
CSCI8350	Semantic Web	F '04
CSCI4350/6350	Global Information Systems	S '03
CSCI8350	Semantic Web	F '03
CSCI8350	Semantic Web	S '02
CSCI8350	Semantic Enterprise	F '02
CSCI8350	Enterprise Integration (w/ Cardoso)	S '01
CSCI8350	Enterprise Integration (w/ Arpinar)	S '00
CSCI6350	Global Information Systems	F '99
CSCI8350	Enterprise Integration	S '99
CS 690	Global Information Systems	W '98
CS 835	Enterprise Integration	W '98
CS 690	Advanced Global Information Systems	S '98
CS 490/690	Global Information Systems	W '97
CS 835	Enterprise Integration	W '97
CS 203	Programming Project Designs	F '97
CS 490	Global Information Systems	W '96
CS 490/690	Global Information Systems	W '96
CS 835	Enterprise Integration	W '96
CS 203	Programming Project Designs	F '96
CS 837	Advanced Database Systems	W '95
CS 490/690	Special Topics in Computer Science	Sp '95
CS 203	Programming Project Design	F '95
05 203	r rogramming r rojoer Design	1))

Supervision of Student Research as Major Professor

Vipul Kashyap, PhD, "Information Brokering over Heterogeneous Digital Data," October 1997. (Note: Student's degree is from Rutgers University, NJ, but Dr. Sheth is his research adviser.) [CIGNA]

- Devashish Worah, MS, "Error Handling and Recovery for the ORBWork Workflow Enactment Service in METEOR," June 1997. [Virtuasa]
- Srilekha Mudumbai, MS, "ZEBRA Image Access System," June 1997.
- Selvam Velmurugan, MS, "Collaborative Tele-Consulting for Healthcare: CATCH," September 1997. [Amazon, eMoksha/Kiirti]
- Krishnan Parsuraman, MS, "Agent Support in the InfoQuilt System," December 1998.
- Clemens Bertram, MS, "Metadata and Ontology Based Query Processing in the InfoQuilt System, December 1998. [Taalee/Semagix, Goldman Sachs]
- Vineet Mahajan, MS, "A Multi-Agent System for Metadata Management and Information Brokering," December 1999. [AOL]
- Subrajit Ray, MS, "Ontology-based Media Independent Correlation of Information Accross Heterogeneous Distributed Sources," December 1999. [Deutsche Bank]
- Mukesh Guntamadugu, MS, "MÉTIS: Automating Metabase Creation from Multiple Heterogeneous Sources," July 2000. [CBS Interactive]
- Dilpreet Singh, MS, "An Agent Based Architecture For Query Planning And Cost Modeling Of Web Sources," July 2000. [Kana, Life360]
- Sriram Lakshminarayan, "Semantic Interoperability in Digital Libraries using Inter-Ontological Relationships," July 2000. [Yahoo!]
- Narayan Palsena, MS, "A Collaborative Approach to Learning using Information Landscapes," 2000. [SAP]
- Zhongqiao Li, MS, "Using Collaboration Task in OrbWork Enactment System for METEOR Workflow Management System, August 2000.
- Zongwei Luo, PhD, Knowledge Sharing, Coordinated Exception Handling, and Intelligent Problem Solving for Cross–Organizational Business Processes, February 2001. [University of Hong Kong]
- Sanjeev Thacker, MS, "Knowledge Modeling for Study of Domains and Inter-domain Relationships – A Learning Paradigm," July 2001.
- Shuchi Patel, MS, "Planning and Optimizing Semantic Information Requests on Heterogeneous Information Sources Using Semantically Modeled Domain and Source Characteristics,"July 2001.
- Wonjung Kim, MS, "Knowledge Based Personalization," December 2001.
- Madhan Arumugam, M.S., "The Peer-to-Peer Semantic Web: A Distributed Environment for Sharing Semantic Knowledge on the Web," December 2001.
- Jorge Cardoso, PhD, Quality of Service and Semantic Composition of Workflows, August 2002. [SAP Research, University of Coimbra]
- Kaarthik Sivashanmuga, MS (co-adviser: J. Miller), "The METEOR-S Framework for Semantic Web Process Composition," August 2003. [Microsoft]
- > Abhijit Patil, MS METEOR-S Web Service Annotation Framework, December 2003.
- Christian Halaschek-Wiener, MS (co-adviser: I.B. Arpinar) "A Flexible Approach for Ranking Complex Relationships on the Semantic Web," August 2004.
- Rohit Aggrawal, MS, August 2004. (co-adviser: J. Miller). [Convergys]
- Swapna Onudhakar, MS, December 2004. [ADP]
- William Milnor MS (co-adviser), Discovering Informative Subgraphs in RDF Graphs, August 2005. [Topquadrant]
- Ravi Pavagada, MS, IR based Search in Semantic Web, Summer 2006. *
- Bilal Gonen, MS, Semantic Browser, Summer 2006. *

- Kunal Verma, PhD (co-adviser), Configuration and Adaptation of Semantic Web Processes, July 2006. [Accenture Labs]
- Kemafor Anyanwu, PhD, "Building Statistical Summaries for Obtaining Accurate Estimates of the Cardinality of Graph Patterns for Optimizing Graph Pattern Matching Queries," August 2007. [North Carolina State University]
- Sujeeth Thirumalai, MS (co-advisor), "Keyword Search Interface for Path Queries on Ontology," August 2007.
- Cartic Ramakrishnan, PhD, "<u>Extracting, Representing and Mining Semantic Metadata from Text: Facilitating Knowledge Discovery in Biomedicine</u>," September 2008. [Information Sciences Institute]
- Matthew Perry, PhD, "<u>A Framework to Support Spatial, Temporal and Thematic Analytics over Semantic Web Data</u>," July 2008. [Oracle]
- Angela Maduko, PhD, "Building Statistical Summaries for Obtaining Accurate Estimates of the Cardinality of Graph Pattern Matching Queries," May 2009. [ADVIS Lab at University of Illinois at Chicago]
- Karthik Gomadam, PhD, "Semantics Enriched Service Environments," August, 2009. [Accenture Labs]
- Satya S. Sahoo, PhD, "Semantic Provenance: Modeling, Querying, and Application in Scientific Discover," July 2010. [Case Western Reserve University-tenure track]
- Meenakshi Nagarajan, PhD, "Understanding User-Generated Content on Social Media," August 2010. [IBM Almaden Research Center]
- Ashwin Manjunatha, M.S., "<u>A Domain Specific Language Based Approach for Developing Complex Cloud Computing Applications</u>," June 2011. []
- Harshal Patni, M.S., "Real Time Semantic Analysis of Streaming Sensor Data," June 2011. []

External Academic Advising

- Member of Ph.D. dissertation committee for Ph.D. candidate Haibo Zhao, University of Georgia, Athens, GA, 2009.
- Member of Ph.D. dissertation committee for Ph.D. candidate Fabian M. Suchanek, Saarland University, Saarbrucken, Germany, expected completion Dec 2008.
- External expert reviewer for Ph.D. candidate Manual Garcia Solaco, Facultat d'Informatica de la Universitat Politechica de Cataluna, Barcelona, 1994.
- External adviser and dissertation committee member for Ph.D. student George Karabatis, Univ. of Houston, "Management of Interdependent Data in a Multidatabase Environment: A Polytransaction Approach," May 1995.
- Member of Ph.D. dissertation committee for Quiang Zhu, "Estimating Local Cost Parameters for Global Query Optimization in a Multidatabase System," University of Waterloo, Canada, August 1995.
- Member of Ph.D. dissertation committee (Jury) for Philippe Thiran, Legacy database federation. A combined forward–Reverse approach, Institut d'Informatique, F.U.N.D.P. (Univ. of Namur), Belgium, September 2003.

Supervised research of Eduardo Mena (Ph.D. candidate, Basque State University, Spain) during his one year work at LSDIS Lab, UGA in 1996 (12 months).

Supervising research of Isabel Scheiding (Ph.D. candidate, University of Frankfurt, Germany) during her work at LSDIS Lab, UGA between July 1997 and December 1997. Supervised research of Tascisio Lima (Ph.D. student, University of Brazil) during his work at LSDIS Lab, UGA, August 1998- June 2000.

Current Doctoral Students

Pramod Anantharam(co-advisor); Delroy Cameron; Kalpa Gunaratna; Cory Henson; Ashutosh Jadhav; Prateek Jain; Sarasi Lalithsena; Chen Lu; Pablo Mendes; Vinh Nguyen; Maryam Panahiazar; Sujan Perera; Hemant Purohit; Ajith Ranabahu; Christopher Thomas; Wenbo Wang; Sanjay Wijeratne.

Post Doctoral and Research Fellow Supervision

Yanbo Han (PostDoc), Chinese Academy of Sc., 1995–1997; Eduardo Mena (Ph.D. candidate, "OBSERVER: An Approach for Query Processing in global Information Systems based on Interoperation across Pre-exisiting Ontologies," Basque State University, Spain), Basque State U., 1996–1998; Isabel Scheiding (Ph.D. candidate, University of Frankfurt, Germany), 7/1997–12/1997; Tascisio Lima (Ph.D. student, University of Brazil), 8/1998–6/2000; Shengli Wu, U. Sheffield, 2000–2002; I.B. Arpinar, METU–Turkey, 2000–2002; Farshad Hakimpour, U. Zurich, Switzerland, 2005–2006; Ramakanth Kavuluru 2009-Present; Priti Parikh 2009-Present.

University and Public Service

Served as the primary consultant and directed development to benefit UGA administration in the form of CAPA for the Vice President for Academic Affairs (7/96-6/97) and GradWeb for the Graduate School (7/97-6/97). Both are fully functional/operational Web-based applications.

- Board of Directors of the Service-Oriented Computing Summer School (<u>SummerSOC</u>), Hersonissos Crete Greece, June 27- July 2, 2011.
- > Institute of Bioinformatics, membership committee, 2004–present.
- GIScience Faculty Resource at UGA, 1997– present. Alternate UCGIS rep. for several years.
- > Participation in multicultural and underrepresented group related activities:
 - Panel: "Road Less Traveled: Entrepreneurship & Leadership," 2006 Alumni Networking & Professional Development Conference, organized by UGA Multicultural Programs, March 25, 2006.
 - Mentored one faculty and one student under 1995 Summer Undergraduate Research Program for Minority Students and Faculty in Minority Institutions.
 - Mentored two students under 1996 Summer Undergraduate Research Program for Minority Students.

Service provided in the form of committee participation at UGA–CS department.

- Member of Faculty Development Committee, 2010-present.
- Member of Graduate Faculty, 1994 present.
- Member: Graduate School Policy Committee, Wright State University, 2008-present.
- Chair, Department Graduate Studies Committee, Wright State University, 2008present.
- > Participation in Departmental Committees at UGA–CS department:
 - Equipment Committee, 1994 2006.
 - Faculty Search Committee, 1995, 2000, 2004, 2009.
 - Graduate Admissions Committee, also Aid Committee, 1996 2006, 2008 2010.
 - Space Committee, 1997 1998.