

Professor Amit P. Sheth

Education

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

Jan 2007 – Present	LexisNexis Ohio Eminent Scholar, Wright State University, Dayton, OH. Executive Director, Ohio Center of Excellence on Knowledge-enabled Computing (Kno.e.sis). Professor, Computer Sc. & Engg. Department. Professor, Biomedical Sciences PhD Program (2009-present), Department of Community Health (2015-present).
2001 – 2007	Member/Professor, Faculty of Engineering, University of Georgia
1994 – 2006	Director, Large Scale Distributed Information Systems (LSDIS) Lab, Athens, GA.
1998 – 2006	Professor, Department of Computer Science , University of Georgia , Athens, GA (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. Biomedical & Health Science Institute , Member, 2005 Institute of Bioinformatics , Member, 2004.
May – Jun 1993	Visiting Faculty, Institute of Information Systems, ETH (Swiss Federal Institute 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 & Appointments

Current	Cofounder and CTO (nonemployee): Cognovi Labs, Inc. Advisor and/or Board Member: ezDI, LLC; Edamam LLC; Brain Health Alliance.
2011-2015	Advisor, DropThought.
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, (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, MN

Vision and Leadership (see: <http://knoesis.org/vision>)

- Computing for Human Experience
- Semantic Cognitive Perceptual Computing – towards machine intelligence
- Augmented Personalized Health
- Knowledge-empowered NLP and Machine Learning
- Smart Data from Physical, Cyber and Social Big Data

Research Thrusts

- Computing for Human Experience, Knowledge-enabled Computing (knowledge enhanced machine learning and NLP), Semantic-Cognitive-Perceptual Computing and other AI issues [2008 -]
- Smart Data and Big Data, Web 3.0: semantic enhanced exploitation of diverse text (web pages, social data, clinical data), semantic social web, semantic sensor web/networking [2004 -]
- Semantic Web and Semantic Applications including search, browsing, analysis, personalization, advertisement; ontology/knowledge graph building and their applications [1993-]
- Transactional/distributed workflows, multidatabase consistency/coordination [1990-2005]
- Federated databases and data integration, semantic interoperability and integration, AI/DB integration [1986-1996]

Key application domains: health care/clinical/epidemiology/public health, biomedical, social good (human/social/economic development, crisis coordination), financial, defense and intelligence, etc.

Recognition, Outstanding Achievements and Honorary Appointments

1. **AAAI Fellow** elected by the Association for the Advancement of Artificial Intelligence “for significant and enduring contributions to semantics and knowledge based techniques to transform diverse data into insights and actions.” Class of 2018.
2. **Technology Commercialization Award** (runner up), **Ohio Faculty Council, 13 Nov 2017**. The honor recognizes faculty members in the state university system in Ohio for exceptional research discoveries and the role they have played in supporting the translation of those discoveries into marketable products and/or services.
3. Invited/joined the **Academic Council** (senate), LNM-IIT, October 2017 – present.
4. With an **h-index of 97 and over 38,000 citations** (as of 10/2017), placed among the 100 most highly cited authors in computer science, placed top few among top authors in World Wide Web (10-year impact) and placed 20th among top authors in databases (impact for all years). ([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 3,500 citations) is the all-time most cited paper in information integration, second most cited paper in distributed databases, and one of the top five most cited papers in the field of databases; Georgakopoulos-Hornick-Sheth (with over 2,000 citations) is one of the most cited paper in the area of workflow management. At least 91 papers have more than 100 citations each.

5. **Trustee's Award** for Faculty Excellence, 2010 Wright State University. 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.
6. **IEEE Fellow** elected by IEEE Board of Directors with citation "for contributions to information integration and workflow management." Class of 2006.
7. As the Kno.e.sis Center's Director, on Feb. 19, 2010 Ted Strickland, then Governor of Ohio, and Eric Fingerhut, Chancellor of the Ohio Board of Regents, recognized the center as a "Center of Excellence."
8. International Scientific Advisory Committee (BISCSE 2005): Forging New Frontiers, 40th of Fuzzy Pioneers (1965–2005), Berkeley CA, Nov. 2–6, 2005.
9. 2004 IBM Faculty Award, Mar. 2004.
10. UGA Career Center Recognition/Award, Sept. 2002. Awarded based on post-graduation student surveys for "greatly contributing to the career development of UGA students."
11. Advisory Board, Coca-Cola Center for Marketing Studies, Terry College of Business, 2002–2003.
12. International Advisory Board, Internet Information Retrieval Research Center (IRC), Hankuk Aviation University, Korea, 2001–2002.
13. Board of Directors, Healthcare Open Systems & Trials (HOST) Consortium, 1995–1999.
14. Member of the two-person International Advisory Board, TARA Project, University of Tsukuba, Japan. 1994–1996.
15. Selected and served as an ACM Lecturer, 1991–1992. Again for 1992–1993.
16. Outstanding Paper Award (co-author), *7th International Conference on Data Engineering*, Kobe, Japan, Apr. 1991.
17. Six Recognition of Service Awards/Certificates of Appreciation: from *IEEE Technical Committee on Data Engineering* and the *IEEE Computer Society* (1989, 1990, 1991, 1992), from *IEEE Technical Community on Services Computing* (2004), from *ACM* (1993).
18. 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, Nov. 1993, and the Bellcore Achievement Award, 1989.
19. Board of Advisors, Indiana Center for Database Systems, 1991–1993.
20. Award from the Federal Computer Conference in recognition of contributions, Apr. 1989.
21. Best Paper Award (co-author) Computer Networking Symposium, 1984.
22. National Merit Scholar, Government of India, 1975.

Research Funding / Grants (> \$27M, 25+NSF, 4 NIH Ro1s) [50+] Federal Funds: Role Principal Investigator, unless indicated otherwise

1. **eDarkTrends: Monitoring Cryptomarkets to Identify Emerging Trends of Illicit Synthetic Opioids Use**, NIH, \$223,715, Jul. 2017 - May 2019. PIs: Francois Lamy and Amit Sheth.
2. **SCH: kHealth: Semantic Multisensory Mobile Approach to Personalized Asthma Care**, NIH: **1Ro1** HD087132-01, \$991,804, Jul. 2016 - Jun. 2019. PI: Amit Sheth. Co-PIs: Sherman Alter and T.K. Prasad.
3. **Maximizing the Collective Intelligence of a Network Using Novel Measures of Socio-Cognitive Diversity**, ARO, \$249,034, May. 6, 2016 - Feb. 15, 2017. PI: Minnery; Co-PI: Amit Sheth.
4. **III: Travel Fellowships for Students from U.S. Universities to Attend ISWC 2016**, NSF, \$30,000, Mar. 1, 2016 - Feb. 28, 2017.

5. **PFI: AIR-TT: Market-driven Innovations and Scaling Up of Twitris – A System for Collective Social Intelligence**, NSF, \$200,000 + \$24,000 (REU), Oct. 1, 2015 - Mar. 31, 2017. Co-I: John Mackay.
6. **Modeling Social Behavior for Healthcare Utilization in Depression**, NIMH/NIH: 1R01MH105384-01A1, \$2,195,362 (WSU: \$505,602), Mar. 3, 2016 - Jun. 30, 2019. Joint PIs: Jyotishman Pathak (Cornell University) and Amit Sheth. Co-PI: T.K. Prasad.
7. **TWC SBE: Medium: Context-Aware Harassment Detection on Social Media**, NSF: CNS-1513721, \$925,104 + \$32,000 (REU), Sept. 1, 2015 - Aug. 31, 2018. PI: Amit Sheth. Co-PIs: Valerie Shalin and T.K. Prasad .
8. **Medical Information Decision Assistance and Support**, DoD SBIR/STTR, \$25,000, Jul. 6, 2015 - Mar. 30, 2016. PI: T.K. Prasad. Co-PI: Amit Sheth.
9. **Hazards SEES: Social and Physical Sensing Enabled Decision Support for Disaster Management and Response**, NSF, \$2,000,000 (WSU: \$787,500), Jul. 1, 2015 - Jul. 31, 2019. PIs: Srinivasan Parthasarathy (OSU, project) and Amit Sheth (WSU). Co-PIs: Ethan Kubatko (OSU), Densheng Liu (OSU), Valerie Shalin, and T.K. Prasad.
10. **Semantic Web-based Data Exchange and Interoperability for OEM-Supplier Collaboration**, Pratt & Whitney, \$89,736, Jul. 1, 2015 - Sept. 30, 2015. PI: T.K. Prasad. Co-PI: Amit Sheth.
11. **Cardiology Semantic Analysis System**, ezDI, \$150,000, Jun. 2, 2014 - Jun. 1, 2015. PI: Amit Sheth.
12. **Trending Social Media Analysis to Monitor Cannabis and Synthetic Cannabinoid Use**, NIDA/NIH: 5R01DA039454-02, \$1,689,019, Aug. 14, 2014 - Aug. 14, 2017; Principal Investigators in a multi-PI grant: Raminta Daniulaityte and Amit Sheth; Co-Investigators: Robert Carlson, T.K. Prasad, Ramzi Nahhas, Sylvia Martins (Columbia), and Edward W. Boyer (U. Mass.).
13. **SemMat: Federated Semantic Services Platform for Materials Science and Engineering**, Air Force Research Labs, \$298,028, starting Jun. 1, 2013 - Dec. 31, 2015. PI: Amit Sheth. Co-PIs: T.K. Prasad, Raghu Srinivasan.
14. **NIDA National Early Warning System Network (iN3): An Innovative Approach**, NIDA/NIH: R56DA038366 -01, \$299,741, Jul. 2014 - Aug. 2015. Principal Investigators in a multi-PI grant: Robert Carlson, Amit Sheth, Ed Boyer (U. Mass.).
15. **Software and Hardware Infrastructure for Energy-efficient, Large-scale Complex Language Modeling**, DoD, AFOSR, \$492,500, Aug. 30, 2013 - Aug. 29, 2014. PI: Shaojun Wang. Co-PIs: Amit Sheth, Keke Chen, and Junjie Zhang.
16. **Towards Commercialization of Twitris – A system for collective intelligence**, NSF: I-Corp, \$50,000, Jul. 1, 2013 - Jun. 30, 2014.
17. **Materials Database Knowledge Discovery and Data Mining**, Air Force Research Labs, \$190,000. Co-PIs: T.K. Prasad, Raghu Srinivasan.
18. **LVC Sensors Integration for Data Fusion in Operations and Training**, Air Force Research Lab through Ball Aerospace, \$306,000, Oct. 15, 2010 - Oct. 14, 2013.
19. **EAGER: Expressive Scalable Querying over Linked Open Data**. National Science Foundation (IIS-1143717), \$125,828, Sept. 2011 - Aug. 2013. Supplement granted: \$16,000. Co-PI: Pascal Hitzler.
20. **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), \$220,812, Jul. 2011 - Jun. 2014. PIs in a multi-PI grant: Raminta Daniulaityte and Amit Sheth. Co-PIs: Robert Carlson and Russel Falck.

21. **Trusted Semantic Sensor Web to Support Decision making over Massive Amounts of Sensor and Social Data**, Air Force Research Labs—Sensor Directorate (via Prime: Riverside Research), \$149,276.30, Jun. 2011 - Jan. 2013. Co-PI: T.K. Prasad.
22. **Semantics and Services Enabled Problem Solving Environment for Trypanosoma cruzi**, NHLBI/NIH: 1R01HL087795-01A1, \$1,515,656, May 2008 - Mar. 2013. PI: Amit Sheth. Co-PIs: Rick Tarleton (UGA), Mark Musen (Stanford), Natasha Noy (Stanford), Prashant Doshi (UGA).
23. **SoCS: Collaborative Research: Social Media Enhanced Organizational Sensemaking in Emergency Response**, National Science Foundation, \$480,000, Sept. 2011 - Aug. 2015. REU Supplement: \$16,000. Principal Investigators in a multi-PI grant: Amit Sheth and Srinivasan Parthasarathy (OSU). Co-PIs: Valerie Shalin and John Flach.
24. **ARRA: Semantics and Services Enabled Problem Solving Environment for Trypanosoma cruzi**, NHLBI-DHHS, \$182,786. Jul. 2009 - Jun. 2011. Principal Investigator: Priti Parikh.
25. Undisclosed Sponsor, **Trusted Semantic Sensor Network—Phase I**, \$28,890, Jul. 2010 - Aug. 2011.
26. **Ontology and Semantic-Aided Human Cognition Knowledge Discovery**, Air Force Research Lab's Human Effectiveness Directorate, WPAFB, \$400,000, Jun. 1, 2008 - Mar. 31, 2009.
27. **Information Operations/Cyber Exploitation Research (ICER)**, Air Force Research Lab - Sensor Directorate (via Prime: Woolpert), \$148,402, Jul. 2010 - Dec. 2010.
28. **Spatio-Temporal-Thematic Queries of Semantic Web Data: A Study of Expressivity and Efficiency**, National Science Foundation, \$146,952, Aug. 2008 - Aug. 2010. PI: Amit Sheth. Co-PI: T.K. Prasad. REU supplement: \$22,960.
29. **Trusted Semantic Sensor Network**, Air Force Research Lab, \$313,093.50, Feb. 2009 - Aug. 2011. PI: Amit Sheth. Co-PI: T.K. Prasad.
30. **Education Partnership Agreement for joint work on Distributed Systems for Psychological Modeling**. 711th Human Performance Wing, Air Force Research Laboratory, \$61,000.
31. Undisclosed Sponsor, **Trusted Semantic Sensor Web**. \$126,000, Jul. 2008 - Mar. 2009. PI: Amit Sheth.
32. **Human Performance Ontology** funded by The Air Force Research Lab's Human Effectiveness Directorate, WPAFB, \$400,000, Jun. 2008 - Mar. 2009. PI: Amit Sheth. Co-PI: T.K. Prasad and Valerie Cross (Miami University).
33. **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, Jun. 1, 2008 - May 31, 2009.
34. **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), Jul. 1, 2003 - Jun. 30, 2008. (Partial funds transferred to Wright State University upon move.)
35. **SemGrid: Semantic Discovery on Adaptive Services Grid**, National Science Foundation (IIS 0545243), Oct. 15, 2005 - Dec. 31, 2007, \$100,000. PI: Amit Sheth. UGA Co-PIs: Arpinar, Kochut, and Miller.

36. **SemDis: Discovering Complex Relationships in Semantic Web**, PI of joint UGA-UMBC project: Amit Sheth. UGA Co-PIs: Arpinar, Kochut, and Miller. UMBC Co-PIs: Joshi, Finin, and 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), Jan. 2007 - Dec. 2009. REU Supplement: \$15,000.
37. **Sensor Data Management**, Principal Investigator of subcontract (subcontract to daytaOhio in Sensor-Aided Vigilance (SAVig), funded by the Air Force Research Laboratory), \$32,000, Apr. 2007 - Aug. 2007.
38. **An Ontological Approach to Financial Analysis & Monitoring**, PI: Amit Sheth. ARDA-funded project (subcontract to CTA, Inc.), \$325,000, Apr. 2005 - Sept. 2006.
39. **Semantic Association Identification and Knowledge Discovery for National Security Applications**, National Science Foundation, CISE-ITR-0219649. PI: Amit Sheth. Co-PIs: I.B. Arpinar and K. Kochut. \$200,000. REU Supplement for 2004, \$12,000, Jul. 1, 2002 - Jun. 30, 2005.
40. **Ontology, Metadata and Semantic Association Support for Semantic Agent Based Document Protection**, PI: Amit Sheth. ARDA-funded project (subcontract to CTA, Inc.), \$38,716, Nov. 2004 - February 2005.
41. **The Alexandria Digital Earth Modeling System** (Semantic Interoperability and Collaboration), UGA subcontract to UCSB, National Science Foundation-IIS-9817432, \$600,000 in federal funds, plus \$25,000 in UGARF equipment matching, Sept. 1999 - Aug. 2004. PI: Amit Sheth. Co-PI: K. Kochut,
42. **System-Level Techniques for Energy Aware Computing** (focus area: Enabling Personal Networked and Home Computing Applications with Metadata, \$27,150, Jul. 1, 2003 - Jun. 30, 2004. PI: D. Lowenthal. Co-PIs: Bhandarkar, Sheth, Li, and Waterson.
43. **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, Apr. 1, 2002 - Mar. 31, 2003.
44. **Extending METEOR with workflow reuse, adaptation, and collaboration**, Principal Investigator, awarded by Naval Research Laboratory and ITT, \$200,000, Jan. 1, 2000 - Sept. 30, 2000.
45. **Workflow Management for Advanced DoD Applications**, Principal Investigator, awarded by Naval Research Lab/Department of Navy-No0173-98-2-LO05 (Co-Principal Investigators: K. Kochut, J. Miller), \$315,542 in federal funds, plus \$15,000 in UGARF equipment matching funds, Jul. 1, 1998 - Dec. 31, 1999.
46. **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-Principal Investigators: 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), Mar. 1995 - Aug. 1996.

47. **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-Principal Investigators for first year: K. Kochut, J. Miller, Co-Principal Investigators 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, Jun. 1996 - May 1999.
48. **InfoHarness: A Scalable 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, Apr. 15, 1995 - Aug. 30, 1997.
49. **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 \$6,000 donation by the University of Georgia Research Foundation, Sept. 1995 - Sept. 1996.
50. **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), Dec. 1996 - Aug. 1997.
51. Principal Investigator of research grants/contracts of over \$4 million dollars DARPA, Army Research Labs and other sources before joining UGA.

Industry/Consortia/VC Funds [4]

1. As cofounder of Cognovi Labs, shared primary responsibility of raising \$865,000 in seed investments in 2017 and more than \$2million in grant investments.
2. **Homeland Security Workshop**, Principle Investigator (with Co-Principal Investigators E. Lynn Usery, I. Budak Arpinar, Xiaobai Yao), UCGIS, \$15,000, Aug. 2003–Jul. 2004.
3. Led as founder/CEO/SrVP acquisition of approximately \$5 million in Venture and commercial funding for R&D including \$2.4 million **Taalee, Series A. VC funds led by Redwood Ventures, Oct. 1999**. Over \$7million invested in local economy during university spin-off Taalee/Voquette before its acquisition/merger (1999-2002), company still operational and economic activities continue.
4. **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, Jan.–Dec. 1998.

State and University Funds: Role of Principal Investigator, unless indicated otherwise [13]

1. **Westwood Partnership to Prevent Juvenile Repeat Violent Offenders**, Ohio Office of Criminal Justice Services, \$140,000, Jan. 1, 2015 – Sept. 30, 2017. PI: Amit Sheth. Co-PIs: Derek Doran and Jack Dustin.
2. **kHealth enabled health Monitoring, Epidemiology & Public Health Research**, Office of Vice President for Research, \$40,000, Jun. 17, 2003-Dec. 31, 2014. **Twitris- a system for collective intelligence**, National Science Foundation, \$30,000, \$50,000, Jul. 2013.

3. **Advanced Data Management Tuition**, Wright State University Graduate School, \$126,000, Jan. 20007-Jun. 30, 2013.**Center of Excellence Kno.e.sis Operating Award**, Wright State University, \$330,000, Jul. 2010-Jun. 2013.
4. **A Study of Social Web Data on Oxycontin Abuse Using Semantic Web Technology**, Wright State University Boonshoft Scholl of Medicine Department of Community Health, \$13,950, Apr. 2, 2011-Dec. 31, 2011.**Education Partnership Agreement between Wright State and Wright Patterson Air Force Base**, 711th Human Performance Wing, Air Force Research Laboratory \$61,000.
5. **Cloud Computing Collaboratory**, Wright State University, \$48,000, Co-Principal Investigators: J. Gallagher, K. Chen, Y. Pei, M. Raymer, TK Prasad, B. Wang, M. Rizki, S. Wang, P. Mateti, M. Liu.
6. **Major Collaboration/Infrastructure Grant**. “Advanced Data Management Resource for Biomedical Research.” Principal Investigator (WSU Co-Principal Investigators: M. Raymer, N. Reo), awarded through the Research Incentive Program of the Ohio Board of Regents by Wright State University, \$30,000, May 1, 2007–Jun. 30, 2008.
7. **Advanced Data Management Resource**, Ohio’s Research Challenge, \$210,000, Jun. 1, 2006-2017.
8. **LexisNexis Ohio Eminent Scholar Endowment Fund**, \$1,500,000, June 1, 2006.
9. **Faculty Research Commercialization Program**, awarded by the Advanced Technology Development Center in conjunction with Georgia Research Alliance, \$50,000, Jul. 1, 1998–Jun. 30, 1998.
10. **UGA Office of Instructional Development (OID)**, Co-Principal Investigators: D. Everett, J. Miller, K. Kochut, J. Smith, R. Robinson, and H. Arabnia, “Mobile Multimedia Instruction Environment.” \$8,500, Apr. 1, 1996-Mar. 30, 1997.
11. **Course Approval Process Automation (CAPA)**, Principal Investigator, funded by the Vice President for Academic Affairs, University of Georgia, \$150,065 (budget) Jul. 1, 1996-Jun. 30, 1997.
12. **CareWeb for the Family Connection Program**, Principal Investigator, cooperative agreement funded by Medical College of Georgia, \$30,000, May 1997-Apr. 1998.
13. **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, Jul. 1997–Jul. 1998.

Competitive Awards, Sponsored Research and Industry Cash Gifts [18]

1. **Employee and Job Search Semantic Engine: Phase I**, Universal Freelancer, \$30,000, 01/2016.
2. **2015-2016 George Thomas Fellowship**, Health Data Consortium, \$10,500, 08/2015; awarded to Sujana Perera.
3. **Cardiology Semantic Analysis System**, ezdataintelligence (ezDI) LLC, \$100,000, (\$25,000 in 2011, renewed: 2012, 2013, and 2014 at the same level.
4. **Janya, Inc.**, \$25,150. “Enhancing Information Extraction with Linked Open Data.” Apr., 2011.
5. **Department of Community Health**, \$30,000. “A Study of Social Web Data on Oxycontin Abuse Using Semantic Web Technology.” Jan., 2011.
6. **Microsoft**, \$75,000 unrestricted gift, Jul., 2010.
7. **Hewlett Packard**, \$45,000 for “Model Generation and Model Extension for Information and Knowledge Management.” Competitive Research Excellence Award, Jun., 2010.
8. **Competitive Award, Microsoft Research**, \$60,000 for “Chatter, Intent, Good Karma, and Contextual Advertisements in Social Networks.” Feb. 2008.

9. **Competitive Award, IBM UIMA Innovation Award**, \$23,000 for “UIMA-based Infrastructure for Summarizing Casual, Unstructured Text.” Nov. 2007.
10. **Gift from HP Research, \$50,000**, for research in unstructured text extraction, starting Jan. 2008.
11. **Gift/donation**, Athens Heart Center, \$32,000, May 2005.
12. **Competitive Award**, IBM Eclipse Innovation Grant 2005, \$27,000, Jan. 2005.
13. **Gift/donation**, 2004 IBM Faculty Award, \$30,000, 2004.
14. **Competitive Award**, IBM Eclipse Innovation Award 2004, \$28,000, Jan. 2004.
15. **Gift** from the Boeing Company as a LSDIS industry sponsor, \$55,000 (annual gifts), Dec. 1996, Jan. 1998, Jan. 2001.
16. **Gift** from Microelectronic and Computer Technology Corporation (MCC) as a LSDIS industry sponsor, \$20,000, Jun. 1997.
17. **Gift** from Hewlett-Packard Labs as a LSDIS industry affiliate, \$12,500 (annual gifts for 1995, '96, '97, '98).
18. **Gift** from LG Electronics Research Center of America as a LSDIS industry sponsor, \$25,000, Feb. 1998.

Industry Donations Received (Totals More Than \$650,000) [10]

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

Speeches and Talks

Keynote and Plenary Invited Talks [55]: International Conferences/Workshops and Significant International/National Meetings

1. Augmented Personalized Health: using AI techniques on semantically integrated multimodal data for patient empowered health management strategies, 2018 AAAI Joint Workshop on Health Intelligence (W3PHIAI 2018), 2 February 2018, New Orleans, LA.
2. “Augmented Personalized Health: How Smart Data with IoTs and AI is about to Change Healthcare,” at Big Data Integration and IoT for Smart Healthcare at the RTSI 2017 – 3^o International Forum on Research and Technologies for Society and Industry, Modena, Italy, 13 September 2017.

3. **"Knowledge will Propel Machine Understanding of Big Data,"** [*China Conference on Knowledge Graph and Semantic Computing \(CCKS2017\)*](#), 29 August 2017, Chengdu, China.
4. **"Semantic, Cognitive, and Perceptual Computing – three intertwined strands of a golden braid of intelligent computing,"** Keynote at the [*2017 IEEE/WIC/ACM International Conference on Web Intelligence \(WI'17\)*](#), 24 Aug 2017, Leipzig, Germany.
5. "Transforming Social Big Data into Timely Decisions and Actions", Keynote at the [*International Workshop on Social Computing \(IWSC 2017\)*](#), co-organized with WWW2017, Perth, Australia, April 4, 2017.
6. **"Semantic, Cognitive and Perceptual Computing – Three Intertwined Strands of a Golden Braid of Intelligent Computing."** Keynote at the International Summer School on Web Science and Technology (WebST2016), Bilbao, Spain, July 19, 2016.
7. "Semantics-empowered Smart City applications: today and tomorrow." The 6th Workshop on Semantics for Smarter Cities ([*S4SC 2015*](#)) at ISWC 2015, Oct. 12, 2015, Bethlehem, PA.
8. **"Smart Data - How you and I will exploit Big Data for personalized digital health and many other activities."** Keynote at *IEEE Big Data 2014*. Bethesda, MD, Oct. 28, 2014 ([Abstract](#), [Slides](#)).
9. "Semantic Technologies for Big Sciences including Astrophysics." Plenary talk at *EarthCube End-User Workshop on Science-Driven Cyberinfrastructure Needs in Solar-Terrestrial Research*, NJIT. New Jersey, NJ, Aug. 13-14, 2014.
10. "Smart Data for you and me: Personalized and Actionable Physical Cyber Social Big Data." Featured Keynote at *WORLDCOMP '14 - The 2014 World Congress in Computer Science, Computer Engineering, and Applied Computing*. Las Vegas, NV, Jul. 21, 2014 ([Abstract](#), [Video](#), [Slides](#), [Pictures](#)).
11. **"Transforming Big Data into Smart Data: Deriving Value via Harnessing Volume, Variety, and Velocity Using Semantic Techniques and Technologies."** Keynote at *30th IEEE International Conference on Data Engineering*, Chicago, Illinois, Apr. 2, 2014 ([Announcement](#), [Presentation](#)).
12. **"Transforming Big Data into Smart Data: Deriving Value via harnessing Volume, Variety and Velocity using semantics and Semantic Web."** Keynote at *SEBD2013: 21st Italian Symposium on Advanced Database Systems*. Jun. 30 - Jul. 3 2013, Roccella Jonica, Italy. **"Physical Cyber Social Computing: An early 21st century approach to Computing for Human Experience."** Keynote at *WiMS2013: International Conference on Web Intelligence, Mining and Semantics*. Jun. 12-14, 2013, Madrid, Spain.
13. **"Computing for Human Experience: Semantics empowered Cyber-Physical, Social and Ubiquitous Computing beyond the Web."** Keynote at *OnTheMove Federated Conferences & Workshops (OTM 2011)*. Crete, Greece, Oct. 17-21, 2011.
14. **"Spatial Semantics for Better Interoperability and Analysis: Challenges and Experiences in Building Semantically Rich Applications in Web 3.0."** Keynote at 3rd Annual Spatial Ontology Community of Practice Workshop (SoCoP 2010), in conjunction with USGSReston, VA, Dec. 3, 2010.
15. "Semantic Web, Powering Intelligent Web Applications." Luncheon Keynote at *Technology First's Technology Landscape 2013*. May 16, 2010, Dayton, Ohio
16. **"Computing for Human Experience: Semantics empowered Sensors, Services, and Social Computing on Ubiquitous Web."** Keynote at *4th International Conference on Digital Information Management (ICDIM 2009)*. Ann Arbor, Michigan, Nov. 1-4, 2009.
17. **"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, Sept. 16-18, 2009.

18. ["Extending SPARQL to Support Spatially and Temporally Related Information."](#) Keynote at *Semantic Technology Conference*. San Jose, CA, Jun. 16, 2009.
19. ["Computing for Human Experience: Sensing, Perception, Semantics, Social Computing, Web 3.0, and beyond."](#) Keynote at *20th Midwest Artificial Intelligence and Cognitive Science Conference (MAICS 2009)*. Fort Wayne, Indiana, Apr. 18-19, 2009.
20. ["Computing for Human Experience: Sensors, Perception, Semantics, Web N.O, and Beyond."](#) Keynote at *3rd Asian Semantic Web Conference (ASWC 2008)*. Bangkok, Thailand, Feb. 2-5, 2009.
21. ["Semantics to Empower Services Science: Using Semantics at Middleware, Web Services and Business Levels."](#) *CSIRO*. Canberra, Australia, Aug. 11, 2008.
22. ["Empowering Translational Research using Semantic Web Technologies."](#) Plenary invited talk at the *Ohio Collaborative Conference on Bioinformatics (OCCBIO)*. Toledo, OH Jun. 2-4, 2008.
23. ["Semantic Web for Health Care and Biomedical Informatics."](#) Keynote at *NSF Biomedical Informatics Workshop: Expanding Secondary Use of Health Data*. Dec. 4-5, 2007.
24. ["Semantic Web techniques empower perception and comprehension in Cyber Situational Awareness?"](#) Invited talk at the *ARO Cyber Situational Awareness Workshop*. Fairfax, VA, Nov. 14-15, 2007.
25. ["Realizing the Relationship Web: Morphing information access on the Web from today's document- and entity-centric paradigm to a relationship-centric paradigm."](#) Keynote at *ACM Multimedia 2007 International Workshop: The Many Faces of Multimedia Semantics*. Augsburg, Germany, Sept. 28, 2007.
26. ["Semantics to Empower Services Science: Using Semantics at Middleware, Web Services and Business Levels."](#) Keynote at *9th International Conference on Enterprise Information Systems (ICEIS2007)*. Funchal, Portugal, Jun. 12-16, 2007.
27. ["Driving Deep Semantics in Middleware and Networks: What, why and how?"](#) Keynote at *Semantic Sensor Networks Workshop, 5th International Semantic Web Conference (ISWC-2006)*. Athens, GA, Nov. 6, 2006.
28. ["{Ontology: Resource} x {Matching : Mapping} x {Schema : Instance} :: Components of the same challenge."](#) Keynote at *International Workshop on Ontology Matching (OM-2006)*, *5th International Semantic Web Conference (ISWC-2006)*. Athens, GA, Nov. 5, 2006.
29. ["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, Sept. 14-15, 2006.
30. ["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, Jun. 22, 2006.
31. ["Semantic Web applications in Financial Industry, Government, Health Care and Life Sciences,"](#) Keynote Address at *AAAI Spring Symposium on Semantic Web Meets eGovernment*. Stanford University, Palo Alto, CA, Mar. 28, 2006.
32. ["Semantics Enabled Industrial and Scientific Applications: Research, Technology and Deployed Applications."](#) Keynote Address at *1st Online Metadata and Semantic Research Conference*. Nov. 21-30, 2005.
33. ["Semantics for Scientific Experiments and the Web: the implicit, the formal and the powerful."](#) Featured talk, *BISCSE 2005: Forging New Frontiers*. Berkeley CA, Nov. 2-6, 2005.

34. ["Semantic Web Applications in Industry: Examples in Risk & Compliance."](#) Part I. ["Semantic Web & Semantic Web Services: Applications in Health Care and Scientific Research."](#) Part II. Keynote at *IFIP Working Conference on Industrial Applications of Semantic Web (IASW-2005)*. Jyväskylä, Finland, Aug. 25–27, 2005.
35. ["Web Services to Semantic Web Processes: Investigating Synergy between Practice and Research."](#) Keynote at *1st European Young Researchers Workshop on ServiceOriented Computing*. Leicester, UK, Apr. 21, 2005 ([Abstract](#), [Presentation](#)).
36. ["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, Dec. 16, 2003.
37. ["What can Semantics do for Bioinformatics?"](#) Keynote at *Russian Conference on Digital Libraries (RCDL 2003)*, Saint Petersburg, Russia, Oct. 29, 2003.
38. ["Semantics-Powered Bioinformatics: What, Why and How of Semantic Search, Integration, Processes and Analytics."](#) Invited Talk at *Semantic Web Technologies for Science and Engineering Workshop*. Sanibel Island, FL, Oct. 20, 2003.
39. ["Semantic Web in Action \(Also Known as Ontology-driven Information Search, Integration and Analysis\)"](#). Keynote Address at *Net Object Days 2003 and MATESo3*. Erfurt, Germany, Sept. 23, 2003.
40. ["From Semantic Search to Analytics and Discovery on Heterogeneous Content: Changing focus from Documents and Entities to Relationships."](#) Keynote at *1st International Workshop on Semantic Web and Databases*, Sept. 8, 2003.
41. ["Semantic Web Process Lifecycle: Role of Semantics in Annotation, Discovery, Composition and Orchestration."](#) Invited Talk, *WWW 2003 Workshop on E-Services and the Semantic Web*. Budapest, Hungary, May 20, 2003.
42. ["Ontology Driven Information Systems in Action \(Capturing and Applying Existing Knowledge to Semantic Applications\)"](#). Invited Talk, *Sharing the Knowledge-International CIDOC CRM Symposium*. Washington, DC, Mar. 26–27, 2003.
43. ["Relationships at the Heart of Semantic Web: Modeling, Discovering, Validating and Exploiting Complex Semantic Relationship."](#) Keynote at *29th Annual Conference on Current Trends in Theory and Practice of Informatics (SOFSEM 2002)*. Czech Republic, Nov. 25, 2002.
44. "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, Jul. 14, 2002.
45. "Content Management, Metadata, and Semantic Web." Inaugural Keynote at *NetObjectDAYS*. Erfurt, Germany, Sept. 11, 2001.
46. ["Semantic Web and Information Brokering: Opportunities, Early Commercialization, and Challenges."](#) Keynote at *Workshop on Semantic Web: Models, Architectures and Management*. Lisbon, Portugal, Sept. 21, 2000
47. "Information Brokering in Digital Media." Keynote at *3rd International Workshop on Cooperative Information Agents CIA-99*. Uppsala, Sweden, Jul. 31–Aug. 2, 1999.
48. ["Processes in the Networked Economy: Portals, Vortex and Dynamic Trading Processes."](#) Keynote at *SAPBM Workshop at the 11th Conference on Advanced Information Systems Engineering*. Heidelberg, Germany Jun. 14–18, 1999
49. "Semantic Interoperability and Information Brokering in Global Information Systems." Keynote at *3rd IEEE Metadata Conference*. Bethesda, MD, Apr. 6–7, 1999.
50. "Workflow Process Management and Enterprise Application Integration in Healthcare." Keynote at *IEEE Workshop on Enterprise Networking and Computing in Healthcare Industry (Healthcom 99)*. Sydney Australia, Jan. 11, 1999.

51. "Real-world Relevant Research Challenges in Workflow." Keynote at EDBT Workshop on Workflow Management Systems, Valencia, Spain, Mar. 27–28, 1998.
52. "Pragmatics Driven Research Issues in Data and Process Integrity in Enterprises." Keynote at *IFIP WG 11.5 Conference on Integrity and Control in Information Systems*. Zurich, Switzerland, Dec. 4–5, 1997.
53. "[Semantic Interoperability in Infocism: Moving Beyond Infrastructural and Data Interoperability in Federated Information Systems](#)." Keynote at *International Conference on Interoperating Geographical Information Systems (Interop '97)*. Santa Barbara, CA, Dec. 3, 1997.
54. "From Contemporary Workflow Process Automation to Adaptive and Dynamic Work Activity Coordination and Collaboration." Keynote at *Workshop on Workflows in Scientific and Engineering Applications*. Toulouse, France, Sept. 1997.
55. "Schemata for Interoperable Database Systems" and "So Far (Schematically) yet So Near (Semantically)." Keynote at *IFIP DS-5 Conference on Semantics of Interoperable Database Systems*. Lorne, Australia, Nov. 1992.

Conference and Workshop Invited Talks [40+]

1. "Big Data and Smart Cities." Dunedin City Council. Dunedin, New Zealand. Apr. 29, 2015.
2. "Transforming Big Data into Smart Data: Deriving Value via Harnessing Volume, Variety, & Velocity using Semantics and Semantic Web." Computer & Information Science Seminars. University of Otago. Dunedin, New Zealand. Mar. 27, 2015.
3. "[Citizen Sensor Data Mining, Social Media Analytics and Applications](#)." *iTrust Seminar Series: Transforming Big Data into Smart Data*. Singapore University of Technology and Design. Mar. 3, 2015.
4. "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 – Jun. 01, 2012.
5. "Citizen Sensing Opportunities and Challenges in Mining Social Signals and Perceptions." [2011 Microsoft Research Faculty Summit](#). Redmond, WA, Jul. 18-20, 2011. ([PPT](#), [PDF](#)).
6. "Active Perception Over Machine and Citizen Sensing." [2011 Semantic Technology Conference \(SemTech\)](#). San Francisco, CA, Jun. 7, 2011. [with Cory Henson]
7. "[How To Make Linked Data More than Data](#)." *2010 Semantic Technology Conference (SemTech2010)*. San Francisco, CA, Jun. 21-25, 2010.
8. "Semantics empowered Understanding, Analysis and Mining of Nontraditional and Unstructured Data." *AFRL Data Mining Seminar*, Aug. 2009.
9. "[Monetizing User Activity on Social Networks-Challenges and Experiences](#)," with Meenakshi Nagarajan, Kamal Baid, and Shaojun Wang, *Beyond Search-Semantic Computing and Internet Economics 2009 Workshop*. Redmond, Washington, Jun. 10, 2009.
10. "[Challenges of Creating a Knowledge-based Society: Education & Research for India & Gujarat](#)." Invited talk at *World Gujarat Conference: Chaalo Gujarat*, Aug. 30, 2008.
11. "Empowering Translational Research using Semantic Web Technologies." Ohio Collaborative Conference on Bioinformatics (OCCBIO), Toledo, OH, Jun. 2-4, 2008.
12. "[Semantic Sensor Web](#)," with Cory Henson. *Semantic Technology Conference*. San Jose, CA, May 18-22, 2008.
13. "[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.
14. "[Dynamic and Agile SOA using SAWSDL](#)," with Karthik Gomadam, and Kunal Verma, Semantic Technology Conference, San Jose, CA, May 18, 2008.

15. "Semantic Sensor Web." *Sensor Web Enablement (SWE) Working Group of the Open Geospatial Consortium (OGC)*, St. Louis, MO, Mar. 26, 2008.
16. "[Semantic Sensor Web](#)." *Special SICoP Conference, Building Semantic Interoperability Solutions for Information Sharing and Integration*. Falls Church, VA, Feb. 5, 2008.
17. "[Strategic Importance of Higher Education and Research in Positioning Gujarat for Global Competitiveness](#)." Plenary Invited Talk, *Global Gujarat & Its Diaspora*. Hemchandracharya North Gujarat University, Patan, India, Jan. 17–19, 2008.
18. "[Trailblazing, Complex Hypothesis Evaluation, Abductive Inference and Semantic Web—exploring possible synergy](#)," *ARO Workshop on Abductive Reasoning: Evidence and Intelligent Systems*, Adelphi, MD, Aug. 23–24, 2007.
19. "[Relationship Web: Realizing the Memex vision with the help of Semantic Web](#)." *SemGrail 2007*. Redmond, WA, Jun. 21–22, 2007.
20. "[Semantic Annotations for WSDL](#)." with Jacek Kopecky (DERI Innsbruck), *W3C Track at the 16th World Wide Web Conference (WWW2007)*. Banff, Canada, May 10, 2007.
21. "Semantic empowerment of Life Science Applications." *Microsoft eScience Workshop*, Cincinnati Children Hospital & Medical Center, Oct. 14, 2006.
22. "[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.)
23. "Semantic Web applications in Financial Industry, Government, Health Care and Life Sciences." *Taxonomies and Semantic Technologies for S&T Analysis Conference*, The MITRE Corporation, Mar. 17, 2006.
24. "Active Semantic Electronic Patient Records." *Semantic Technology Conference*. San Jose, CA, Mar. 7, 2006.
25. "Autonomic Web Process," vision paper presented at the *3rd International Conference on Service Oriented Computing*. Amsterdam, Netherlands, Dec. 13, 2005.
26. "Semantic Technology in the Real World: Experiences and Lessons based on Enterprise Semantic Applications." *Semantic Technology Conference 2005*, San Francisco, CA, Mar. 8, 2005.
27. "[Semantic Web Technology in Support of Bioinformatics for Glycan Expression](#)." *W3C Workshop on Semantic Web for Life Sciences*. Cambridge, MA, Oct. 28, 2004.
28. "From Semantic Search & Integration to Analytics." *KMWorld 2004*, Santa Clara, CA, Oct. 26–28, 2004.
29. "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, Sept. 21, 2004.
30. "Semantic Web Technology Ontology Testbed." *Ontology in Action Workshop*. Banff, Canada, Jun. 21, 2004.
31. "Semantic Visualization: Interfaces for exploring and exploiting ontology, knowledgebase, heterogeneous content and complex relationships." *NASA Virtual Iron Bird Workshop*, Monterey, CA, Apr. 2, 2004.
32. "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, Jun. 12–13, 2003.
33. "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, *Science on the Semantic Web, Building a New Generation of Environmental Information Systems*, Rutgers University, Newark, NJ, Oct. 24, 2002.
34. "Process Composition: Quality of Service Specification Semantics, and Adaptation." Invited Talk, *EI3-IC workshop on Interoperability of Business Processes and Enterprise Models*, Gaithersburg, MD, Feb. 6–8, 2002.

35. "Semantic Content Annotation and Applications: Semantic Web Now and Challenges Ahead." Invited talk, *2001 IRC International Conference on Internet Information Retrieval*. Seoul, South Korea, Oct. 29, 2001.
36. "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, Aug. 16, 2001.
37. "Information Scapes: A Paradigm for Knowledge Discovery in Semantic Web." Inaugural session, Invited Talk, [IJCAI-2001 Workshop on Knowledge Discovery from Distributed, Dynamic, Heterogeneous, Autonomous Data and Knowledge Sources](#). Seattle, WA, Aug. 6, 2001.
38. "[Workflow and Process Automation in Information Systems: A Proposal for a Multidisciplinary Research Agenda and Follow-up](#)." Invited Talk, NSF Invitational Workshop on Distributed Information, Computation, and Process Management for Scientific and Engineering Environments. Virginia, May 15–16, 1998.
39. "From Process Modeling to Workflow Automation." Invited Talk, *National Institute of Standards and Technology sponsored Process Information Technology Workshop*. Gaithersburg, MD, Mar. 13, 1998.
40. "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, Aug. 1997.
41. "Overview of Workflow Research and Technology." Invited Talk, *DARPA Collective Actions Tools Workshop*, Mar. 1996.
42. "From Data Dirt Roads to Infocism." Inaugural session Invited Talk, *7th International Conference on Management of Data*. Pune, India, Dec. 1995.

Invited and Colloquia Talks [130+]

(Conference and workshop paper presentations/talks not included.)

1. "Knowledge will Propel Machine Understanding of Big Data," IBM Almaden Research Center, San Jose, CA, 27 Oct 2017.
2. "Big Data and Smart Cities." Dunedin City Council. Dunedin, New Zealand. Apr. 29, 2015.
3. "Research Career and Higher Education Choices for ICT Students." IET-Ahmedabad University. Town hall (guided discussion with Q&A). Mar. 7, 2016.
4. "[Semantics-enhanced Linguistic, NLP, & ML Approach to Health Informatics](#)." IET-Ahmedabad University. Feb. 26, 2016.
5. "[Semantics-empowered Smart City Applications: Today & Tomorrow](#)." IET-Ahmedabad University. Feb. 26, 2016.
6. "Semantic Sensor Web." IET - Ahmedabad University. Feb. 12, 2016. [[SSW project website](#), [Video](#)].
7. "Physical-Cyber-Social Computing: An Early 21st Century Approach to Computing for Human Experience." IET - Ahmedabad University. Feb. 10, 2016. [WiMS keynote: [Slides](#), [Video](#). [PCS-EarthCube Video](#), [Applications of Multimodal P\(IoT\)CS Data for Reliable and Actionable Insights](#); papers: [ACM-TIST](#), [AAAI](#).]
8. "Citizen Sensing & Social Media Analysis with Twitris." IET - Ahmedabad University. Feb. 9, 2016. [[Slides](#), [Video](#); [Twitris](#); [Sample real-world application stories](#).]
9. "Transforming Big Data into Smart Data: Deriving Value via Harnessing Volume, Variety, and Velocity Using Semantics and Semantic Web." IET - Ahmedabad University, LNMIIT (Jaipur, India), VJTI (Mumbai, India), IIT (Patna, India), and CiRG (New Delhi, India). Feb. 8, 11, 17, and 29 2016. Mar. 10, 2016. [[Smart Data wiki/article](#), [Video](#).]

10. "Search Engine Basics to Semantic Search." IET - Ahmedabad University & IIIT Hyderabad. Feb. 5 and Feb. 15 2016. [[Schema.org - Evolution of Structured Data on the Web](#), [15 years of Semantic Search and Ontology-enabled Semantic Applications](#), [Review of early Semantic Engine](#), [Semantic Enhancement Engine](#).]
11. "Semantic Web: Introduction & Overview." IET - Ahmedabad University. Feb. 4, 2016. [Intro: [Video](#), [Slides](#); Role of metadata in semantic search; RDF/RDFS: [Video](#), [Slides](#).]
12. "History of World Wide Web & Core Web". IET - Ahmedabad University. Feb. 3, 2016. [Intro: [Slides](#); Videos: [Module 1](#), [Module 2](#); Dirt Road to Infocism: [Slides](#), [Video](#).]
13. "Transforming Big Data into Smart Data: Deriving Value via Harnessing Volume, Variety & Velocity Using Semantics and Semantic Web." [CSIT Seminar: Transforming Big Data into Smart Data: Deriving Value via Harnessing Volume, Variety & Velocity Using Semantics and Semantic Web](#). RMIT School of Computer Science and Information Technology. Melbourne, Australia. Mar. 18, 2015.
14. "Transforming Big Data into Smart Data: Deriving Value via Harnessing Volume, Variety & Velocity Using Semantics and Semantic Web." Commonwealth Scientific and Industrial Research Organisation. Hobart, Australia. Mar. 16, 2015.
15. "[Citizen Sensor Data Mining, Social Media Analytics and Applications](#)." [Singapore Symposium on Sentiment Analysis](#). Nanyang Technology University. Feb. 6, 2015.
16. "[Smart Data - How You and I Will Exploit Big Data for Personalized Digital Health and Many Other Activities](#)." Institute for Infocomm Research (I²R), Agency for Science, Technology & Research (A*STAR). Feb. 5, 2015.
17. Sheth, Amit. "Transforming Big Data into Smart Data." Vienna University of Economics and Business. Vienna, Austria. Dec. 17, 2014.
18. "[Citizen Sensor Data Mining, Social Media Analytics, and Applications](#)." SaSeMe Institute. National University of Singapore. Singapore, Republic of Singapore. Feb. 25, 2014.
19. "Citizen Sensor Data Mining, Social Media Analytics and Applications." [SaSeMe Institute](#). National University of Singapore. Singapore, Republic of Singapore. Feb. 25, 2014.
20. "Transforming Big Data into Smart Data." Nanyang Technological University. Singapore, Republic of Singapore. Feb. 13, 2014.
21. "Transforming Big Data into Smart Data." University of Malaysia. Kuala Lumpur, Malaysia. Feb. 10, 2014.
22. "[Transforming Big Data into Smart Data](#)." Singapore Management University. Singapore, Republic of Singapore. Feb. 6, 2014.
23. "[Transforming Big Data into Smart Data](#)." [Institute for Infocomm Research \(I²R\), Agency for Science, Technology & Research \(A*STAR\)](#). Singapore, Republic of Singapore. Jan. 29, 2014.
24. "[Transforming Big Data into Smart Data](#)." International Institute of Information Technology. New Delhi, India. Jan. 16, 2014.
25. "[Transforming Big Data into Smart Data](#)." Indian Institute of Sciences. Bangalore, India. Jan. 8, 2014.
26. "Transforming Big Data into Smart Data." EMC Corporation. Bangalore, India. Jan. 7, 2014.
27. "Physical-Cyber-Social Computing." Computer Society of India, Ahmedabad Education Society Institute for Computer Studies. Ahmedabad, India. Jan. 4, 2014.
28. "Physical-Cyber-Social Computing." International Institute of Information Technology. Bangalore, India. Jan. 1, 2014.
29. "Transforming Big Data into Smart Data." International Institute of Information Technology. Gandhinagar, India. Jan. 1, 2014.
30. "[Transforming Big Data into Smart Data](#)." Maharastra Institute of Technology. Pune, India. Dec. 24, 2013.

31. "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 - Jun. 01, 2012.
32. "[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), Mar. 26, 2011.
33. "[Computing for Human Experience: Semantics empowered Sensors, Services, and Social Computing on ubiquitous Web.](#)" SRI International, Menlo Park, CA, May 3, 2010.
34. "[Semantic \(Web\) Technologies for Translational Research in Life Sciences.](#)" *The School of Informatics and Computing Colloquium Series*. Indiana University, Feb. 5, 2010.
35. "Semantics to Empower Services for Agile Global Business." Indian Institute of Technology. Bombay, Powai, India, Aug. 1, 2009.
36. "Semantics, Services, Sensor and Social Computing on the Web." *Dhirubhai Ambani Institute of Information and Communication Technology (DAIICT)*, Gandhinagar, India, Jul. 29, 2009.
37. '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).
38. "Semantic Sensor Web." Advancing Digital Watersheds and Virtual Environmental Observatories II session of AGU Fall Meeting, San Francisco, CA, USA, Dec. 17, 2008
39. "Computing for Human Experience." Department of Computer Science (DSIC) of the Technical University of Valencia (UPV), Valencia, Spain, Oct. 24, 2008.
40. "Challenges of Creating a Knowledge-based Society: Education & Research for India & Gujarat." Invited Talk, *World Gujarat Conference: Chaalo Gujarat*. Edison, NJ, Aug. 30, 2008.
41. "Globalization and Knowledge-intensive Economies." *AINA/World Gujarat Conference*, Edison. NJ, Aug 29-31, 2008.
42. "Semantic Web: Promising Technologies, Current Applications and Research Directions." Macquarie University, Sydney, Aug. 14, 2008.
43. "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, Aug. 13, 2008.
44. "Semantics to Empower Services Science: Using Semantics at Middleware, Web Services and Business Levels." *CSIRO*. Canberra, Australia, Aug. 11, 2008.
45. "[Semantic Sensor Web.](#)" ARC Research Network on Intelligent Sensors. *Sensor Networks and Information Processing - ISSNIP talk*, Melbourne, Australia, Aug. 1, 2008.
46. "Semantic Web: Promising Technologies, Current Applications & Future Directions." University of Adelaide, Australia, Jul. 23, 2008.
47. "Semantic Sensor Web." Semantic Technology Conference, San Jose, CA, May 18-22, 2008.
48. "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.
49. "Dynamic and Agile SOA using SAWSDL." *Semantic Technology Conference*. San Jose, CA, May 18, 2008.
50. "Semantic Sensor Web." Sensor Web Enablement (SWE) Working Group of the Open Geospatial Consortium ([OGC](#)), St. Louis, MO, Mar. 26, 2008.
51. Sheth, Amit. "Semantic Sensor Web." Special SCoP Conference, Building Semantic Interoperability Solutions for Information Sharing and Integration. Falls Church, VA, Feb. 5, 2008.

52. ["Strategic Importance of Higher Education and Research in Positioning Gujarat for Global Competitiveness."](#) Plenary Invited Talk, Global Gujarat & Its Diaspora, Hemchandracharya North Gujarat University, Patan, India, Jan. 17–19, 2008.
53. "Relationship Web: Spinning the Semantic Web from Trailblazing to Complex Hypothesis Evaluation." *Cyber Center Lecture Series*. Discovery Park, Purdue University, Lafayette, IN, Aug. 16, 2007.
54. "Relationship Web: Spinning the Semantic Web from Trailblazing to Complex Hypothesis Evaluation." Presentation, College of Engineering, University of Illinois at Chicago, Chicago, IL, 2007.
55. "Semantic Empowerment of Life Science Applications." Cincinnati Children Hospital and Medical Center, Cincinnati, OH, Oct. 14, 2006.
56. "Career Options, Changing Trends and Emerging Areas in Computer Science and related fields." Birla Institute of Technology & Science, Pilani, India, Sept. 30, 2006.
57. "Semantics to energize the full Services Spectrum." IBM Indian Research Lab, New Delhi, India, Jul. 27, 2006.
58. "Semantics to energize the full Services Spectrum." *DA-IICT*. Ahmedabad, India, Jul. 25, 2006.
59. "METEOR-S: Using Semantics to energize Services & Processes." *DERI*. Galway, Ireland, Jun. 19, 2006.
60. "Semantic Web applications in Financial Industry, Government, Health care and Life Sciences." Accenture Technology Labs, Palo Alto, CA, Mar. 29, 2006.
61. "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, Mar. 6, 2006.
62. "Web Service Semantics-WSDL-S." W3C Advisory Committee Meeting, Montreal, Canada, Nov. 30, 2005.
63. "What can Semantics do for Bioinformatics?" Special Seminar, Institute of Bioinformatics, University of Georgia, Sept. 22, 2005.
64. "Semantic Web Applications in Enterprises and Scientific Research." W3C Advisory Committee Meeting, Cannes-Mandelieu, France, Jun. 7, 2005.
65. "Semantic Web: Technology & Applications in Search, Digital Media/Content Management, Science and National/Homeland Security." Digimarc Corp., Portland, OR, May 3, 2005.
66. "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, Oct. 26, 2004.
67. "Web Services to Semantic Web Process." Tsinghua University, Beijing, China, Sept. 16, 2004.
68. "Semantic Web Technology in Action: From Search and Integration to Analytics." Shanghai Jiao Tong University, Shanghai, China, Sept. 15, 2004.
69. "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.
70. "Semantic Web in Action." NASA Ames Research Center, Menlo Park, CA, Apr. 1, 2004.
71. "Semantic Web in Action." IBM Almaden Research Center, Jan. 13, 2004.
72. "Semantic Discovery and its applications to Homeland Defense and Bioinformatics." Georgia Technology Institute, Atlanta, GA, Nov. 24, 2003.
73. "Ontology-based Information Systems: From Research to Reality." Boeing PhantomWorks, Seattle, WA, Sept. 17, 2003.

74. "Semantic Web Process Lifecycle: Role of Semantics in Annotation, Discovery, Composition and Orchestration." IBM T.J. Watson Research Center, Hawthorne, NY, Jul. 10, 2003.
75. "Ontology Driven Information Systems in Action: Capturing and Applying Existing Knowledge to Semantic Applications." University of Namur, Belgium, Jun. 2003.
76. "Semantic Web Applications and Next Generation Content Management." Hongik University, Seoul, Korea, Oct. 30, 2001.
77. "Web, Semantics, OIL and FUEL: Semantic Interoperability and learning on the Web." Stanford University Database Seminar, Oct. 20, 2000.
78. "Mapping your job search process while balancing Career Growth, Pay and Security." ACM Student Chapter 1st Annual ACM Dinner, Athens, GA, Apr. 5, 2001.
79. "Changing Focus on Interoperability in Global Information Systems." Technical Speaker Series, MITRE, Dec. 3, 1998.
80. "Enabling Virtual Teams and Infocism." Bell Communications Research, Dec. 2, 1998.
81. "METEOR System for Distributed, Multi-paradigm Workflow Management." Invited technical presentation, CERN, Geneva, Switzerland, Mar. 31, 1998.
82. "InfoHarness and InfoQuilt: Steps towards enabling Infocism through Semantic Interoperability." colloquium talk, University of California, Santa Barbara, Mar. 5, 1998.
83. "InfoHarness and InfoQuilt Projects." CNN Interactive, Atlanta, GA, Apr. 21, 1997.
84. "Information (Super) Highway: New Opportunities for Global Competitive Advantage for Developing Countries." H. M. College, Ahmedabad, India, Sept. 12, 1996.
85. "Information (Super) Highway: New Opportunities for Global Competitive Advantage for Developing Countries." *IEEE Computer Society*. Gujarat, India, Sept. 11, 1996.
86. "Media-independent Correlation and Access of Heterogeneous Digital Information." Indian Space Research Organization, Ahmedabad, India, Sept. 9, 1996.
87. "Adapt/X Harness System for Managing Heterogeneous Information in Internet and Intranets." Conference on Very Large Databases, Bombay, India, Sept. 4, 1996.
88. "Transactional Workflow Management: Research, Technology and Applications." Indian Institute of Management, Ahmedabad, India, Dec. 1994.
89. "Issues in Interoperable Information Systems." Indian Institute of Technology, Bombay, India, Dec. 29, 1994.
90. "Multi-Database Systems: Research and Reality." ACM Lecture Series Talk, Univ. of Michigan, Nov. 1994.
91. "Transactional Workflow Systems." ACM Lecture Series Talk, Wayne State University, Detroit, MI, Nov. 17, 1994.
92. "Multi-Database Systems: Research and Reality." ACM Lecture Series Talk, ACM Professional Chapter, Ann Arbor, MI, Nov. 17, 1994.
93. "Multi-system Applications and Transactional Workflows." George Mason University, Fairfax, VA, May 1994.
94. "Multisystem Applications and Transactional Workflows." University of California, Riverside, Apr. 1994.
95. "Transactional Workflow Management: Research, Technology and Applications." State University of New York, Albany, NY, Mar. 1994.
96. "Transactional Workflow Management: Research and Applications." Bell Labs, Murray Hill, NJ, Jul. 1993.
97. "Transactional Workflow Management: Research and Applications." Matsushita Information Technology Laboratory, Princeton, NJ, Jun. 1993.
98. "Management of Interdependent Data: Specification, Enforcement and Applications." University of Zurich, Zurich, Switzerland, May 1993.
99. "Schematic and Semantic Heterogeneity." ETH (Swiss Federal Institute of Technology), Zurich, Switzerland, May 1993.

100. "Multisystem Workflow Applications." University of Munich, Apr. 1993.
101. "Management of Interdependent Data: Specification, Enforcement and Applications." George Mason University, Fairfax, VA, Mar. 1993.
102. "BERDI: A Schema Design, Analysis and Integration Toolkit." Hewlett Packard Labs, Feb. 1993.
103. "The CHIME Project." Microelectronics and Computer Corporation, Austin, TX, Jan. 1993.
104. "Multidatabase Systems: Research and Reality." Queensland University of Technology, Brisbane, Australia, Nov. 1992.
105. "Federated Databases for Managing Distributed, Heterogeneous, and Autonomous Databases." La Trobe University, Bandoora, Australia, Nov. 1992.
106. "Management of Interdependent Data: Specification, Enforcement and Applications." ETH (Swiss Federal Institute of Technology), Zurich, Switzerland, Oct. 1992.
107. "Management of Interdependent Data." IBM-European Networking Center and Scientific Research Heidelberg, Heidelberg, Germany, Oct. 1992.
108. "Transactional Workflow Management: Specification and Enforcement." IPSI-GMD, Darmstadt, Germany, Oct. 1992.
109. "Federated Databases for Managing Distributed, Heterogeneous, and Autonomous Databases." University of Ulm, Oct. 1992.
110. "The BrAID System for Integrating AI and DBMS Systems." Fern Universitat, Hagen, Germany, Oct. 1992.
111. "Multidatabase Systems: Research and Reality." Simon Fraser University, Vancouver, Canada, Aug. 1992.
112. "Management of Interdependent Data in Multidatabase Systems." U of Maryland-BC, May 1992.
113. "Management of Interdependent Data." IPSI-GMD, Darmstadt, Germany, Mar. 1992.
114. "Semantics Issues in Schema Integration." IPSI-GMD, Darmstadt, Germany, Mar. 1992.
115. "Federated Databases for Managing Distributed, Heterogeneous, and Autonomous Databases." CRAI, Italy, Mar. 1992.
116. "Data Consistency and Work Flow Management in Multidatabase Systems." VTT (National Research Center of Finland), Helsinki, Finland, Mar. 1992.
117. "Management of Interdependent Data in Multidatabase Systems." Matsushita Information Technology Laboratory, Princeton, NJ, Feb. 1992.
118. "Management of Interdependent Data: A Case Study at Bellcore." Microelectronics and Computer Corporation, Austin, TX, Jan. 1992.
119. "Research Issues in Schema Integration and View Update." University of Houston, TX, Oct. 1991.
120. "Federated Database Systems." Boeing, Seattle, WA, Oct. 1991.
121. "Federated Database Systems." ACM professional chapters at Piscataway, NJ, Apr. 1991.
122. "Schematic and Semantic Issues in Schema Integration." New Jersey Institute of Technology, Newark, Mar. 1991.
123. "Federated Database Systems: Architecture and Alternatives." New Jersey Institute of Technology, Newark, Jan. 1991.
124. "Integrating Heterogeneous Distributed Databases: Requirements, Concepts and Solutions." New Jersey Institute of Technology, Newark, Oct. 1990.
125. "Research Issues in Schema Integration and View Update." Purdue University, West Lafayette, IN, Oct. 1990.
126. "Federated Databases for Managing Distributed, Heterogeneous, and Autonomous Databases." IBM-European Networking Center and Scientific Research Heidelberg, Germany, Aug. 1990.
127. "View Update Using Knowledge at View Definition and View Update Time." IPSI-GMD, Darmstadt, Germany, Aug. 1990.

128. "Federated Databases for Managing Distributed, Heterogeneous, and Autonomous Databases." Fern Universitat, Hagen, Germany, Aug. 1990.
129. "Federated Database Systems." Bell Communications Research, Red Bank, NJ, Feb. 1990.
130. "Integrating Heterogeneous Distributed Databases: Requirements, Concepts and Solutions." University of California, Los Angeles, Oct. 1988.
131. "View Update Using Knowledge at View Definition and View Update Time." Fern Universitat, Hagen, Germany, Mar. 1988.
132. "View Update Using Knowledge at View Definition and View Update Time." INRIA, France, Mar. 1988.
133. "View Update Using Knowledge at View Definition and View Update Time." Unisys West Coast Research Center, Apr. 1987.
134. "Integrating Heterogeneous Distributed Databases." University of Minnesota, Sept. 1986.

Chief Guest/Speaker at Special Events [15]

1. "Transforming Big Data into Smart Data: Deriving Value via harnessing Volume, Variety, and Velocity using semantic techniques and technologies." IBM Distinguished Speaker Series, IBM Almaden Research Center, San Jose, CA, Jul. 1, 2014. ([Abstract](#), [Slides](#), [Video](#))
2. ["Computing for Human Experience: Semantics empowered Sensors, Services, Social and Ubiquitous Computing in Web 3.0 and beyond."](#) University of Illinois, National Center for Supercomputing Applications (NCSA). Urbana-Champaign, IL, Oct. 10, 2010.
3. "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, Aug. 5, 2009.
4. "Semantic Web: Promising Technologies and Current Applications." Invited talk at the Reed Elsevier EPIC Conference, Toronto, Canada, Oct. 9, 2007.
5. "Semantic Web applications in Industry, Government, Health Care and Life Sciences." Invited talk at meeting of the Greater Dayton IT Alliance, Dayton, OH, Apr. 18, 2007.
6. "Semantic Web applications in Industry, Government, Health Care and Life Sciences." Keynote Address at the [daytaOhio](#)-organized conference *From Research to Reality*. Wright State University, Dayton, OH, Oct. 27, 2006.
7. "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, Jun. 22, 2006.
8. "Realizing Semantic Information Brokering and Semantic Web." Invited talk, Perspectives on Agents: Theories and Technologies Seminar Series, Università degli Studi di Trento, Trento, Italy, Apr. 27, 2000.
9. "An Overview of Workflow Management: From Process Modeling to Workflow Automation." CERN-wide Computing Colloquium, CERN, Geneva, Switzerland, Mar. 31, 1998.
10. "Workflow Management: Technology, Experiences and Research." special university-industry seminar, Universidade Nova de Lisboa, Lisbon, Portugal, Mar. 25, 1998.
11. "Information (Super) Highway: New Opportunities for Global Competitive Advantage for Developing Countries." city-wide talk organized by Ahmedabad Management Association, India, Aug. 26, 1996.
12. "Multidatabase Systems: Research and Reality." Invited guest speaker at the *1st Symposium of the Tsukuba Advanced Research Alliance (TARA)*. Tsukuba, Japan, Mar. 4, 1995.
13. "Information By-Ways, Lanes, and Superhighway." Citywide talk organized by the Ahmedabad Management Association, Ahmedabad, India, Dec. 1994.

14. Special guest and speaker at the UBILAB Workshop on Data Management Scenarios at Union Bank of Switzerland, Zurich, Apr. 28, 1993.
15. Primary speaker for the Workshop on Federated Database Systems (for the members of CRAI consortium), CRAI, Render, Italy, Mar. 23–24, 1992. Presented and led discussions for 21 hours.

Tutorial Presentations at International Conferences [35]

1. N. Aggarwal, S. Shekarpour, S. Bhatia, and A. Sheth. "[Knowledge Graphs: In Theory and Practice](#)," 2017 CIKM Intl conf on Information and Knowledge Management, Singapore, 10 Nov 2017.
2. E. Della Valle, A. Sheth, R. Tommasini, P. Anantharam, P. Kapanipathi. "[Semantic Approach to Big Data and Event Processing](#)," Short Course at the Ohio Center of Excellence in Knowledge-enabled Computing (Kno.e.sis), Wright State University, Dayton, USA. Oct 6-8, 2015.
3. A. Sheth, H. Purohit, [P. Meier](#), and [C. Castillo](#). "[Crisis Mapping, Citizen Sensing and Social Media Analytics: Leveraging Citizen Roles for Crisis Response](#)." *7th International Conference on Weblogs and Social Media (ICWSM-13)*. Boston, MA, Jul. 2013.
4. A. Sheth, P. Anantharam, P. Barnaghi. "[Data Processing and Semantics for Advanced Internet of Things \(IoT\) Applications: modeling, annotation, integration, and perception](#)." *WiMS2013: International Conference on Web Intelligence, Mining and Semantics*. Madrid, Spain, Jun. 12-14, 2013.
5. A. Sheth, K. Thirunarayan, P. Anantharam, C. Henson. "Trust Networks." *2012 International Conference on Collaboration Technologies and systems (CTS 2012)*. Denver Colorado, May 21-25, 2012.
6. A. Sheth, S. S. Sahoo, G. Zhang. "Role of Semantic Web in Health Informatics." *2012 ACM SIGHIT International Health Informatics Symposium (IHI 2012)*, Jan. 28-30, 2012.
7. A. Sheth, K. Gomadam, S. Velmurgan. "Citizen Sensing, Social Media Analytics, and Applications." *2011 Semantic Technology Conference (SemTech)*. San Francisco, CA, Jun. 6, 2011.
8. "[Citizen Sensor Data Mining, Social Media Analytics and Development Centric Web Applications](#)," (with Meena Nagarajan and Selvam Velmurugan), 20th World Wide Web Conference (WWW2011), Hyderabad, India, Mar. 28, 2011.
9. A Sheth, P. Jain, P. Hitzler, P. Z. Yeh, K. Verma. "[How to Make Linked Data More than Data](#)." *Semantic Technology Conference 2010*. San Francisco, CA, Jun. 23, 2010.
10. A. Sheth, K. Gomadam, A. Joshi. "[Mobile Semantic Computing](#)." *2nd International Conference on Semantic Computing (ICSC2008)*. Santa Clara, CA, Aug. 4–7, 2008.
11. A. Sheth, M. Nagarajan, C. Ramakrishnan. "Text Analytics for Semantic Computing—the good, the bad and the ugly." *2nd International Conference on Semantic Computing (ICSC2008)*. Santa Clara, CA, Aug. 4–7, 2008.
12. A. Sheth, K. Verma. "Using SAWSDL for Semantic Service Interoperability." *Semantic Technology Conference*. San Jose, CA, May 20–24, 2007.
13. A. Sheth, S. Stephens. "[Semantic Web: Technologies and Applications for the Real-World](#)." *16th World Wide Web Conference (WWW2007)*. Banff, Canada, May 8–12, 2007.
14. A Sheth, K. Verma, K. Gomadam. "WSDL–S: Specification, Tools, Use Cases and Applications." *Semantic Technology Conference*. San Jose, CA, Mar. 7, 2006.
15. "[Lifecycle of Semantic Web Processes](#)" (with Jorge Cardoso), *17th Conference on Advanced Information Systems Engineering (CAiSE'05)*, Porto, Portugal, Jun. 13, 2005.
16. A. Sheth, F. Curbera, K. Verma. "[Service Oriented Architectures and Semantic Web Processes](#)." *2004 IEEE International Conference on Web Services (ICWS 2004)*. San Diego, CA, Jul. 7, 2004.

17. A. Sheth, J. Cardoso. "Semantic Web Processes: Semantics Enabled Annotation, Discovery, Composition and Orchestration of Web Scale Processes", *4th International Conference on Web Information Systems Engineering (WISE 2003)*. Rome, Italy, Dec. 10–12, 2003.
18. A Sheth, J. Cardoso, F. Curbera. "Service Oriented Architectures and Semantic Web Processes." *13th International World Wide Web Conference*. New York, NY, May 2004.
19. A. Sheth, J. Cardoso. "Semantic Web Processes: Semantics Enabled Annotation, Discovery, Composition and Orchestration of Web Scale Processes." *4th International Conference on Web Information Systems Engineering (WISE 2003)*. Rome, Italy, Dec. 10–12, 2003.
20. A. Sheth, J. Cardoso. "Semantic Web Processes." *1st German Conference on Multiagent System Technologies and Net Object Days*. Erfurt, Germany, Sept. 22–25, 2003.
21. A. Sheth, J. Cardoso, C. Bussler. "Semantic Web Services and Processes: Semantic Composition and Quality of Service." *International Federated Conferences: DOA/ODBASE/CooPIS 2002*, Irvine, CA, Oct. 28–29, 2002.
22. "On the Move to Meaningful Internet Computing and Ubiquitous Computer 2002." *International Federated Conferences: DOA/ODBASE/CooPIS 2002*, Irvine, CA, Oct. 28–29, 2002.
23. A. Sheth, J. Miller. "Workflow Management: Technology, Experiences and Research." *IEEE International Conference on Data Engineering*. Orlando, FL, Feb. 23, 1998.
24. "Workflow Automation: Applications, Technology, and Research." *ACM SIGMOD International Conference on Management of Data*. San Jose, CA, May 24, 1995; *International Conference On Information Systems Engineering (CAiSE '95)*. Finland, Jun. 14, 1995.
25. "Multidatabase Interoperation: Perspective of Researchers & Practitioners." *11th International Conference on Data Engineering*, Taiwan, Mar. 1995.
26. "Database and Application Interoperability in Industry: Requirements, Technology, Research Issues and Case Studies." *6th International Conference on Management of Data*. Bangalore, India, Dec. 1994.
27. A. Sheth, D. McLeod. "Interoperability in Multidatabase Systems." *20th International Conference on Very Large Data Bases*. Chile, Sept. 1994.
28. "Interoperability in Multidatabase Systems." Course offered by ETH (Swiss Federal Institute of Technology), Zurich, Switzerland, Apr. 1993.
29. A. Sheth, M. Rusinkiewicz. "Multidatabase Systems: Technology and Applications." *3rd International Conference on Data Engineering*. Vienna, Austria, Apr. 1993.
30. "Issues and Applications Support in Interoperable Database Systems." *IFIP DS-5 Conference on Semantics of Interoperable Database Systems*. Melbourne, Australia, Nov. 1992.
31. A. Sheth, M. Rusinkiewicz "Multidatabase Applications: Semantics and Systems Issues." *18th International Conference on Very Large Data Bases (VLDB 92)*. Vancouver, Canada, 1992.
32. "Federated Databases for Managing Distributed, Heterogeneous, and Autonomous Databases." *17th VLDB*, Barcelona, Spain, Sept. 1991; *Workshop on Federated Databases*. Rende, Italy, Mar. 1992.
33. "Heterogeneous Distributed Databases: Issues in Integration." *ACM SIGMOD Conference*, 1989; *3rd International Conference on Data Engineering*, 1987 and 1990.
34. "Integrating Heterogeneous Distributed Databases: Requirements, Concepts, and Solutions." at the Fall Joint Computer Conference, Oct. 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.

35. "Issues in Managing Interdependent Data." Workshop on Management of Interdependent Data (with A. Elmagarmid and M. Rusinkiewicz), 1990.

Panel Presentations at Conferences and Workshops [55]

1. "Semantics, Knowledge, Intelligence and the Web", roundtable at the International Summer School on Web Science and Technology (WebST2016), Bilbao, Spain, July 20, 2016.
2. Raxit Goswami, Neil Shah, and Amit Sheth. "[ezDI's semantics-enhanced linguistic, NLP, and ML approach for health informatics](#)." Proc. of the 14th International Workshop on Semantic Web Enterprise Adoption and Best Practice ([WaSABi 2015](#)) at ISWC 2015, October 11, 2015, Bethlehem, PA, USA.
3. "Closing the gap between science and societal impact for inclusive smart cities: Which scientific topics should we prioritize to enable a smarter nation?" *3rd Singaporean-French Symposium on Inclusive Smart Cities and Digital Health*, Singapore, Feb. 2-3, 2015.
4. "Meet the Editors." *10th International Semantic Web Conference (ISWC 2011)*. Bonn, Germany, Oct. 23-27, 2011.
5. "[Semantic Social Networking Panel](#)." *2010 Semantic Technology Conference (SEMTECH 2010)*. San Francisco, CA, Jun. 21-25, 2010.
6. "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"*. Mar. 22-24, 2010, Stanford CA.
7. "Context is highly contextual!" *4th European Conference on Smart Sensing & Context 2009*, Surrey, UK, Sept. 18, 2009.
8. "Analysis and Monetization of Social Data." Panel on 'Semantifying Social Networks,' *Semantic Technology Conference*, San Jose, CA, Jun. 16, 2009.
9. "[Semantifying Social Networks](#)." *Semantic Technology Conference*, San Jose, CA, Jun. 16, 2009.
10. "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.
11. "The Semantic Web." *7th International Semantic Web Conference (ISWC 2008)*. Karlsruhe, Germany, Oct. 26-30, 2008. Proceedings Springer 2008.
12. S. Dustdar, Fiadeiro, A. Sheth: Business process management. *Data Knowl. Eng.* 64(1): 1-2 (2008).
13. "Relationship Web: Spinning the Web from Trailblazing to Semantic Analytics." *27th International Conference on Conceptual Modeling (ER 2008)*. Barcelona, Spain, Oct. 20-23, 2008.
14. "Do the current Semantic Web standards and technologies benefit Health 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.)
15. "Semantic Web and Database Conferences." *3rd International Workshop on Semantic Web and Databases*. Atlanta, GA, Apr. 8, 2006.
16. "Strengths & Weaknesses of Semantic Technology Solutions: View from the Vendor and Research Community." *Taxonomies and Semantic Technologies for S&T Analysis Conference*, MITRE Corporation, Mar. 17, 2006.
17. "[Semantic Web Services: Past, Present, and Future](#)." *International Workshop in Dynamic Web Processes (DWP 2005)*. Amsterdam, Netherlands, Dec. 12, 2005.
18. "FLINT and Semantic Web." *BISCSE 2005: Forging New Frontiers*. Berkeley CA, Nov. 2-6, 2005.

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

41. "Database Research in Workflow Management Systems, Do We Have Anything to Contribute?" *Intl Conf on Cooperative Information Systems (CoopIS '96)*. Jun. 20, 1996. (Panelist)
42. "How Do We Meet the Challenges of the Global Computing Revolution?" *International Conference on Cooperative Information Systems (CoopIS '96)*, Jun. 21, 1996. (Panelist, plenary session panel.)
43. "Data Semantics: What, Where and How?" *6th IFIP TC-2 Working Conference on Data Semantics (DS-6)*. Stone Mountain, Georgia, Jun. 1995. (Panel Chair.) (See Section 3a, No. 7.)
44. "Information Resource Discovery: A Torch in the Deep Darkness of the Information Superhighway?" *11th International Conference on Data Engineering*. Taiwan, Mar. 1995. (Panel Chair.)
45. "Where are Distributed Databases headed?" *6th International Conference on Management of Data*. Bangalore, India, Dec. 1994. (Panelist.)
46. "Challenges in Global Information Systems." *20th International Conference on Very Large Data Bases*. Chile, Sept. 1994. (Panelist.)
47. "Why do we need Extended Transaction Models?" *16th IEEE-CS Computer Software & Applications Conference (COMPSAC '92)*, Sept. 1992. (Panelist.)
48. "Dealing with Heterogeneous Databases: Is the Research on Right Track?" *2nd International Conference on Systems Integration*. Morristown, PA, Jun. 1992. (Panel Chair.)
49. "Key Information Management Issues in the Real World." *US West-NSF-DARPA Workshop on Heterogeneous Databases and Semantic Interoperability*. Boulder, CO, Feb. 1992. (Panelist, final plenary session panel.)
50. "Cooperative Database Design." *17th International Conference on Very Large Data Bases*. Barcelona, Spain, Sept. 1991. (Panelist.)
51. "Resolving Semantic Heterogeneity." *6th International Conference on Data Engineering*. Los Angeles, CA, Feb. 1990. (Panelist.)
52. "Does loose AI-DBMS coupling stand a chance?" *5th International Conference on Data Engineering*. Los Angeles, CA, Feb. 1989. (Panel Chair.)
53. "Can we Meaningfully Integrate Drawing, Text, Image, and Voice with Structured Data?" *4th International Conference on Data Engineering*. Los Angeles, CA, Feb. 1988. (Panel Chair)
54. "When will we have true Heterogeneous Databases?" *Fall Joint Computer Conference*, Oct. 1987. (Panelist.)
55. "Improving Concurrency in Distributed Systems." *3rd International Conference on Data Engineering*, Feb. 1987. (Session discussant.)

Publications [~500]

Book Series Editorship [2]

1. Ramesh Jain and Amit Sheth (Eds.), [Semantic Web and Beyond: Computing for Human Experience](#), Springer, started 2005. Currently thirteen volumes in this series. ISSN 1559-7474
 - i. Volume 1: [Semantic Management of Middleware](#), Daniel Oberle, 2006.
 - ii. Volume 2: [Canadian Semantic Web](#), Mamadou Tadiou Koné and Daniel Lemire (Eds.), 2006.
 - iii. Volume 3: [Semantic Web Services, Processes and Applications](#), Jorge Cardoso and Amit P. Sheth (Eds.), 2006.
 - iv. Volume 4: [Ontology Alignment, Bridging the Semantic Gap](#), Marc Ehrig, 2006.
 - v. Volume 5: [Social Networks and the Semantic Web](#), Peter Mika, 2007.

- vi. Volume 6: The Semantic Web: Real-World Applications from Industry, Jorge Cardoso, Martin Hepp, and Miltiadis Lytras (Eds.), 2008.
- vii. Volume 7: Ontology Management, Semantic Web, Semantic Web Services, and Business Applications, Martin Hepp, Pieter De Leenheer, Aldo de Moor, and York Sure (Eds.), 2008.
- viii. Volume 8: Semantic Web Services Challenge, Charles Petrie, Holger Lausen, Michal Zaremba, and Tiziana Margaria-Steffen (Eds.), 2008.
- ix. Volume 9: Ontology Economics, Martin Hepp and Robert Tolksdorf (Eds.), 2012
- x. Volume 9: Terminological Ontologies, Javier Lacasta, Javier Nogueras-Iso, Soria Zarazaga and Javier Francisco (Eds.), 2010.
- xi. Volume 10: Semantic Business Process Management, Martin hepp, Jogn Domingue and Alistair Barros (Eds.), 2012.
- xii. Volume 12: Geospatial Semantics and the Semantic Web: Foundations, Algorithms, and Applications, Naveen Ashish and Amit Sheth (Eds.), 2011.
- xiii. Volume 13: Social Semantics, Harry Halpin Ed., 2013.
- 2. Ahmed Elmagamid and Amit Sheth (Eds.), Advances in Database Systems, Springer. Prof. Sheth joined as co-editor in Jul. 2007.

Books Authored or Co-Authored [2]

- 1. A. Sheth, K. Thirunarayan. *Semantics Empowered Web 3.0: Managing Enterprise, Social, Sensor, and Cloud-based Data and Services for Advanced Applications*. Morgan & Claypool Publishers. Dec. 19, 2012.
- 2. V. Kashyap, A. Sheth. *Information Brokering across Heterogeneous Digital Data*. Kluwer Academic Publishers, Aug. 2000, pp. 248.

Books Edited and Co-Edited [11]

- 1. A. Sheth. Semantic Web: Ontology and Knowledge Base Enabled Tools, Services and Application, Information Science Reference, IGI Global, Jul 2013, pp. 1-360 ISBN 978-1-4666-3610, DOI: 10.4018/978-1-4666-3610-1.
- 2. A. Sheth. Semantic-Enabled Advancements on the Web: Applications across Industries. IGI Global, Feb, 2012, pp. 1-324. DOI: 10.4018/978-1-4666-0185-7, ISBN13: 9781466601857.
- 3. A. Sheth. Semantic Services, Interoperability and Web Applications: Emerging Concepts. IGI Global, Jun. 2012, pp. 1-420. DOI: 10.4018/978-1-60960-593-3, ISBN13: 9781609605933.
- 4. A. Sheth. *Semantic Services, Interoperability and Web Applications: Emerging Concepts.* IGI Global, 2011, pp. 1-420. Web. DOI: 10.4018/978-1-60960-593-3.
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Editorship of Special Issues of Journals and Technical Society Magazines, Dagstuhl (most with introductions/state-of-the-art reviews) [13]

1. S. Gustafson and A. Sheth (Ed.) “Web of Things.” *Computing Now*, Vol. 7, no. 3, Mar. 2014, IEEE Computer Society ([online](#)).
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3. G. T. Lakshmanan, F. Curbera, J. Freire, and A. Sheth (Eds.) (Guest Editors). “[Introduction: Provenance in Web Applications](#).” *IEEE Internet Computing*, Vol. 15, no. 1, Jan./Feb. 2011, pp. 17–21, doi:10.1109/MIC.2011.9.

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5. D. Benslimane, S. Dudstar, and A. Sheth (Eds.), special issue: Service Mashups, *IEEE Internet Computing*, 2008.
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7. J. Davies, M. Lytras, and A. Sheth (Eds.), special issue: Semantic-Web-Based Knowledge Management, *IEEE Internet Computing* 11 (no. 5), Sept.–Oct. 2007.
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10. O. and A. Sheth (Eds.), special section, *ACM SIGMOD Record* 28 (no.1), Mar. 1999.
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Patents

1. Patent co-inventor (Nehal Shah, Amit Sheth, Shreyansh Bhatt, Raxit Goswami, Vatsal Shah, Rahil Kanani, Amrish Patel, Parth Pathak). "Data Processing System and Method for Computer-Assisted Coding of Natural Language Medical Text." (Patent application number 14/918,881), May 12, 2016.
2. Patent co-inventor (Sheth, Gomadam, and Nagarajan). "Methods and Systems for Analysis of Real-Time User-Generated Text Messages." US 20120042022 A1Feb 16, 2012, Priority: Feb 17, 2010.
3. Patent co-inventor (Sheth, Avant, and Bertram). "System and Method for Creating Semantic Web and Its Applications in Browsing, Searching, Profiling, Personalization and Advertisement." US 6311194 B1, Oct. 30, 2001. (Priority: Mar 15, 2000).
4. Patent co-inventor (Marcus, Shah, Kshitij, Sheth, Shklar, Surak, Thatte). "Method and system for providing uniform access to heterogeneous information." (Patent publication number WO 1997015018 A1), Apr. 24, 1997 (Priority date: Oct 16, 1995).
5. 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." (Patent application number 5,241,675), Aug. 31, 1993.

Professional or Scholarly Activities – Technologies and Commercialization

From ideas and research to real-world: applications, deployed systems, and commercial products/services.

In most of my activities, I seek to traverse the entire innovation cycle. This may start with conceiving ideas while walking and brainstorming with students or partners, then lead to a series of activities that typically involve:

- Bringing resources (which usually takes the form of writing proposals);

- Leading and supervising efforts involving training, teambuilding and prototype building;
- Understanding users and customers, or partners in our inter-disciplinary research;
- System building (which often lends itself to an open source tool(s) and datasets, licensed technologies and patents, operationally deployed applications and software, or commercial products and services).

Below is a brief, incomplete list of some of my **activities that have gone from industry or academic research to the real world**. I would be remiss not to point out that these activities are almost always a team effort. When in industry, I had colleagues, and in academia, I have my graduate students. I have attempted to point out some of the key contributors and partners, but my memory may not be perfect as I look back over two decades (co-authors of cited publication indicate out more contributors).

Name/Years	Brief Technical Description (Key Collaborator and/or Contributor)	Role/Outcomes/Form of Real-world Use	More Information: Publications and/or Presentations (Representative)
Twitris: 2009-Present	<ul style="list-style-type: none"> • Twitris- a System for Collective Social Intelligence • Demo 	<ul style="list-style-type: none"> • Founder- Cognovi Labs: Commercial version completed in Dec. 2015; Licensed to set up Cognovi Labs in Feb. 2016- received \$2.3 M funding by end of 2017. • Company in full operation, former students as key employees 	<ul style="list-style-type: none"> • Ohio Faculty Council Commercialization award (runner up) • Patent awarded, patent published • Over 40 related publications • Multiple demos, chapter, multiple dissertations/theses
ezCAC, ezCDI, ezFIND: 2010-Present	<ul style="list-style-type: none"> • A Semantic Clinical Natural Language Understanding Engine being developed as part of collaborative research project funded by ezDI at Kno.e.sis. 	<ul style="list-style-type: none"> • Co-founder. • ezCAC released at AHIMA 2013; multiple enterprise (Hospital) customers 	<ul style="list-style-type: none"> • Patent published • Publications starting BIBM2012
Scooner : 2008-2011	<ul style="list-style-type: none"> • Ontology/background knowledge support Semantic Browsing of Biomedical Literature with focus on human performance and cognition (C. Thomas, R. Kavuluru). 	<ul style="list-style-type: none"> • Near production quality tool deployed at Air Force Research Lab's Human Performance Directorate for biologists doing research in human performance and cognition. 	<ul style="list-style-type: none"> • Paper: SIGHIT12 • Demo
VideoAnywhere	<ul style="list-style-type: none"> • In an industry funded 	<ul style="list-style-type: none"> • Roles: Taalee: 	<ul style="list-style-type: none"> • Product/System

<p>, Taalee Semantic Search Engine, Taalee</p> <p>MediaAnywhere, Voquette SCORE, Semagix FREEDOM: 1998-2006</p>	<p>project, VideoAnywhere set out to become a set-top based manager of videos on local systems, interactive TV and broadband/Web (Clemens Bertram).</p> <ul style="list-style-type: none"> • In Java-based implementation, semantic technology (domain model associated metadata) was the key differentiator. • As broadband content on grew, we developed MediaAnywhere, a semantic-faceted search engine which exploited domain specific ontologies with automatically aggregated background knowledge and disambiguated (somewhat similarly to GKB) with automatic semantic annotation of textual and media content. • Search was followed by semantic browsing, connecting the dots and more focused application build over semantic technology. • More details: System and method for creating a semantic web and its applications in browsing, searching, profiling, personalization and advertising, 2000-2001. • Taalee was the first VC funded software/internet company in Athens and surrounding region, and 	<p>Founder, COB, CEO; Voquette: Co-founder, Exec.VP; Semagix: SrVP-all R&D, later Chief Scientist.</p> <ul style="list-style-type: none"> • Licensed VideoAnywhere to found VC funded Taalee (1999). We initially developed the MediaAnywhere Faceted Semantic Search Engine for broadband content on Web during 1999-2001 • Example customers: Voquette, Redband Broadcasting). • Upon merger with Voquette (2002), we developed SCORE, a semantic web application development platform and digital content delivery platform • Also developed apps like Passenger Threat Assessment; customers include a pharmaceutical company and NASA). • Upon merger with Semagix (2004), we develop FREEDOM, and focused on selling vertical industry applications, with biggest success in deploying Know Your Customer (KYC) in a majority of world's top 30 financial institutions. 	<p>papers: ICo2, SEEo2</p> <ul style="list-style-type: none"> • Application papers: CIKMo2, IASWo5, SAIo6 • Presentations: 2000Keynote, 2001Keynote, 2003Keynote • (Probably the first keynotes on SW and also on commercial SW products and/or services.)
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	<p>paid \$6+ million in payroll and other direct economic activities in the economy of Athens, GA before the company was acquired and moved to Atlanta, GA.</p>	<ul style="list-style-type: none"> • I left Semagix after its acquisition by Fortent in 2006; it is now Actimize: some original Taalee employees and apps like KYC were still employees as of 2012. 	
<p>ASEMR: 2005-Present</p>	<ul style="list-style-type: none"> • Active Semantic Electronic Medical Record (ASEMR) combined Semantic Web technology (three ontologies, rules, services architecture) with among the earliest fully Web based EMR system in a totally paperless clinical system. It was one of the three initial use cases for W3C SW HCLS in 2005. 	<ul style="list-style-type: none"> • ASEMR was deployed at Athens Heart Center and its partners in Jan 2006 as one of the earliest operational Semantic Web applications and it remains in 24x7 operation as of 2012. 	<ul style="list-style-type: none"> • Paper: ISWCo6 • Demo, video, OpenClinical, SWLS, LSDIS
<p>Pediatric Echo: 2000-2003</p>	<ul style="list-style-type: none"> • Due to issues of cost, personnel, and availability of qualified individuals, echocardiography has not been used to its full potential, especially in rural areas. • Working with the pediatric echocardiologists at the Medical College of Georgia, I led development of the first of its kind system described as the “Low-Cost Web-Based Tool for Pediatric Echocardiographic Consultation.” 	<ul style="list-style-type: none"> • Used in blind trials by pediatric echocardiologists to compare against traditional store-and-forward method (in which a rural clinic sends a tape by overnight mail). • Trial successfully proved that the Web based system provided statistically equivalent or better results (at much lower cost, with higher convenience and speed). 	<ul style="list-style-type: none"> • Paper (that reports the evaluation): Clinical Pediatrics 2003
<p>Course Approval Process Automation</p>	<ul style="list-style-type: none"> • METEOR2’s graphical workflow designer and WebWork technology 	<ul style="list-style-type: none"> • Course Approval Process Automation system was completed and 	

(CAPA): 1997-1999	was the basis of CAPA.	<p>deployed for use on UGA campus by any faculty or staff involved in proposing new courses or changes to the courses, and processing and approval of the proposals.</p> <ul style="list-style-type: none"> • In first quarter of use, approximately 6000 courses were processed. • My lab developed and maintained the system for the first year; now has been transferred to the VPAA's office. • CAPA system has been operational since 1997. 	
CareWeb: 1996-1988	<ul style="list-style-type: none"> • An unintended outgrowth of collaboration that began as part of NIST's Healthcare Information Integration Technology initiative. • Funded by the Georgia Division of Family and Children Services. • Involved early adoption of Web technologies for this field. 	<ul style="list-style-type: none"> • CareWeb, a Web resource developed in collaboration with Medical College of Georgia to support health information and education needs of under-served populations. 	
InfoHarness: 1993-2000	<ul style="list-style-type: none"> • InfoHarness was very early in adding metadata to heterogeneous data (documents of different formats, source code, etc.). • Supported browser-based Web search (i.e., attributed-based or faceted search) of annotated Web 	<ul style="list-style-type: none"> • InfoHarness was commercialized as AdaptX/Harness in 1995 (Kshitij Shah). • Remained available until 2000 and was used in Baby Bells. • My biggest commercialization-related disappointed was 	<ul style="list-style-type: none"> • InfoHarness early system: WWW2004, CAiSE95; Commercial version: IC99

	<p>accessible and Intranet documents.</p> <ul style="list-style-type: none"> • Its 1993, 1994 implementation used Mozilla (Leon Skylar; later Leon led development of GeoHarness). 	<p>the failure in convincing Bellcore business managers to target Web search market rather than limiting it to telcom apps.</p>	
<p>METEOR: 1990-1994</p> <p>METEOR2: 1995-1999</p>	<ul style="list-style-type: none"> • METEOR was among the earliest multiparadigm (supporting transaction and nontransaction/user tasks) workflow management system (WfMS) (Krishnakumar). • METEOR2 used emerging middleware and Web technologies resulting in two implementations: (1) WebWork (John Miller), one of the earliest web-based WfMS, and (2) ORBWork (Krys Kochut), one of the earliest CORBA-based truly distributed workflow management systems. • Note: METEOR2 was followed by a semantic Web Services version, but did not have commercial applications: 2002-2006). 	<ul style="list-style-type: none"> • Founder/President, Infocism, Inc. • METEOR, developed at Bellcore, had internal technology exchange/transfer with a product team (for the workflow component) and was also used in significant application like Child Immunization Tracking; work continued at UGA. • METEOR2 was used to start up and was licensed by Infocism Inc. • Infocism created commercial version termed METEOR Enterprise Application System (EAppS), which was sold to Bellcore, MCC, and Boeing. • EAppS was used in building applications such as Neonatal Clinical Pathways. 	<ul style="list-style-type: none"> • METEOR theory: VLDB93, METEOR system: DAPD95, METEOR app: VLDB96, DAPD03 • METEOR2 ORBWork Research: JDB96, InfoSys97; ORBWork commercial: CompStr99; WebWork: JIIS98
<p>BERDI: 1989-1992</p>	<ul style="list-style-type: none"> • BERDI was a practical, graphical schema integration tool. • Followed the earlier “academic” prototype that was probably the first schema integration tool 	<ul style="list-style-type: none"> • Used internally in Bellcore to integrate schemas associated with large legacy applications, some of which were transitioning from IMS to RDB 	<ul style="list-style-type: none"> • Bellcore-TR

	developed in US • Benefited from rapidly developing graphical interface technologies.	technology.	
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Also see [Open Source](#) for tools and data sets, and standards activities

Interviews and Biographical Profiles [60+] (more complete list at: <http://knoesis.org/amit/media>)

1. [Local start-up hails big investments](#), Dayton Daily News, May 24, 2017. News on Cognovi Labs receiving a round of investment, set up with the technology licensed from Kno.e.sis with Prof. Amit Sheth as a co-founder.
2. [Eat it, then tweet it](#), Dayton City Paper, April 25, 2017. This story covers research related to our NIH R01 funded project, eDrugTrends. PIs of this project are Dr. Raminta Daniulaityte and Prof. Sheth.
3. [Cannabis Edibles, Unwrapped: Here's What No One Tells You](#), Daily Burn, April 19, 2017. This article reviews our results reported in the prestigious journal [Drug and Alcohol Dependence](#) and is based on the NIH-funded R01 project eDrugTrends; it interviews our post-doc Dr. Francois Lamy. PIs of this project are Dr. Raminta Daniulaityte and Prof. Sheth.
4. [Company's read on social media could provide much insight](#), The Columbus Dispatch, December 18, 2016 []. [Interview with Cognovi Lab's founders describing deep insights and predictions using the Twitris technology developed at Kno.e.sis by Prof. Sheth and his students.
5. [Dayton-area lab mines Twitter to make predictions](#), Dayton Daily News, December 2, 2016. The article & video interviews Prof. Sheth and discusses the use of Kno.e.sis' Twitris technology as the basis of Dayton-area startup.
6. [Internet of Things Will Demand a Step-change in Search Solutions](#), University of Surrey, November 24, 2016. International coverage of Prof. Sheth's and Prof. Barnaghi's IEEE article [On Searching the Internet of Things: Requirements and Challenges](#) has been included in [Communications of the ACM](#), [Wireless Week](#), [Phys.org](#), and [Science Newslne](#).
7. [Cognovi Labs: Twitter Analytics Startup Predicts Trump Upset in Real-Time](#), November 11, 2016, Yahoo! Finance/PRNewsWire. Covers some of Prof. Amit Sheth's analysis and predictions using Twitris during the 2016 US Election day.
8. [WSU researchers monitored Twitter to predict a Trump victory](#), WHIO TV, November 10/11, 2016. Also appeared as [University researchers predicted Trump victory with Twitter](#), Atlanta Journal and Constitution, and [WPXI](#), Nov. 10, 2016. Video of TV coverage on Nov 10 and associated article discussing use of Kno.e.sis developed Twitris technology by WSU's Applied Policy Research Institute to monitor 2016 Election. Also mentions Cognovi Labs, a Dayton-based startup that has licensed Twitris from WSU, and quotes Prof. Sheth.
9. [Cognovi Labs is watching the U.S. Presidential Election with its predictive, social sentiment tool](#), TechCrunch, November 8, 2016. The article discusses the use of Twitris technology, developed by the Kno.e.sis Center and licensed by the university to a Dayton area startup Cognovi Labs in analyzing the 2016 US Election and correctly predicting the presidential and senate majority outcomes.
10. [Election Models Predict Trump Defeats Clinton](#), PJ Media, November 2, 2016. [Coverage of Cognovi Lab's work predicting the outcome of the U.S. presidential election and the

potentials of their work for commercial marketing departments and campaigns wanting to measure and react to consumer/voter behavior.

11. [Researchers Claim AI Can Identify Gang Members on Twitter](#), Motherboard, November 1, 2016. Coverage of work by Lakshika Balasuriya, Sanjaya Wijeratne, Dr. Derek Doran, and Dr. Amit Sheth to use a word embeddings-based approach to address the problem of automatically identifying gang member profiles on Twitter.
12. [Inside Wright State's election 'war room,' Clinton outdoes Trump](#), Dayton Daily News; [Wright State researchers track Twitter reaction to presidential debate](#), OHIO TV, October 20, 2016. Local print and TV media report on Kno.e.sis (developer of the Twitris technology), Cognovi Labs (a Dayton start up commercializing the Twitris technology), and the [Applied Policy Research Institute](#), which conducted their third war room for live analysis of 2016 Presidential Debates.
13. [Cognovi Labs will study the presidential debates tonight with their emotional sentiment tool](#), TechCrunch, September 26, 2016. Kno.e.sis, Cognovi Labs, and [APRI](#) did a live analysis of the first 2016 presidential debate using the Twitris technology built by Kno.e.sis; TechCrunch liveblogged some of the observations.
14. [WSU Lab Works to Mine Social Media Posts](#), Dayton Daily News, July 13, 2016. Discusses commercialization effort for Twitris developed at Kno.e.sis by Dayton start-up Cognovi Labs, and quotes Prof. Sheth.
15. [Analysis tool predicted Brexit 6 hours before poll results](#), Inquirer.net, June 30, 2016.
16. [Boonshoft researchers study use of marijuana edibles](#), Fairborn Daily Herald, May 23, 2016. Coverage of the results of eDrugTrends and the joint work by the Wright State University Boonshoft School of Medicine, the Center for Interventions, Treatment, and Addictions Research, and the Kno.e.sis Center.
17. [Perceptual Computing and the Human Experience](#), DataVersity, March 21, 2016.
18. [The Twitris sentiment analysis tool by Cognovi Labs predicted the Brexit hours earlier than polls](#), TechCrunch, June 29, 2016 []. [Hours before the EU referendum votes closed and well before results were declared, Prof. Sheth's analysis of Twitter data predicted #Brexit - votes for leave outpacing remain. Analysis was done using a campaign set up by Cognovi Labs that is powered by Twitris technology. [Analysis detail.](#)]
19. [Chennai floods: How social media and crowdsourcing helps people on ground](#), OneIndia, December 5, 2015. During the Chennai floods, images showing floodwater provided critical information that can be helpful in understanding the situation on the ground and planning for rescue, using the Kno.e.sis' Twitris technology and crowdsourcing. [Additional details.](#)
20. [Wright State launches cyber bullying research](#), coverage in WHIO TV (Channel 7), November 23, 2015. ([Video](#) of the WHIO report.)
21. [Technology for technology-induced disease: Wright State researchers using computer analysis as weapon against harassment](#), Wright State University Newsroom, Nov. 10, 2015. Wright State University researchers developing new software that can detect cyber-bullying, WDTN (NBC (Channel 2), Nov. 19, 2015. ([Video](#) of the WDTN report.)
22. [Lu Chen: «Twitter devient de plus en plus un moyen de vivre sa foi»](#). A US study found that US Twitter users "atheists" would be more active on the social network than "believers" users. La Croix, France, November 4, 2014. Covers my PhD student Lu Chen's research; mentions Kno.e.sis-Wright State University.
23. [Twitter Data Mining Reveals America's Religious Fault Lines](#), MIT Technology Review, October 6, 2014. Covers my PhD student Lu Chen's research; mentions Wright State University.
24. [Atheists tweet more often than Muslims, Jews, Christians, study shows](#), ReligionNews, October 3, 2014. Covers my PhD student Lu Chen's research; mentions Kno.e.sis.
25. [Digital volunteers use social media, come together during Jammu floods](#), OneIndia News, September 20, 2014. Detailed review of application of Kno.e.sis' tool for rescue

coordination resulting from NSF supported research in use of social media for coordination during disasters. Also credited: my PhD student Hemant Purohit who was a key coordinator for major efforts involving digital volunteers.

26. [Digital soldiers emerge heroes in Kashmir flood rescue](#), Hindustan Times, September 9, 2014. Discusses rescue coordination effort by my PhD student Hemant Purohit, and the use of Kno.e.sis' Twitris technology (partly funded by the NSF) by digital volunteers.
27. [How Twitter community reacted over Union Budget 2014](#), OneIndia News, July 23, 2014. Analysis of 30K tweets related to India's 2014 Union budget using Twitris. Also credited: my students Revathy Krishnamurthy, Jeremy Brunn and Alan Smit.
28. [India's Briefcase-Sized Voting Machines](#), The Atlantic, April 15, 2014. Penultimate paragraph covers my views/interpretation of data we saw.
29. [How big data has changed India elections](#), CNBC, April 10, 2014. Mentions some actionable information my group has produced using [Twitris](#) on actual on the ground use in activities associated with India Elections 2014.
30. [Analysis: See what Twitter community thinks of BJP, Congress, AAP](#), OneIndia News, April 10, 2014. Detailed analysis of view of three main parties in 15 important states; also credited: my student Shreyansh Bhatt.
31. [India's social media election battle](#), BBC News, March 30, 2014. Includes coverage of [our analysis](#) of India 2014 Election using Twitris.
32. [Survey: Kejriwal lost popularity after Gujarat visit ahead of election](#), [OneIndia.com](#), March 11, 2014. Based on our analysis of specific event in India 2014 Election using [Twitris](#); also credited: my student Shreyansh Bhatt.
33. [Twitter's top swear words revealed: Researchers find one in 13 tweets contains a curse](#), Daily Mail (UK)/Mail Online, February 20, 2014. Media coverage on our [CSCW2014 paper](#), credit: my student Wenbo Wang.
34. [People Sure Tweet "Fuck" a Lot, Finds Science](#), Motherboard, February 19, 2014. Media coverage on our [CSCW2014 paper](#), credit: my student Wenbo Wang.
35. [#Cursing Study: 10 Lessons About How We Use Swear Words on Twitter](#), [Time.com](#), February 19, 2014. Media coverage on our [CSCW2014 paper](#), credit: my student Wenbo Wang.
36. [140 Characters Of F*ck, Sh!t, And @ss: How We Swear On Twitter](#), Fast Company, February 19, 2014. A media coverage on our [CSCW2014 paper](#); also credited: my student Wenbo Wang.
37. [Mapping Unstructured Clinical Notes to ICD-10 Coding](#), [SemanticWeb.com](#), November 26, 2013. Covers our research NLP enhanced by ontology/background knowledge, which is at the core of ezCAC and related products from [ezDI](#); also credited my student: Sujana Perera.
38. [Google's Person Finder and Google Crisis Response Map for Phailin to help with crisis information](#), DNA, October 12, 2013. Mentions participation by Kno.e.sis students (in particular Hemant Purohit) among "digital humanitarian volunteers" who create crowd sourced data that was used by Google applications to help crisis response.
39. [Are we missing out on tech-aided disaster management in Uttarakhand?](#) The Hindu, July 17, 2013. [Challenges in using 'tech' to support the relief and rebuilding effort; also credited: my student Hemant Purohit.
40. [Using crisis mapping to aid Uttarakhand](#), The Hindu, June 27, 2013. Data resulting from coordination done by Kno.e.sis was used by Google Crisis Maps that helped crisis response planners; also credited: my student Hemant Purohit.
41. [Twitris: Taking Crisis Mapping to the Next Level](#), Tech President, June 24, 2013. In-depth on use of Twitris in Crisis Mapping/Disaster Response, Political Movement and Campaigns; also credited: my student Hemant Purohit.

42. [Election 2012: The Semantic Recap](#), [semanticweb.com](#), November 8, 2012 []. [Reviews how well Twitris did in predicting/analyzing 2012 US presidential election and the deeper insights semantic web technology enable.]
43. [Could Twitris+ Be Used for Disaster Response?](#) iRevolution, September 11, 2012. The influential blog discusses Twitris' ability to provide insights and situational awareness for emergency response aid, reputation management, etc. Credits: my student Hemant Purohit.
44. [Picking the President: Twindex, Twitris Track Social Media Electorate](#), [semanticweb.com](#), August 3, 2012. Comparison of Twitris with other tools monitoring/analyzing US Presidential Elections 201.
45. [Semantic App Helps Researchers Understand Prescription Drug Abuse](#), [semanticweb.com](#), June 12, 2012. Kno.e.sis' PREDOSE platform support prescription drug abuse epidemiology; also credited: my student Delroy Cameron, my colleague: Raminta Daniulaityte.
46. [Web App Analyzes Tweets in Real Time for a Record of Historic Events](#), [mashable.com](#), February 17, 2012. Reviews Twitris' monitoring/analysis of major events such as Occupy Wall Street, Egypt revolution 2011, Haiti Earthquake 2010, Iran Elections 200.
47. [Twitris Social Media Analysis Tackles Occupy Wall Street, 2012 Elections](#), [semanticweb.com](#), February 12, 2012. Review of Twitris' social media analysis of social movements such as Occupy Wall Street and India Against Corruption.
48. Fund nurtures ideas that can be potent job engines, Dayton Daily News Column written by David R. Hopkins, President WSU, April 19, 2010.
49. HP selects WSU professor as research award recipient, Dayton Daily News, June 29, 2009.
50. [WSU Developing New Web Technologies](#), interview in the Dayton Daily News, April 16, 2007.
51. [New Ground in Web technology affecting health care](#), HULIQ, March 29, 2007. Wright State researchers pioneer new ground in Web technology affecting health care, terrorism, defense, and financial services, WSU Communications & Marketing.
52. [NSA Datamining Social Media Sites](#), O'Reilly Radar, June 9, 2006. One of the several media stories/articles that was kicked off by our [WWW2006 paper on Semantic Analytics on Social Networks](#).
53. 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.
54. [Apps Make Semantic Web a Reality](#), SD Times, April 1, 2005. Discusses a variety of Semantic Web technology powered commercial applications powered by Semagix Freedom that used ontologies, semantic annotations, and semantic search, browsing, path computations, etc.
55. Discussion the state of the art in the Semantic Web in [Apps Make Semantic Web a Reality](#), SD Times, April 1, 2005, pp. 5, 17.
56. [Semagix CTO will Present Strategies for Achieving the Potential of the Semantic Web through an Ontology-Based SmartData Approach](#), PRNewswire, October 26, 2004. Outlining the vision of achieving the Semantic Web and for realizing productivity, efficiency, and effectiveness gains by using semantics to transform raw data into Smart Data.
57. [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, volume 1, issue 1, April 2004.
58. [Semagix' CIRAS - A 'Trend-Setting Product of 2003'; Recognition of Innovation in Knowledge Management](#), Business Wire, July 21, 2003. Discusses the technology and product that uses Semantic Web technology for Financial Services apps; product

developed by my team at Taalee/Voquette/Semangix based technology described in [this patent](#).

59. [When Academicians Become Entrepreneurs](#), a profile of Dr. Amit Sheth in the Sandpaper, May 2003.
60. [Revving Up a Smarter Search Engine](#), coverage of Taalee by the Atlanta Business Chronicle, February 2002.
61. Athens Herald on Founding Taalee, June 10, 2001.
62. [Streaming Semantic Search Engine That Reads Your Mind](#), Streaming Media World, August 10, 2000. [An interview that describes Taalee's Semantic Search Engine that used ontologies/knowledge base, similar to the use of knowledge graph by search engines in 2013.]
63. [Interview: Amit Sheth on Workflow Technology](#), by Sushil Jajodia, IEEE Concurrency, April – June 1998, pp. 21–23.
64. Interview discussing applications of the METEOR system in Healthcare, in Research Reporter, UGA, Winter 1997, and in Healthcare Informatics.
65. Technology Interviews: future in Internet-related technologies and relevant research at UGA following broad-based talks, published in the Times of India (several editions), January 1996, and in the Economic Times, January 1995 (several editions), both of which national newspapers in India with largest circulation in the business and general categories, respectively.

Journal and Book Series Editorship [15+]

1. **Editorial Board of Academic Editors**, [PeerJ Computer Science](#), Jul. 2014–Present. ISSN: 2167-8359.
2. **Member of the Editorial Board**, [IEEE Internet Computing](#), May 2006–Present.
3. **Member of the Editorial Board**, [Applied Ontology: An Interdisciplinary Journal of Ontological Analysis and Conceptual Modeling](#), IOS Press, 2005–Present. ISSN: 1570-5838.
4. **Member of the Editorial Board**, [Journal on Web Semantics: Science, Services and Agents on the World Wide Web](#), 2003–Present.
5. **Co-Editor in Chief**, [Journal on Distributed and Parallel Databases](#), 2002–2016.
6. **Series Editor** (with A. Elmagarmid), [Advances in Database Systems](#), Springer, Jul. 2007–2008. ISSN: 1386-2944.
7. **Joint Editor-in-Chief**, [Journal on Distributed and Parallel Databases](#), Springer, Jun. 2007–Dec. 2016. ISSN: 0926-8782. **Member of Editorial Advisory Board**, thereafter.
8. **Founding Editor-in-Chief**, [Journal on Semantic Web and Information Systems \(IJSWIS\)](#), Idea Group Publishing, 2005–2014.
9. **Series Editor** (with Ramesh Jain), [Semantic Web and Beyond: Computing for Human Experience](#), Springer, 2004.
10. **Member of the Editorial Advisory Board**, [Advances in Web Services Research \(AWSR\) Book Series](#), IGI Global, 2007–2008.
11. **Member of the Editorial Review Board**, [Journal of Web Services Research](#), 2008–2012.
12. **Member of the Editorial Board**, [Journal of Intelligent and Cooperative Information Systems](#), 1995–2013.
13. **Member of the Editorial Board**, [Information Systems: an International Journal](#), 1993–2012.
14. **Member of the Editorial Board**, [IEEE Multimedia](#), 1998–2004. Also edited Media Reviews.

15. **Member of the Editorial Advisory Board**, *Journal of Engineering Intelligent Systems*, 1993–2000.
16. **Member of the Editorial Board**, *Distributed Systems Engineering Journal*, 1993–1999.

Key Committee/Honorary Memberships [9]

2010 – 2013	Co-Chair	W3C XG on Semantic Sensor Networking
2004 – 2013	Advisory Committee	World Wide Web Consortium (W3C)
2011 - 2012	Board of Directors	SSAIE Summer School on Service-Oriented Computing
2005 – 2006	Advisory Board	Semantic Web Challenge
2004 – 2005	Member	Semantic Web Services Initiative Architecture Committee (SWSA)
2004 – Present	Faculty	Institute of Bioinformatics, UGA
2004	Faculty	Biomedical and Health Science Institute, UGA
1996 – 1999	Advisor	SIGGROUP
1988 – Present	Associate Editor	SIGMOD Record

Industry Courses and Course Series

1. Series of lectures on Semantic Web, Sensor Web, Social Web, Big Data, NLP and Health Applications, etc. Ahmedabad University, Feb-Mar, 2016.
2. “Semantic Web and Semantic Web Services.” Professional course, University of Madeira. Funchal, Portugal, Jun. 16–18, 2005. ([More information](#).)
3. “Mysteries of Metadata.” *Content World 2001*. Burlingame, CA, May 15, 2001. (3 hours.)
4. “Workflow Management: Research, Technology, Products, Applications and Experiences.” Course leaders: A. Sheth and S. Joosten, offered by WARIA, Atlanta, GA, Aug. 12–14, 1996. (3 days.)

Technical Meeting (Conferences, Workshop) Organization [70+] (incomplete)

Dec. 2018	General Co-Chair	2018 Web Intelligence conference, Santiago, Chile (WI'18).
Oct. 2018	Advisor	9 th Intl. Semantic Sensor Networking Workshop @ ISWC 2018.
Aug. 2017	General Co-Chair	28th International Conference on Database and Expert Systems Applications (DEXA 2017).
Jun. 2018	Co-Chair	SWeTI : Semantic Web of Things for Industry 4.0 @ ESWC 2018
Feb. 2018	Co-Chair	SmartIoT Workshop @ AAAI 2018: AI enhanced IoT data processing for Intelligent Applications
Oct. 2015	Advisor	1st Joint International Workshop on Semantic Sensor Networks and Terra Cognita (SSN-TC 2015) at ISWC2015, October 11, 2015, Bethlehem, PA.
Oct. 2014	General Co-Chair	2nd International Workshop on the Internet of Things (C-IoT 2014) at CollabCoM2014
Aug. 2011	Co-Chair	Mining Data Semantics Workshop (MDS 2011)

Jul. 2011	Director	Summer School on Service Oriented Computing (SummerSoc)
May 2011	Advisory Committee	International Conference on Web Intelligence, Mining and Semantics (WIMS 2011)
Nov. 2010	Advisor	3rd International Workshop on Semantic Sensor Networks (SSN10)
Sept. 2010	Co-Organizer	1st International Workshop on Traceability and Compliance of Semi-Structured Processes (TC4SP2010) at BPM2010
Jan. 2010	Co-Organizer	Semantic Challenges in Sensor Networks
2008 – 2010	Co-Chair	W3C Semantic Sensor Networks Incubator Group
Nov. 2009	Program Co-Chair	International Workshop on Community-Based Evolution of Knowledge-Intensive Systems (COMBEK'09)
Oct. 2009	Steering Committee Chair, Program Committee Member	2nd International Workshop on Semantic Sensor Networks at 8th International Semantic Web Conference (ISWC 2009)
May 2009	Steering Committee Chair, Program Committee Member	1st International Workshop on the role of Semantic Web in Provenance Management at 8th International Semantic Web Conference (ISWC 2009)
May 2009	Co-Organizer	Sensor Web Enablement
Nov. 2008	Scientific Steering Committee, Organizing Committee	International Workshop on Community-Based Evolution of Knowledge-Intensive Systems (COMBEK '08)
Oct. 2008	Program Committee Chair	7th International Semantic Web Conference (ISWC 2008)
Sept. 2008	Steering Committee Chair	Advances in Semantics for Web Services 2008 (semantics4ws 2008)
Jul. 2008	Steering Committee	2nd IEEE International Conference on Semantic Computing (ICSC 2008)
Apr. 2008	Steering Committee	2nd International Workshop on Web Service Composition and Adaptation (WSCA-2008) at 6th IEEE International Conference on Services Computing (SCC-2008)
Apr. 2008	Co-organizer	WWWo8 International Workshop on Context Enabled Source and Service Selection, Integration, and Adaptation (CSSSIA 2008)
Mar. 2008	Co-organizer	Association for the Advancement of Artificial Intelligence (AAAI) 2008, Spring Symposium.
Sept. 2007	Co-organizer	2nd Workshop on Advances in Semantics for Web Services (semantics4ws'07) at BPM 2007
Jul. 2007	General Chair	4th International Workshop on Semantic Web for Services and Processes (SWSP 07) at IEEE International Conference on Web Services
Jul. 2007	Co-organizer	1st International Workshop on Web Service Composition and Adaptation (WSCA-2007) at IEEE International Conference on Web Services
Feb. 2007	Co-Organizer	Autonomic Web Services: Dagstuhl Seminar 07061

Nov. 2006	Industry Track Chair, Sponsorship Chair	5th International Semantic Web Conference
Sept. 2006	Program Co-Chair	4th International Conference on Business Process Management (BPM 2006)
Sept. 2006	General Chair	3rd International Workshop on Semantic and Dynamic Web Processes (SWDP2006)
Sept. 2006	Program Committee Chair	4th International Conference on Business Process Management (BPM 2006)
Sept. 2006	Co-organizer, Program Committee Chair	Advances in Semantics for Web Services Workshop (semantics4ws'06) at BMP 2006
Aug. 2006	Co-organizer	SIG on Semantic Web and Information Systems (mini-track) at 12th Americas Conference on Information Systems
Jul. 2006	Program Co-Chair	AI-Driven Technologies for Services-Oriented Computing (AAAI-06 Workshop)
Jul. 2006	Organization Committee	International Workshop on Distributed Applications for B2B Integration (DABI 2006) at 26th ICDC
Jun. 2006	Organizing Committee	ESWC'06 Industry Forum Day Business Applications of Semantic Web technology
Apr. 2006	General Chair	3rd International Workshop on Semantic Web and Databases (ICDE SWDB '06) at ICDE 2006
Apr. 2006	Program Committee Co-chair	International Workshop on Semantics enabled Networks and Services (ICDE SeNS 2006) at ICDE2006
Mar. 2006	Co-organizer	Semantic Web meets eGovernment at AAAI Spring Symposium Series (SSS-06)
Dec. 2005	Co-chair	Organization Committee, International Workshop in Dynamic Web Processes (DWP 2005) at ICSOC 2005
Jul. 2005	Co-chair	2nd International Workshop on Semantic and Dynamic Web Processes (SDWP 2005)
Sept. 2004	Co-organizer	Semantic Interoperability and Integration: Dagstuhl Seminar 04391
Sept. 2004	Program Co-Chair	2004 IEEE International Conference on Services Computing (SCC 2004)
Jul. 2004	Co-organizer	1st International Workshop on Semantic Web Services and Web Process Composition (SWSWPC 2004)
Mar. - Aril 2004	Co-organizer	NASA Workshop on the Knowledge Integrating Virtual Iron Bird
Nov. 2003	Co-Chair	UCGIS Homeland Security Workshop
May 2002	Co-Chair	Workgroup on Semantic Web, NSF 2002 Workshop on Information and Data Management
Apr. 2002	Organizer/Chair	NSF-EU Invitational Workshop on Database and Information Systems Research for Semantic Web and Enterprises
May 2001	Co-Organizer	2nd International Workshop on the Semantic Web (SemWeb 2001) at WWW10
May 2000	Program Co-Chair	IEEE conference on Advances in Digital Library
Aug. 1997	Co-Director	NATO Advanced Study Institute on Workflow Systems and Interoperability

Jun. 1996	General (Co-)Chair	1st International Conference on Interoperable and Cooperative Information Systems (CoopIS '96)
May 1996	Program Chair, Organizing Committee Chair	NSF workshop on Workflow and Process Automation: State-of-the-art and Future Directions
1994	Program (Co-)Chair	3rd International Conference on Parallel and Distributed Information Systems
1994	Program Vice Chair	Technology and Applications Track, 10th International Conference on Data Engineering
Apr. 1993	Program (Co-)Chair	3rd RIDE-International Workshop on Interoperability in Multidatabase Systems
1991	General Chair	1st International Conference on Parallel and Distributed Information Systems
1990	Program Vice-Chair	6th IEEE International Conference on Data Engineering
1990	Chair	Workshop on Management of Interdependent Data in Bellcore and BCCS
1989	Program Vice-Chair	5th IEEE International Conference on Data Engineering

Other Organization Committee Roles (Partial) [43]

Aug. 2017	Advisor Committee Member	4th International Workshop on Semantic Machine Learning (SML 2017) at IJCAI 2017
Oct. 2017	Advisory Committee Member	1st Intl Workshop on Deriving Value from Big Data in Healthcare at IEEE BigData 2015
Apr. 2014.	Advisory Committee Member	Ontology Summit 2014
Oct. 2014	Advisor	5th Workshop on Semantics for Smarter Cities (SCAS2014) at ISWC 2014
Oct. 2014	Advisor	7th International Workshop on Semantic Sensor Networks (SSN2014) at ISWC2014
Oct. 2013	Advisor	6th International Workshop on Semantic Sensor Networks (SSN2013) at ISWC2013
Nov. 2012	Advisor	5th International Workshop on Semantic Sensor Networks (SSN2012) at ISWC2012
Jul. 2008	Steering Committee	2nd International Workshop on Web Service Composition and Adaptation (WSCA-2008) a 6th IEEE International Conference on Services Computing (SCC-2008)
Mar. 2008	Co-organizer	AI Meets Business Rules and Process Management at Association for the Advancement of Artificial Intelligence (AAAI 2008), Spring Symposium
Sept. 2007	Co-organizer	2nd Workshop on Advances in Semantics for Web Services (semantics4ws'07) at BPM 2007
Jul. 2007	General Chair	4th International Workshop on Semantic Web for Services and Processes (SWSP 07) at IEEE International Conference on Web Services .
Jul. 2007	Co-organizer	1st International Workshop on Web Service Composition and Adaptation (WSCA-2007) at IEEE International Conference on Web Services
Feb. 2007	Co-Organizer	Autonomic Web Services: Dagstuhl Seminar 07061

Nov. 2006	Industry Track and Sponsorship Chair	International Semantic Web Conference
Sept. 2006	General Chair	3rd International Workshop on Semantic and Dynamic Web Processes (SWDP2006)
Sept. 2006	Co-organizer, Program Committee Chair	Advances in Semantics for Web Services Workshop (semantics4ws'06) at BMP 2006
Aug. 2006	Co-organizer	SIG on Semantic Web and Information Systems (mini-track) at 12th Americas Conference on Information Systems
Jul. 2006	Organization Committee	International Workshop on Distributed Applications for B2B Integration (DABI 2006) at 26th ICDCS
Jun. 2006	Organizing Committee	ESWC'06 Industry Forum Day Business Applications of Semantic Web technology
Apr. 2006	General Chair	3rd International Workshop on Semantic Web and Databases (ICDE SWDB'06) at ICDE 2006
Mar. 2006	Steering Committee	Semantic Web Services Challenge 2006: Challenge on Automating Web Services Mediation, Choreography and Discovery
Mar. 2006	Co-organizer	Semantic Web meets eGovernment Workshop at AAAI Spring Symposium Series (SSS-06)
Dec. 2005	Co-chair, Organization Committee	International Workshop in Dynamic Web Processes (DWP 2005) at ICSOC 2005
Jul. 2005	Co-chair	2nd International Workshop on Semantic and Dynamic Web Processes (SDWP2005)
Sept. 2004	Co-organizer	Semantic Interoperability and Integration: Dagstuhl Seminar 0 4391
Jul. 2004	Co-organizer	1st International Workshop on Semantic Web Services and Web Process Composition (SWSWPC 2004)
Mar. 2004 – Apr. 2004	Co-organizer	NASA Workshop on the Knowledge Integrating Virtual Iron Bird
Nov. 2003	Co-Chair	UCGIS Homeland Security Workshop
May 2002	Co-Chair, Workgroup on Semantic Web	NSF 2002 Workshop on Information and Data Management
Apr. 2002	Organizer/Chair	NSF-EU Invitational Workshop on Database & Information Systems Research for Semantic Web & Enterprises
May 2001	Co-Organizer	2nd International Workshop on the Semantic Web - SemWeb'2001 at WWW10
Oct. 2002	Panel Chair	Federated Conferences ODBASE/CooPIS 2002
Oct. 2002	Steering Committee	Science on the Semantic Web: Building the Next Generation of Environmental Information Systems
Feb. 1999	Steering Committee Chair and founder	1st ACM International Conference on Work Activity Coordination and Collaboration
Nov. 1996	Panel Chair	5th International Conference on Information and Knowledge Management (CIKM'96)
Sept. 1996	Panel Co-Chair	22nd International Conference on Very Large Data Bases

1995 – Present	Founding Member, Executive Committee Member/Treasurer	International Foundation on Cooperative Information Systems
1995 – Present	Steering Committee Member	International Conference on Parallel and Distributed Information Systems
Jun. 1995	Panel Chair, Member of Organization Committee	6th IFIP TC-2 Working Conference on Data Semantics (DS-6)
1993	Tutorial Chair	ACM SIGMOD Conference
1988, 1991	Tutorial Chair	7th IEEE International Conference on Data Engineering
1992 – Present	Secretary and Treasurer	IEEE CS TC on data engineering
Apr. 1991	Publication Chair	1st International Workshop on Interoperability in Multidatabase Systems (IMS '91)
1988 – 2005	Associate Editor	SIGMOD Record
1988	Tutorial Chair	4th IEEE International Conference on Data Engineering

Guest (co)Editor of Journal/Magazine Special Issues; (Senior) Program Committee Member for International Conferences and Workshops [235*]

Mar/Apr 2019	Co-Guest Editor: Special Issue on “Cognitive Services and Intelligent Chatbots,” IEEE Internet Computing
July 2018	Co-Guest Editor: Special Issue on "Processing Social Media in Real-Time," Information Processing & Management (IP&M), Elsevier.
Jan/Feb 2018	Co-Guest Editor: Special Issue on “IoT-Enhanced Human Experience,” IEEE InternetComputing
Sept. 2017	RTSI 2017 – 3° International Forum on Research and Technologies for Society and Industry, Modena, Italy, 11-13 September 2017
Dec. 2016	1st Workshop on Data Mining for Internet of Things (DMIoT 2016) held in conjunction with the IEEE International Conference on Data Mining series (ICDM 2016)
June 2016	Co-Guest Editor: <u>Smart cities – enabling services and application</u> , Journal of Internet Services and Applications, 7:6, June 2016.
July 2015	4th International Conference on Data Management Technologies and Applications (DATA 2015)
May–June 2015	12th European Semantic Web Symposium 2015 (ESWC 2015)
May 2015	9th International AAAI Conference on Weblogs and Social Media (ICWSM-15)
May 2015	Special Issue on Dataset Profiling and Federated Search for Linked Data (IJSWIS-DP2014)
May 2015	24th International World Wide Web Conference (WWW 2015)
Mar. 2015	1st IEEE International Conference on Big Data Computing Service and Applications
Oct. 2014	IFIP Workshop on Semantic Web & Web Semantics (SWWS) at OTM 2014
Oct. 2014	OnTheMove (OTM 2014)
Oct. 2014	13th International Semantic Web Conference (ISWC2014)
Sept. 2014	Workshop on Personal Data Analytics in the Internet of Things (PDA at IOT

	2014)
Aug. 2014	2nd International Workshop on Internet of Things in Conjunction with CollaborateCom 2014 (C-IOT 2014)
June 2014	8th International AAAI Conference on Weblogs and Social Media
June 2014	8th International Conference on Weblogs and Social Media (ICWSM-14)
May 2014	11th European Semantic Web Symposium 2014 (ESWC 2014)
May 2014	11th Extended Semantic Web Conference - EU Project Networking Session (ESWC 2014 EU Projects)
Apr. 2014	23rd International World Wide Web Conference (WWW 2014)
Feb. 2014	AI Magazine Special Issue on Semantics for Big Data 2013 (S4BD-SI 2013)
Nov. 2013	Semantics for Big Data, AAAI 2013 Fall Symposium
Sept. 2013	I-SEMANTICS 2013
Sept. 2013	I-SEMANTICS 2013 Posters & Demos Track
July 2013	27th AAAI Conference on Artificial Intelligence (AAAI-13)
July 2013	Tutorials at the Seventh International AAAI Conference on Weblogs and Social Media (ICWSM-13)
July 2013	7th International Conference on Weblogs and Social Media (ICWSM-13)
June 2012	IJSWIS Special Issue on Visualisation of and Interaction with Semantic Web Data
May 2013	1st International IFIP Working Conference on Value-Driven Social Semantics & Collective Intelligence (VaSCo)
May 2013	Extended Semantic Web Conference
May 2013	22nd International World Wide Web Conference
May 2013	2nd International Workshop on Real-Time Analysis of Social Streams
May 2013	24th ACM Conference on Hypertext and Social Media
Feb. 2013	International Journal on Semantic Web and Information Systems, Special Issue on Semantic Social Media Dynamics (IJSWIS-SI-SSMD13)
Dec. 2012	4th International Conference on Social Informatics (SocInfo 2012)
Nov. 2012	10th International Semantic Web Conference (ISWC 2012)
Nov. 2012	Industry Track, 11th International Semantic Web Conference (ISWC2012-Industry)
Nov. 2012	ISWC 2012 Journal Workshop Session
Oct. 2012	31st International Conference on Conceptual Modeling (ER2012)
Oct. 2012	18th International Conference on Knowledge Engineering and Knowledge Management (EKAW 2012)
Oct. 2012	Knowledge Engineering and Knowledge Management that Matters
June 2012	Data Integration in the Life Sciences 2012
June 2012	ACM Hypertext and Social Media Conference
June 2012	International Provenance and Annotation Workshop
June 2012	6th International Conference on Weblogs and Social Media
May 2012	Extended Semantic Web Conference
Apr. 2012	21st International Conference on World Wide Web (WWW 2012)
Dec. 2011	IJSWIS Special issue on Mining Associations and Patterns from the Semantic Data
Oct. 2011.	10th International Semantic Web Conference (ISWC 2011)
Oct. 2011	4th International Workshop on Semantic Sensor Networks 2011 (SSN11). A Workshop of the 10th International Semantic Web Conference (ISWC 2011).
July 2011	5th International AAAI Conference on Weblogs and Social Media (ICWSM-11)
May 2001 –	8th Extended Semantic Web Conference (ESWC 11)

June 2011	
Apr. 2011	Workshop on Future of the Web for Collaborative Science (HCLS) at WWW 2010
Dec. 2008	3rd Asian Semantic Web Conference (ASWC 2008)
July 2013	AAAI-13 Special Track on AI and the Web (AAAI-13 AIW)
July 2013	ASME 2013 Summer Heat Transfer Conference (HT2013)
July 2013	7th International AAAI Conference on Weblogs and Social Media (ICWSM-13)
May 2013	10th Extended Semantic Web Conference (ESWC 2013)
Nov. 2012	11th International Semantic Web Conference (ISWC 2012-Industry)
Oct. 2012	Knowledge Engineering and Knowledge Management 2012 (EKAQ 2012)
Oct. 2012	31st International Conference on Conceptual Modeling (ER 2012)
June 2012	Data Integration in the Life Sciences 2012 (DILS 2012)
June 2012	4th International Provenance and Annotation Workshop (IPAW 2012)
June 2012	6th International AAAI Conference on Weblogs and Social Media (ICWSM-12)
May 2012	9th Extended Semantic Web Conference (ESWC 2012)
May 2013	Real-Time Analysis and Mining of Social Streams (RAMSS 2013)
May 2013	22nd International World Wide Web Conference (WWW 2013)
Apr. 2012	21st International Conference on World Wide Web (WWW 2012)
Oct. 2011	10th International Semantic Web Conference (ISWC 2011)
Oct. 2011	10th International Semantic Web Conference – Outrageous Ideas Track (ISWC2011-Outrageous-Ideas)
Oct. 2011	4th International Workshop on Semantic Sensor Networks 2011 (SSN11), a workshop at 10th International Semantic Web Conference (ISWC 2011)
Jul. 2011	5th International AAAI Conference on weblogs and Social Media (ICWSM-11)
Jun. 2011	Workshop on Language in Social Media (LSM 2011)
May 2001 – Jun. 2011	8th Extended Semantic Web Conference (ESWC 11)
Apr. 2011	Workshop on Future of the Web for Collaborative Science (HCLS) at WWW 2010 .
Mar. 2011	20th International World Wide Web Conference
Feb. 2011	6th Conference Professional Knowledge Management
Feb. 2011	IEEE CogSIMA 2011
Jan. 2011	Workshop on Sensor-Enabled Situational Awareness at 12th International Conference on Distributed Computing and Networking (ICDCN 2011)
Nov. 2010	9th International Semantic Web Conference (ISWC 2010)
Sept. 2010	8th International Conference on Business Process Management (BPM 2010)
Nov. 2010	3rd International Workshop on Semantic Sensor Networks 2010 (SSN10), a workshop of the 9th International Semantic Web Conference (ISWC 2010)
Aug. 2010	6th Conference on Prestigious Applications of Intelligent Systems (PAIS) at ECAI 2010
Jul. 2010	24th AAAI Conference on Artificial Intelligence (AAAI 2010)
May 2010	4th International AAAI Conference on Weblogs and Social Media
Apr. 2010	3rd CFP: The Future of the Web for Collaborative Science (FWCS2010) at WWW'10
Dec. 2009	7th International Workshop on Middleware for Grids, Clouds and e-Science (MGC2009) at 10th International Middleware Conference 2009
2011	2011 IEEE Conference on Cognitive Methods in Situation Awareness and

	Decision Support
Nov. 2009	28th International Conference on Conceptual Modeling (ER 2009)
Nov. 2009	2nd Intl Workshop on Modeling Mobile Applications and Services (M2AS'09) at 28th Intl Conference on Conceptual Modeling (ER 2009)
Nov. 2009	International Workshop on Community-Based Evolution of Knowledge-Intensive Systems (COMBEK '09)
Oct. 2009	3rd Intl Workshop on Web APIs and Services Mashups (Mashups '09)
Oct. 2009	8th International Semantic Web Conference (ISWC 2009)
Oct. 2009	5th IEEE Workshop on Situation Management (SIMA 2009) at IEEE MILCOM 2009
Sept. 2009	Advanced Knowledge-Based Systems, 13th Intl Conference on Knowledge-Based and Intelligent Information & Engineering Systems (KES 2009)
Sept. 2009	Business Process Management Conference 2009 (BPM 2009)
Jun. 2009	1st International Workshop on the Semantic Sensor Web (SemSensWeb2009)
Apr. 2009	18th International World Wide Web Conference
Feb. 2009	3rd Asian Semantic Web Conference (ASWC 2008)
Dec. 2008	2nd Intl Workshop on Web APIs and Service Mashups (Mashups '08)
Oct. 2008 – Nov. 2008	Multimedia 2008, 2nd International Workshop on the Many Faces of Multimedia Semantics.
Oct. 2008	7th International Semantic Web Conference (ISWC 2008)
Sept. 2008	International Conference on Web Services (ICWS 2008)
Sept. 2008	10th Intl Conference on Visual Information Systems (VISUAL 2008)
Sept. 2008	Advanced Knowledge-based Systems, Invited Session, 12th International Conference on Knowledge-based and Intelligent Information & Engineering Systems (KES 2008)
Jun. 2008	5th European Semantic Web Conference (ESWC 2008 Ph.D. Symposium)
Apr. 2008	Semantic Web for Health Care and Life Sciences Workshop (HCLS 2008) at 17th International World Wide Web Conference
Apr. 2008	Semantic Web for Health Care and Life Sciences Workshop
Dec. 2007	Workshop on Information Systems Economics (WISE 2007)
Nov. 2007	1st International Workshop on Networking for Distributed Knowledge Management (NDKM '07)
Nov. 2007	3rd International IFIP Workshop on Semantic Web & Web Semantics (IFIP SWWS 2007)
Nov. 2007	6th Intl Semantic Web Conference and 2nd Asian Semantic Web Conference
Nov. 2007	1st Workshop Cyberinfrastructure: Information Management in eScience (CIMS) at ACM CIKM 2007
Nov. 2007	Intl Conference on Advances in Semantic Processing (SEMAPRO 2007)
Nov. 2007	Workshop on Cyberinfrastructure for e-Science (CyIneS 2007) at IEEE/WIC/ACM Joint Conference on Web Intelligence and Intelligent Agent Technology
Sept. 2007	Usage of Service Level Agreements in Grids Workshop at 8th IEEE International Conference on Grid Computing (Grid 2007)
Sept. 2007	11th Intl Workshop on Cooperative Information Agents (CIA 2007)
Jul. 2007	22nd National Conference on Artificial Intelligence: AAAI-based7 (Special track on Artificial Intelligence and the Web)
Jun. 2007	9th Intl Conference on e-Health Networking, Applications and Services
Jun. 2007	1st International Conference on Web Reasoning and Rule Systems
May 2007 –	From Concepts & Prototypes to Practical Solutions, 1st Intl Workshop on

Jun. 2007	Semantic Technology Adoption in Business (STAB'07) at ESTC 2007
May 2007	16th International World Wide Web Conference (WWW2007)
May 2007	16th International World Wide Web Conference (WWW2007)
Nov. 2006	5th International Semantic Web Conference (ISWC 2006)
Sept. 2006	4th IEEE International Conference on Web Services
Sept. 2006	1st Asian Semantic Web Conference
Jul. 2006	21st National Conference on Artificial Intelligence (AAAI-06)
Jun. 2006	3rd Annual European Semantic Web Conference (ESWC2006)
May 2006	15th International World Wide Web Conference (WWW2006)
May 2006	IEEE Intelligence and Security Informatics (ISI) Conference
May 2006	IEEE International Conference on Granular Computing
Apr. 2006	22nd International Conference on Data Engineering
Apr. 2006	2nd International Workshop on Database Interoperability (InterDB 2006)
Dec. 2005	6th International Conference on Web Information Systems (WISE 2005)
Nov 2005	1st International Conference on Geospatial Semantics (GeoS 2005)
Nov. 2005	4th International Semantic Web Conference (ISWC 2005)
Oct. 2005 – Nov. 2005	4th International Conference on Ontologies, DataBases, and Applications of Semantics (ODBASE)
Oct. 2005	K-Cap Workshop on Integrating Ontologies
Sept. 2005	IFIP Working Conference on Virtual Enterprises (PRO-VE '05)
Jul. 2005	2005 IEEE Service Intl Conference on Services Computing (SCC 2005)
Jul. 2004	3rd IEEE International Conference on Web Services
Jul. 2005	1st International Workshop on Contexts and Ontologies: Theory, Practice and Applications (an AAAI '05 Workshop)
Jun. 2005	W3C Workshop on Frameworks for Semantics in Web Services
May 2005	IEEE International Conference on Intelligence and Security Informatics (ISI-2005)
May 2005	14th International World Wide Web Conference (WWW 2005)
Apr. 2005	21st International Conference on Data Engineering
Apr. 2005	1st UK Young Researchers Workshop on Service Oriented Computing (YR–SOC)
Nov. 2004	2nd International Conference on Service Oriented Computing (ICSOC '04)
Nov. 2004	3rd International Conference on Semantic Web
Oct. 2004	1st International Workshop on Semantic Web Technologies in Electronic Business
Jul. 2004	AAAI 2004 Workshop on Semantic Web Personalization
Jul. 2004	IEEE International Conference on Web Services (ICWS 2004)
May 2004	13th International World Wide Web Conference (WWW 2004)
May 2004	2nd Workshop on Semantics in Peer-to-Peer and Grid Computing at WWW 2004
Dec. 2003	4th International Conference on Web Information Systems Engineering (WISE '03)
Nov. 2003	2nd International Conference on Ontologies, DataBases, and Applications of Semantics for Large Scale Information Systems (ODBASE '03)
Nov. 2003	12th International Conference on Information and Knowledge Management (CIKM 2003)
Oct. 2003	2nd International Semantic Web Conference
Oct. 2003	Semantic Integration Workshop at ISWC 2003
Oct. 2003.	Workshop on Semantic Web Technologies for Searching and Retrieving Scientific Data at ISWC2003

Oct. 2003	Workshop on Practical and Scalable Semantic Systems at ISWC 2003
Oct. 2003	2003 IEEE/WIC International Conference on Intelligent Agent Technology (IAT 2003)
Sept. 2003 – Oct. 2003	ICEC Workshop on Semantic Web Services for Enterprise Application Integration and E-Commerce
Sept. 2003	Semantic Web Services for Enterprise Application Integration and E-Commerce (SWSEE '03)
Sept. 2003	4th Annual International Conference on Object-oriented and Internet-based Technologies, Concepts, and Applications for a Networked World
Sept. 2003	Workshop on Semantic Web and Databases at the 29th International Conference on Very Large Data Bases (VLDB 2003)
Sept. 2003	1st International Workshop on Semantic Web and Databases
Aug. 2003	7th International Workshop CIA-2003 on Cooperative Information Agents
Jun. 2003	IEEE Conference on E-Commerce (CEC '03)
Jun. 2003	IEEE International Conference on Electronic Commerce (CEC '03)
May 2003	12th International World Wide Web Conference (WWW 2003)
May 2003	1st Workshop on Semantics in Peer-to-Peer and Grid Computing at WWW 2003
Oct. 2002	1st International Conference on Ontologies, DataBases, and Applications of Semantics for Large Scale Information Systems (ODBASE '02)
Oct. 2002	3rd International Symposium on Multi-Agent Systems, Large Complex Systems, and E-Businesses (MALCEB 2002)
Oct. 2002	3rd Annual International Conference on Object-oriented and Internet-based Technologies, Concepts, and Applications for a Networked World
Oct. 2002	Net.Object Days 2002
Sept. 2002	6th International Workshop CIA-2002 on Cooperative Information Agents
Jul. 2002	2nd International Workshop on Databases, Documents, and Information Fusion (DBFusion 2002): Information Integration and Mining in Databases and on the Web
Jun. 2002	1st International Semantic Web Conference (ISWC-2002)
May 2002	11th International World Wide Web Conference (WWW 2002)
May 2002	1st WWW 2002 Workshop on Real World RDF and Semantic Web Applications
Sept. 2001	5th International Workshop CIA-2001 on Cooperative Information Agents
Sept. 2001	6th Intl Conference on Cooperative Information Systems (CoopIS 2001)
Jul. 2001	Intl Semantic Web Workshop: Infrastructure and Applications for the Semantic Web
May–Jun. 2001	Autonomous Agents 2001
May 2001	2nd Intl Workshop on the Semantic Web (SemWeb'2001) at WWW '10
Apr. 2001	International Workshop on Information Integration on the Web: Technologies and Applications
Sept. 1999	5th International Workshop on Groupware (CRIWG '99)
Jul. 1999 – Aug. 1999	3rd International Workshop on Cooperative Information Agents (CIA-99)
Mar. 1999	9th RIDE International Workshop on Information Technology for Virtual Enterprises
Mar. 1999	2nd International Conference on Interoperating Geographic Information Systems (Interop '99)
Nov. 1998	CSCW Workshop on Adaptive Workflow Systems

Nov. 1998.	5th Intl Conference of Foundations of Data Organization (FODO '98)
Sept. 1998	11th Intl Conference on Parallel and Distributed Computing Systems
Aug. 1998	International Workshop on Workflow Management (WFM '98)
Aug. 1998	3rd IFCIS International Conference on Cooperative Information Systems (CoopIS '98)
Jun. 1998	ACM SIGMOD Conference
May 1998	18th International Conference on Distributed Computing Systems
Mar. 1998	6th International Conference on Extending Data Base Technology (EDBT '98)
Dec. 1997	2nd International Conference on Visual Information Systems (Visual '97)
Dec. 1997	International Conference on Management of Data (COMAD '97)
Oct. 1997	7th IFIP 2.6 Working Conference on Database Semantics (DS-7)
Sept. 1997	8th Intl Conference on Database & Expert Systems Applications (DEXA '97)
Sept. 2002	2nd IEEE Metadata Conference
Jun. 1996	1st IFCIS Conference on Cooperative Information Systems (COOPIS '96)
Mar. 1996	5th International Conference on Extending Database Technology (EDBT'95)
1996	5th IEEE RIDE Workshop on Interoperability of Nontraditional Databases (RIDE-IND '96)
1996	12th IEEE International Conference on Data Engineering
Dec. 1995	7th International Conference on Management of Data (COMAD '95)
Dec. 1995	14th Object-oriented and Entity Relationship Modeling '95 (OO-ER95)
Nov. 1995	4th International Conference on Information and Knowledge Management
Jun. 1995	2nd Next Generation Information Technologies and Systems (NGITS-95)
May 1995	IFIP DS-6 Database Application Semantics
Apr. 1995	11th IEEE International Conference on Data Engineering
Mar. 1995	4th International Conference on Extending Database Technology (EDBT 95)
Sept. 1994	20th International Conference on Very Large Data Bases (VLDB 94)
Jun. 1994	1st International Conference on Application of Databases (ADB 94)
May 1994	2nd Intl Conference on Cooperative Information Systems (CoopIS 94)
Apr. 1994	10th IEEE International Conference on Data Engineering
Apr. 1993	9th IEEE International Conference on Data Engineering (ICDE 1993)
Jan. 1993	2nd International Conference on Parallel & Distributed Information Systems (PDIS 93)
1993	2nd International Conference on Information and Knowledge Management
Nov. 1992	IFIP DS-5 Semantics of Interoperable Data Base Systems-92
Feb. 1992	2nd International Workshop on Research Issues on Data Engineering: Transaction and Query Processing (RIDE-TQP)
Feb. 1992	8th IEEE International Conference on Data Engineering (ICDE 92)
1991	1st International Conference on Information and Knowledge Management
Apr. 1991	21st Intl Conference on Distributed Computing Systems (ICDCS-21)
Apr. 1991	1st International Workshop on Research Issues on Data Engineering: Interoperability in Multidatabase Systems (RIDE-IMS)
Apr. 1991	7th IEEE International Conference on Data Engineering (ICDE 91)
Dec. 1991	COMAD/Management of Data
Mar. 1990	1st Intl Conference on Databases, Parallel Architectures and their Applications (PARBASE-90)
1990	2nd Intl Symposium on Database in Parallel and Distributed Systems
1988	1st Intl Symposium on Database in Parallel and Distributed Systems
Feb. 1988	4th IEEE International Conference on Data Engineering

Other Services (Sessions, Reviews, Funding Panels)

Services to National and international funding Agencies as Proposal Reviewer (partial)

Ongoing & frequent	US 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). National Institute of Health , since 2007.
2016, 2017	European Union
2017	National Research Funding agency of Saudi Arabia.
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)
various	Canada, National Science and Engineering Research Council; Norway Research Council. ; NSF-equivalent national research sponsorship organization (reviewer for several years)
2003	Australian Research Council, Expert Assessor of International Standing
2001	Ireland, Science Foundation
1999	Austria, Fonds zur Förderung der wissenschaftlichen Forschung (FWF)
2005 2003	The Netherlands, Netherlands Organization for Scientific Research (NOW)
1996	Israel Science Foundation, Israel; National Research Grants council, Hong Kong.

Chaired Technical Sessions at various international conferences (numerous, not fully documented)

Services to Journals as Referee [practically all high quality journals in my area of research]

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 this area of work.

Curriculum Development (Initiatives and Courses)

Initiatives

- Led development of Big and Smart Data MS certificate program starting Aug. 2014 at Wright State University.
- 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 and Offered [10]

- **Semantic, Cognitive and Perceptual Computing**, Wright State University, Summer 2016.
- **Advanced Topics in Semantic Web**, CS 79950, offered at Wright State University Fall 2013.
- **Web 3.0: Next Generation Web & Apps**, CS 7900, offered at Wright State University Spring 2013.
- **Semantics empowered Web 3.0**, CS4800/6800, offered at Wright State University Fall 2012.
- **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

Courses Taught – Partial list:

CS 4800/6800/7900	Web Information Systems	S '16
CS 7820	Advanced Topics in Semantic Web	F '16
MM10	(Guest Lecture) Internet Marketing. University of Otago, Dunedin, New Zealand	Apr. 15, 2015
INFO 408	(Guest Lecture) Examples of Real-World Big Data Application. University of Otago, Dunedin, New Zealand	Apr. 2, 2015

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CS 7950	Advanced Topics in Semantic Web	F '13
CS 7900	Web 3.0: Next Gen Web & Apps	S '13
CS 4800/6800/7900	Web Information Systems	F '12
CS 875	Semantic Web	S '12
CS 475/675	Web Information Systems	F '11
CS 875	Semantic Web	S '11
CS 475/675	Web Information Systems	F '10
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
CSCI 8351	Semantic Web Services & Processes	S '06
CSCI 4350/6350	Global Information Systems	S '05
CSCI 8350	Semantic Web	F '05
CSCI 8351	Semantic Web Services & Processes	S '04
CSCI 8350	Semantic Web	F '04
CSCI 4350/6350	Global Information Systems	S '03
CSCI 8350	Semantic Web	F '03
CSCI 8350	Semantic Web	S '02
CSCI 8350	Semantic Enterprise	F '02
CSCI 8350	Enterprise Integration (w/ Cardoso)	S '01
CSCI 8350	Enterprise Integration (w/ Arpinar)	S '00
CSCI 6350	Global Information Systems	F '99
CSCI 8350	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	S '95
CS 203	Programming Project Design	F '95

Supervision of Student Research as Dissertation/Thesis Advisor [27 PhDs]

No.	Name	Thesis	Jobs/Career
1)	Vinh Nguyen PhD (WSU): 12/2017	Foundations of Representing, Reasoning, and Traversing in Contextualized Knowledge Graphs using Semantic Web	NLM

2)	Pavankalyan Yallamelli	<u>A Power Iteration Based Co-Training Approach to Achieve Convergence for Multi-View Clustering</u>	R-Net Technologies
3)	Kalpa Gunaratna PhD (WSU): 04/2017	<u>Semantics-based Summarization of Entities in Knowledge Graphs</u>	Samsung Research
4)	Sujan Perera PhD (WSU): 08/2016	<u>Knowledge-driven Implicit Information Extraction</u>	IBM Almaden Research (Watson Health)
5)	Lu Chen PhD (WSU): 08/2016	<u>Mining and Analyzing Subjective Experiences in User Generated Content</u>	LinkedIn Applied Research
6)	Ashutosh Jadhav PhD (WSU): 04/2016	<u>Knowledge-driven Search Intent Mining</u>	<u>IBM Almaden Research Center</u>
7)	Pavan Kapanipathi PhD (WSU): 04/2016	<u>Personalized and Adaptive Semantic Information Filtering for Social Media</u>	IBM TJ Watson
8)	Pramod Anantharam PhD (WSU): 04/2016	<u>Knowledge-empowered Probabilistic Graphical Models for Physical-Cyber-Social Systems</u>	<u>Bosch Research & Technology Center</u>
9)	Wenbo Wang PhD (WSU): 06/2015	<u>Automatic Emotion Identification from Text</u>	GoDaddy
10)	Hemant Purohit PhD (WSU): 06/2015	<u>Mining Behavior of Citizen Sensor Communities to Improve Cooperation with Organizational Actors</u>	<u>George Mason University (tenure track)</u>
11)	Delroy Cameron PhD (WSU): 12/2014	<u>A Context-Driven Subgraph Model for Literature-Based Discovery</u>	URX, Apple
12)	Pablo Mendes PhD (WSU): 12/2013	<u>Adaptive Semantic Annotation of Entity and Concept Mentions in Text</u>	<u>IBM Almaden Research Center</u> , Apple
13)	Cory Henson PhD (WSU): 11/2013	A Semantics-based Approach to Machine Perception Senior Research Engineer	<u>Bosch Research & Technology Center</u>
14)	Pratik Desai PhD (WSU): 04/2013 Co-advisor: Kuldip Rattan	A Situation Awareness Framework for Indoor Cyber-Physical Systems Aided by Fuzzy Abductive Reasoning and Semantic Web	Seer Labs; Imbue; Movimento [Entrepreneur]
15)	Christopher Thomas PhD (WSU): 12/2012	Knowledge Acquisition in a System	Samsung Research & Development; Glint

16)	Ajith Ranabahu PhD (WSU): 08/2012	<u>Abstraction Driven Application and Data Portability in Cloud Computing</u>	Amazon AWS (core group)
17)	Prateek Jain PhD (WSU): 08/2012	Linked Open Data Alignment and Querying	IBM TJ Watson Research
18)	Meena Nagarajan PhD (WSU): 08/2010	<u>Understanding User-Generated Content on Social Media</u>	<u>IBM Watson Health</u>
19)	Satya S. Sahoo PhD (WSU): 07/2010	<u>Semantic Provenance: Modeling, Querying, and Application in Scientific Discover</u>	Case Western Reserve University (tenured)
20)	Karthik Gomadam PhD (WSU): 08/2009	<u>Semantics Enriched Service Environments</u>	Accenture Labs
21)	Angela Maduko PhD (WSU): 05/2009	Building Statistical Summaries for Obtaining Accurate Estimates of the Cardinality of Graph Pattern Matching Queries	Teradata; earlier: ADVIS Lab at University of Illinois at Chicago
22)	Matthew Perry PhD (WSU): 07/2008	<u>A Framework to Support Spatial, Temporal and Thematic Analytics over Semantic Web Data</u>	Oracle
23)	Cartic Ramakrishnan PhD (WSU): 10/2008	<u>Extracting, Representing and Mining Semantic Metadata from Text: Facilitating Knowledge Discovery in Biomedicine</u>	IBM Research Center, Earlier: Datapop; ISI; CCHMC
24)	Kemafor Anyanwu PhD (UGA): 08/2007	<u>Supporting Link Analysis using Advanced Querying Methods on Semantic Web Databases</u>	North Carolina State University (tenured)
25)	Kunal Verma PhD (UGA): 08/2006 Co-advisor: John A. Miller	<u>Configuration and Adaptation of Semantic Web Processes</u>	AppZen (CTO and Co-founder); formerly, Accenture.
26)	Jorge Cardoso PhD (UGA): 08/2002	Quality of Service and Semantic Composition of Workflows	Prof. University of Coimbra; earlier: SAP Research; Asst. Prof., U. Madeira
27)	Vipul Kashyap PhD (Rutgers): 10/1997	Information Brokering over Heterogeneous Digital Data	Director, Clinical Decision Support and Knowledge Management at CIGNA; earlier: Partner Healthcare; NLM, Bellcore

28)	Zongwei Luo PhD (UGA): 02/2001	Knowledge Sharing, Coordinated Exception Handling, and Intelligent Problem Solving for Cross- Organizational Business Process	South University of Science and Technology of China; earlier: University of Hong Kong; IBM Watson Research
29)	PavanKalyan Yallamelli MS (WSU)	A Co-Training Approach for Multi-View Power Iteration Clustering	
30)	Siva Cheekula MS (WSU)	Characterizing Concepts in Taxonomy for Entity Recommendations	
31)	Nishita Jaykumar MS (WSU): 05/2016	<u>ResQu: A Framework for Automatic Evaluation of Knowledge-Driven Automatic Summarization</u>	
32)	Surendra Marupudi MS (WSU) 05/2016	Framework for Semantic Integration and Scalable Processing of City Traffic Events	
33)	Swapnil Soni MS (WSU): 05/2015	<u>Domain Specific Document Retrieval Framework for Near Real-time Social Health Data</u>	DropThought
34)	Revathy Krishnamurthy MS (WSU): 04/2015	<u>Knowledge Enabled Location Prediction of Twitter Users</u>	FactSet
35)	Gaurish Anand MS (UGA): 08/2014	Automatic Identification of Interestingness in Biomedical Literature	Sandia National Lab
36)	Ashwin Manjunatha MS (WSU): 06/2011	<u>A Domain Specific Language Based Approach for Developing Complex Cloud Computing Applications</u>	CISCO
37)	Harshal Patni MS (WSU): 06/2011	<u>Real Time Semantic Analysis of Streaming Sensor Data</u>	Entrepreneur. Earlier Zynx Health
38)	Sujeeth Thirumalai MS (UGA): 08/2007 Co-advisor: J. Miller	Keyword Search Interface for Path Queries on Ontology	Akamai Technologies
39)	Bilal Gonen MS (UGA): 08/2006	<u>Semantic Browser</u>	University of West Florida (Asst. Prof.)
40)	Ravi Pavagada MS (UGA): 08/2006	<u>Supporting keyword search on semantic web documents</u>	Manager, Comcast; earlier: Excelacom

41)	William Milnor MS (UGA): 12/2005	<u>Discovering Informative Subgraphs in RDF Graphs</u>	Topquadrant
42)	Swapna Onudhakar MS (UGA): 12/2004	<u>Semantic Web service discovery in a multi-ontology environment</u>	ADP
43)	Rohit Aggrawal MS (UGA): 08/2004 Co-advisor: J. Miller	<u>Constraint driven Web service composition in METEOR-S</u>	NetCracker; earlier: senior positions in Convergys
44)	Christian Halaschek-Wiener MS (UGA): 08/2004 Co-advisor: I.B. Arpinar	<u>A Flexible Approach for Ranking Complex Relationships on the Semantic Web</u>	CTO & Co-Founder at HashGo; earlier: SemanticSpace Technologies
45)	Abhijit Patil MS (UGA): 12/2003	<u>METEOR-S Web Service Annotation Framework</u>	
46)	Kaarthik Sivashanmuga MS (UGA): 08/2003 Co-advisor: J. Miller	<u>The METEOR-S Framework for Semantic Web Process Composition</u>	Microsoft
47)	Madhan Arumugam MS (UGA): 12/2001	The Peer-to-Peer Semantic Web: A Distributed Environment for Sharing Semantic Knowledge on the Web	Lead Program Manager, Microsoft; earlier: Intel
48)	Wonjung Kim MS (UGA): 12/2001	<u>Knowledge Based Personalization</u>	Samsung
49)	Shuchi Patel MS (UGA): 08/2001	Planning and Optimizing Semantic Information Requests on Heterogeneous Information Sources Using Semantically Modeled Domain and Source Characteristics	Tech Lead at Verizon
50)	Sanjeev Thacker MS (UGA): 08/2001	Knowledge Modeling for Study of Domains and Inter-domain Relationships – A Learning Paradigm	
51)	Zhongqiao Li MS (UGA): 08/2000	<u>Using Collaboration Task in OrbWork Enactment System for METEOR Workflow Management System</u>	Earlier: i2 Technologies
52)	Narayan Palsena MS (UGA): 08/2000	<u>A Framework for Creating Information Landscapes and Modeling Metadata in the Context of Digital Earth</u>	SAP

53)	Sriram Lakshminarayan MS (UGA): 07/2000	Semantic Interoperability in Digital Libraries using Inter-Ontological Relationships	Engineering Manager at Elance; earlier: Yahoo!!
54)	Dilpreet Singh MS (UGA): 12/2000	<u>An Agent Based Architecture for Query Planning and Cost Modeling of Web Sources</u>	Cofounder, CTO at Life360; earlier: Director, Kana
55)	Mukesh Guntamadugu MS (UGA): 08/2000	MÉTIS: Automating Metabase Creation from Multiple Heterogeneous Sources	CBS Interactive; Earlier: Looksmart
56)	Subrajit Ray MS (UGA): 08/1999	Ontology-based Media Independent Correlation of Information Across Heterogeneous Distributed Sources	VP, Deutsche Bank
57)	Vineet Mahajan MS (UGA): 08/1999	A Multi-Agent System for Metadata Management and Information Brokering	SmartBrief (CTO); earlier Interim CTO at Huffington Post; VP at AOL
58)	Clemens Bertram MS (UGA): 12/1998	<u>Metadata and Ontology Based Query Processing in the InfoQuilt System</u>	VP at Goldman Sachs; earlier: VP of Tech at Semagix/Director of Engg at Voquette/Taalee
59)	Krishnan Parsuraman MS (UGA): 12/1998	Agent Support in the InfoQuilt System	IBM - Digital Media (CTO); Earlier: Netezza, Infosys, Exemplary
60)	Selvam Velmurugan MS (UGA): 9/1997	Collaborative Tele-Consulting for Healthcare: CATCH	Director of Groupon; earlier: Netflix, Amazon;
61)	Srilekha Mudumbai MS (UGA): 05/1997	<u>ZEBRA Image Access System</u>	Owner (entrepreneur), JitBit; earlier: Lawrence Berkeley National Lab; Verizon;
62)	Devashish Worah MS (UGA): 05/1997	Error Handling and Recovery for the ORBWork Workflow Enactment Service in METEOR	VP, Virtuasa

External Academic Advising [9]

- 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, Saarbrücken, Germany, Dec 2008.
- External expert reviewer for Ph.D. candidate Manuel Garcia Solaco, Facultat d'Informàtica de la Universitat Politècnica de Catalunya, 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.

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- 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, Aug. 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, Sept. 2003.

Supervised research of PhD researchers during visits to my center/lab: [samples] (a) Eduardo Mena (Ph.D. candidate, Basque State University, Spain) during his one-year work at LSDIS Lab, UGA in 1996 (12 months), (b) Isabel Scheiding (Ph.D. candidate, University of Frankfurt, Germany) during her work at LSDIS Lab, UGA between Jul. 1997 and Dec. 1997 (c) Tascisio Lima (Ph.D. student, University of Brazil) during his work at LSDIS Lab, UGA, Aug. 1998-Jun. 2000.

Current Doctoral Students [partial list]

Hussein Al-Olimat, Lakshika Balasuriya, Shreyansh Bhatt, Monireh Ebrahimi, Farah Golrooy, Utkarshini Jaimini, Soon Jye Kho, Sarasi Lalithsena, Vin Nguyen, Sanjaya Wijeratne, Amir Yazdavar, Joey Yip.

Post-Doctoral and Research Fellow Supervision (with next appointment)

Post-Doc (Where & When)	Institution, Year	Title of Research Project	Next Position
Yanbo Han UGA: 1995–1997	Technical University of Berlin, 1995	METEOR: Healthcare Information Infrastructure Program—Enterprise Workflow Automation	Professor, North China University of Technology
Shengli Wu UGA: 2002–2002	Southeast University, Nanjing, China, 2000	Extending METEOR with workflow reuse, adaptation, and collaboration	Lecturer, School of Computing and Mathematics, University of Ulster
I. Budak Arpinar UGA: 1998–2001	METU–Turkey, 1997	METEOR: Healthcare Information Infrastructure Program—Enterprise Workflow Automation	Asst. Prof. University of Georgia (now Assoc. Prof.)
Farshad Hakimpour UGA: 2005–2006	Univ. of Zurich, 2003	SemDis: Discovering Complex Relationships in Semantic Web	Asst. Prof., Tehran University (now full prof.)
Ramakanth Kavaluru WSU: 2009–2011	University of Kentucky, 2009	SemDIS: Discovering Complex Relationships in the Semantic Web	Asst. Prof., University of Kentucky

Post-Doctoral and Research Fellow Supervision (with next appointment)

Post-Doc (Where & When)	Institution, Year	Title of Research Project	Next Position
Kera Z. Watkins WSU: 2012-2013	North Carolina St. U, 2006	PREscription Drug abuse Online Surveillance and Epidemiology	Lecturer, Wright State University
Priti Parikh WSU: 2009– 2011	Virginia Polytechnic Institute and State University, 2007	Semantics and Services Enabled Problem Solving Environment for Trypanosoma cruzi	Research Director and Asst. Prof., Surgery, Wright State University
Tanvi Banerjee WSU: 2014-2016	U. of Missouri, 2014	SoCS: Collaborative Research: Social Media Enhanced Organizational Sensemaking in Emergency Response	Asst. Prof., Wright State University
Saeedeh Shekarpour WSU: 2016 - Present	University of Bonn, 2014	HazardSEES, Harassment on Social Media, Kno.e.sis Knowledge Graph Platform	Asst. Prof., Univ. of Dayton

Doctoral Students whose primary dissertation research was done under my supervision/mentorship

Eduardo Mena (Ph.D. candidate, Basque State University, Spain), Basque State U., 1996–1998 (Asst. Prof., Basque State U); 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.

University and Public Service

- Board of Directors of the Service-Oriented Computing Summer School ([SummerSOC](#)), Hersonissos Crete Greece, Jun. 27- Jul. 2, 2011.
- Served as 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.
- 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, Mar. 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

- Adhoc Research Committee: Wright State University, 2014 – Present.
- Member of Graduate Faculty: Wright State University, 2007 – Present; University of Georgia: 1994 –2007.
- Member of Faculty Development Committee, 2010 – 2012.
- Department Graduate Studies Committee, Wright State University, 2008 – 2010.
- Participation in Departmental Committees at UGA CS department:
 - Graduate Admissions Committee, also Aid Committee, 1996 – 2006 and 2008 – 2010.
 - Faculty Search Committee, 1995, 2000, 2004, and 2009.
 - Equipment Committee, 1994 – 2006. Space Committee, 1997 – 1998.