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## Research Interests

Developing techniques for efficient Knowledge Management and Analytics

- Adaptive Information (Data) Integration over Heterogeneous Data Sources
- Mining Contextual Information for Similarity Search and Relevance based Result Ranking
- Data and Text Analytics for Real time Business Intelligence

## Education

**Ph.D** Computer Science, **Arizona State University** August 2005  
Dissertation: Answering Imprecise Queries over Autonomous Databases  
Advisor: Prof. Subbarao Kambhampati

**B.E.** Computer Science, **Maharaja Sayajirao University**, Vadodara, India. May 1997

## Professional Experience

**Research Staff Member, IBM India Research Lab (IRL)** Sept 2006 – current

**Post-Doctoral Research Scholar, University of California, Davis** Sept 2005 – Sept 2006

**Research Assistant, Arizona State University** Jan 2000 – Aug 2005

**Research Scientist - Intern, IBM India Research Lab (IRL)** June 2004 – Sep 2004

**Research Scientist – Intern, NEC Research, Cupertino, CA** May 2002 – Aug 2002

**Teaching Assistant, Arizona State University** Spring 2004, Spring 2000  
*CSE 494, Information Retrieval, Mining and Integration on the Internet.*

**Teaching Assistant, Arizona State University** Fall 1999  
*CSE 471, Introduction to Artificial Intelligence*

**Software Analyst, SBC Inc, Missouri, USA** Jan 1999 – Aug 1999

**Software Engineer, L&T InfoTech , India** July 1997 – Jan 1999

## Awards and Honors

ASU Graduate Scholarship	2002 – 2004
IBM Research Internship	2004
NEC Research Internship	2002
ONGC Engineering Merit Scholarship	1993 – 1997

## Publications

### Journals

1. Z. Nie, S. Kambhampati and U. Nambiar. Effectively Mining and Using Coverage & Overlap Statistics for Data Integration. *IEEE Transactions on Knowledge & Data Engineering (TKDE)*, 2005.
2. S. Kambhampati, E. Lambrecht, U. Nambiar, Z. Nie and S. Gnanaprakasam. Optimizing Recursive Information Gathering Plans in EMERAC. *Journal of Intelligent Information Systems (JIIS)*, Vol. 22, No. 2, March 2004.
3. U. Nambiar, Z. Lacroix, S. Bressan, M. L. Lee and Y. G. Li. Current Approaches to XML Management. *IEEE Internet Computing (IEEE IC)*, Vol. 6(4):43-51 July/August 2002.
4. B. Srivastava, X. Nguyen, S. Kambhampati, M. B. Do, U. Nambiar, Z. Nie, R. Nigenda and T. Zimmerman. AltAlt: Combining Graphplan and Heuristic State Search. *Artificial Intelligence Magazine (AI Magazine)*, Vol. 22(3), 2001.

### Book Chapters

5. M. Mohania, U. Nambiar, M. Schrefl and M. Vincent. Active and Real-time Data Warehousing. *To appear in Encyclopedia of Database Systems, Editors: Ling Liu and Tamer Ozsu; Publisher: Springer, 2008.*
6. U. Nambiar. Supporting Imprecision in Database Systems. *To appear in Encyclopedia of Data Warehousing and Mining (2nd Edition). Editor: John Wang; Publisher: Information Science Reference, 2008.*
7. S. Bressan, M. L. Lee, Y. G. Li, Z. Lacroix and U. Nambiar. XML Management System Benchmarks. *Chapter 17, XML Data Management: Native XML and XML-Enabled Database Systems (Eds. A Chaudri, A Rashid and R. Zicari), ISBN 0-201-84452-4, Addison Wesley, 2003.*

### Refereed Conferences

8. S. Roy, H. Wang, U. Nambiar, G. Das and M. Mohania. DynaCet: Building Dynamic Faceted Search Systems over Databases. *To appear in 25<sup>th</sup> International Conference on Data Engineering (ICDE 2009) as Demo, Shanghai, China, March 29-April 4, 2009. (Acceptance rate: 26/92)*
9. S. Roy, H. Wang, U. Nambiar, G. Das and M. Mohania. Minimum-Effort Driven Dynamic Faceted Search in Structured Databases. *To appear in 17th ACM Conference on Information and Knowledge Management, CIKM 2008, October 26-30, 2008, Napa Valley, California.*

10. U. Nambiar, H. Gupta, R. Balakrishnan and M. Mohania. Helping Satisfy Multiple Objectives during a Service Desk Conversation. *In Proceedings of the 28<sup>th</sup> ACM SIGMOD International Conference on Management of Data, Vancouver, BC, Canada, June 9-12, 2008.*
11. U. Nambiar, H. Gupta and M. Mohania. CallAssist: Helping Call Center Agents in Preference Elicitation. *Demonstration at the 33<sup>rd</sup> Very Large Database Conference (VLDB), Vienna, Austria, Sept 23-27, 2007.*
12. S. Kambhampati, G. Wolf, Y. Chen, H. Khatri, B. Chokshi, J. Fan and U. Nambiar. QUIC: Handling Query Imprecision & Data Incompleteness in Autonomous Databases. *Demonstration at Third Biennial Conference on Innovative Data Systems Research (CIDR), January 7-10, 2007, Asilomar, CA, USA.*
13. U. Nambiar and S. Kambhampati. Supporting Queries with Imprecise Constraints. *In proceedings of the 21<sup>st</sup> National Conference on Artificial Intelligence (AAAI), NECTAR Track, Boston, USA, July, 2006.*
14. U. Nambiar and S. Kambhampati. Answering Imprecise Queries over Autonomous Web Databases. *In proceedings of the 22<sup>nd</sup> International Conference on Data Engineering (ICDE), Atlanta, USA, April 2006.* (Acceptance rate: 19%)
15. U. Nambiar and S. Kambhampati. Answering Imprecise Queries over Web Databases. *Demonstration at the 31st Very Large Database Conference (VLDB), Norway, August 2005.*
16. U. Nambiar and S. Kambhampati. Providing Ranked Relevant Results for Web Database Queries. *Poster at the Thirteenth International World Wide Web Conference (WWW), New York, May 2004.*
17. Z. Nie, U. Nambiar, S. Vaddi and S. Kambhampati. Mining Coverage Statistics for Webservice Selection in a Mediator. *Eleventh International Conference on Information and Knowledge Management (CIKM), McLean, Virginia, November 2002.* (Acceptance rate: 24%)
18. U. Nambiar, Z. Lacroix, S. Bressan, M. L. Lee and Y. G. Li. Efficient XML Data Management: An Analysis. *Fifth International Conference on Electronic Commerce and Web Technologies (EC-Web), Aix-en-Provence, France, September 2002.*
19. S. Bressan, G. Dobbie, Z. Lacroix, M. L. Lee, Y. G. Li, U. Nambiar and B. Wadhwa. XOO7: Applying OO7 Benchmark to XML Query Processing Tools. *Tenth International Conference on Information and Knowledge Management (CIKM), Atlanta, Georgia, November 2001.* (Acceptance rate: 24%)
20. U. Nambiar, Z. Lacroix, S. Bressan, M. L. Lee and Y. G. Li. XML Benchmarks Put to the Test. *Third International Conference on Information Integration and Web-based Applications & Services (IIWAS), Linz, Austria, September 2001.*

### **Refereed Workshops**

21. U. Nambiar, B. Ludaescher, K. Lin and C. Baru. The GEON Portal: Accelerating Knowledge Discovery in the Geosciences. *In proceedings of 8<sup>th</sup> International Workshop on Web Information and Data Management (WIDM), November 10, 2006, Arlington, Virginia, USA.*
22. U. Nambiar, B. Ludaescher, G. Memon and D. Seber. GEONSearch: From Searching to Recommending. *Geoinformatics 2006, May 10-12, Reston, Virginia, USA.*

23. U. Nambiar and S. Kambhampati. Mining Approximate Functional Dependencies and Concept Similarities to Answer Imprecise Queries. *Seventh International Workshop on the Web and Databases (WebDB), Paris, France, June 2004*. (Acceptance rate: 25%)
24. U. Nambiar and S. Kambhampati. Answering Imprecise Database Queries: A Novel Approach. *Fifth International Workshop on Web Information and Data Management (WIDM), New Orleans, November 2003*. (Acceptance rate: 27%)
25. Z. Nie, S. Kambhampati, U. Nambiar and S. Vaddi. Mining Source Coverage Statistics for Data Integration. *Third International Workshop on Web Information and Data Management (WIDM), Atlanta, Georgia, November 2001*. (Acceptance rate: 26%)
26. S. Bressan, M.L. Lee, Y.G. Li, Z. Lacroix and U. Nambiar. The XOO7 Benchmark. *First VLDB Workshop on Efficiency and Effectiveness of XML Tools and Techniques (EEXTT), Hong Kong, China, August 2002*.

### **Technical Reports**

27. U. Nambiar and Z. Nie. Information Integration on the Web (IIWeb) - Papers from AAAI 2007 Workshop, *AAAI Technical Report WS-07-14, AAAI Press, 2007*.
28. S. Kambhampati, Y. Chen, J. Fan, H. Khatri, U. Nambiar and G. Wolf. Handling Imprecision and Incompleteness in Autonomous Databases. *ASU CSE Technical Report 06-014, July 2006*.
29. H. Khatri, J. Fan, U. Nambiar, Y. Chen and S. Kambhampati. Query Processing Under Imprecision and Incompleteness: A Decision Theoretic Model. *ASU CSE Technical Report 06-008, April 2006*.
30. U. Nambiar and W. Li. Adaptive Data Center Synchronization for Load and Precision Critical Web Applications. *NEC Technical Report, August 2002*.
31. S. Kambhampati, U. Nambiar, Z. Nie and S. Vaddi. Havasu: A Multi-Objective, Adaptive Query Processing Framework for Web Data Integration. *ASU CSE Technical Report, TR-02-005, April 2002*.
32. S. Bressan, M. L. Lee, Y. G. Li, Z. Lacroix and U. Nambiar. The XOO7 XML Management System Benchmark. *National University of Singapore, CS Dept Technical Report, TR21/00, November 2001*.
33. U. Nambiar, Z. Lacroix, S. Bressan, M. L. Lee and Y. G. Li. Benchmarking XML Management Systems: The XOO7 Way. *ASU CSE Technical Report, TR-01-005, July 2001*.

### **Professional Services**

#### **Organizer:**

- Co-chair of the Seventh International Workshop on Information Integration on the Web (**IIWeb09**) in conjunction with IJCAI-09, July 11-7, 2009, Pasadena, California, USA.
- Co-chair of the International Workshop on Context enabled Source and Service Selection, Integration and Adaptation (**CSSSIA 2008**), in conjunction with WWW 2008, April 22, 2008, Beijing, China.
  - Keynote: Prof. Schahram Dustdar. Participants: 33
- Co-chair of the Sixth International Workshop on Information Integration on the Web (**IIWeb-07**), in conjunction with AAAI-07, July 23rd 2007, Vancouver, Canada.
  - Keynote by Phil Bernstein. Participants: 30

**PC Member:**

- VLDB 2008 International Workshop on New Trends in Information Integration, Auckland, New Zealand, August 2008.
- Journal on Data Semantics – Special Issue on “Semantic Data Warehouses”, Publisher: Springer, December 2008.
- AAI-08: Twenty-third AAI Conference on Artificial Intelligence, Chicago, Illinois, USA, 13-17 July, 2008.
- International Symposium on Data, Information & Knowledge Spectrum (ISDIKS 07), Dec 13-15, 2007, Amrita University, Kerala, India.
- AAI-06: The 21<sup>st</sup> National Conference on Artificial Intelligence, July 16-20, 2006, Boston, USA.
- EEXTT – a VLDB 2002 Workshop, August 2002, Hong Kong, China.
- ISWC 2003: Second International Semantic Web Conference (posters), October 2003, Florida, USA.

**Reviewer:**

ESWC 2007, VLDB 2006, TKDE 2006, KAIS 2004, IIWEB 2004, ISWC 2004, IIWEB 2003, DIWEB 2002, VLDB 2002