

Vikram Sorathia

Career Objective

To take-up challenging assignments on information management in complex dynamical systems, where I can apply and enhance my conceptual modeling and system building capabilities to bring value to real-world service systems.

Key Capabilities

- Leading services science research and academic activities
- Conceptual modeling for situation awareness
- Developing enterprise information architecture
- Authoring software process
- Designing Service Oriented Architecture (SOA) and Grid Computing based solutions
- Building Data Warehouse
- Utilizing Geographical Information Systems(GIS) and Remote Sensing solutions
- Technical writing, training and team building

Education

Ph. D. (Information and Communication Technology) 2002 - 2008
Dhirubhai Ambani Institute of Information and communication Technology (DA-IICT), Gandhinagar, India
Website: <http://www.daiict.ac.in>

M. Sc. (Environmental Science) 1997 - 1999
School of Sciences, Gujarat University, Ahmedabad, India
Website: <http://www.gujaratuniversity.org.in>

B. Sc. (Chemistry) 1994 - 1997
Gujarat University, Ahmedabad, India

Experience

Postdoctoral Researcher March 2009 - Current
University of Twente, Enschede, Netherlands. (<http://www.universiteitwente.nl/>)
Responsible for developing Service Science discipline

- Identifying and leading research priorities in Service Science
- Building network of collaborators in academia, industry and government
- Defining academic activities across multiple disciplines in Service Science Education
- Organizing events on Service Science theme
- Conducting research on “Service Ontology” and “Service Knowledge Management”

Research Engineer Dec 2008 - Feb 2009
DA-IICT, Gandhinagar, India. (<http://www.daiict.ac.in>)
Research in SOA and Grid Computing.

Course Instructor July 2007 - July 2008
DA-IICT, Gandhinagar, India.
Responsible for conducting lectures and lab sessions for the following courses:

- Content Development and Management (Postgraduate Level)
- Computer and Communication Skills (Postgraduate Level)

Teaching Assistant July 2006 - June 2007
DA-IICT, Gandhinagar, India
Responsible for lab sessions for the following courses:

- Software Engineering (Graduate Level)

- Software Project Management (Graduate Level)
- Environmental Science (Graduate Level)

Research Associate

July 2005 - June 2006

DA-IICT, Gandhinagar, India

Responsible for conceptualizing and coordinating research and development work in realizing

"*Framework for processing and visualization of critical alerts for risk perception for efficient decision-making*" - A project awarded under IBM Eclipse Innovation Grant 2005.

Teaching Assistant

July 2002 - June 2005

DA-IICT, Gandhinagar, India

Responsible for conducting lab sessions for the following courses:

- Remote Sensing and GIS (Postgraduate Level)
- Data Warehousing and Mining (Postgraduate Level)
- Object oriented Programming (Graduate Level)

Research Associate

June 1999 - June 2002

School of Planning, CEPT, Ahmedabad, India. (<http://www.spcept.ac.in/>)

Responsible for overall monitoring and execution of following projects in small interdisciplinary teams.

- Artificial Recharge of Ground Water Resources for Mahesana District - A GIS Solution, sponsored by GWRDC, Government of Gujarat.
- Monitoring Environmental Changes due to Industrialization and Identification of 'Hot Spots' in Vapi-Vadodara part of Golden Corridor, sponsored by Ministry of Environment and Forests, Government of India, New Delhi.
- Waste Land Mapping of Valsad and Amreli Districts, sponsored by NRSA, Hyderabad.
- Grass Land Mapping of Bhavnagar District, sponsored by Space Application Center.

Publications

PhD Thesis

"**Dynamic Information Management Methodology with Situation Awareness Capability**", PhD Thesis, Dhirubhai Ambani Institute of Information and communication Technology (DA-IICT), Gandhinagar, India, 2008. Available online at http://dcomp.daiict.ac.in/people/vikram/vikram_sorathia_PhD_thesis.pdf

Journal Papers

"**An Analysis of Service Ontologies**" (Under Review) Submitted to Pacific Asia Journal of the Association for Information Systems. Co-authored with Luís Ferreira Pires, Marten van Sinderen, and Fons Wijnhoven.

Book Chapters

"**Data Provenance**" A Chapter in *Encyclopedia of Data Warehousing and Mining (Second Edition)*, IDEA Group, 2008, Co-authored with Anutosh Maitra.

"**Discovering mappings between Ontologies**" A Chapter in *Encyclopedia of Artificial Intelligence*, IDEA Group, 2008, Co-authored with Anutosh Maitra.

"**Building Semantic Business Services**" A Chapter in a book "*The Semantic Web and its Applications*", Edited by Jorge Cardoso and Amit Sheth, Springer, 2006 Co-authored with Sanjay Chaudhary and Zakir Laliwala

Conference / Workshop Papers

"**Towards a Unifying Process Framework for Services Knowledge Management**" In the Proceedings of the First International Conference on Exploring Services Sciences (IESS 1.0) 17-18-19 February 2010, Geneva, Switzerland. Co-authored with Marten van Sinderen, and Luís Ferreira Pires.

"**Service Semantics Classification: an Approach Towards Modular Service Ontology**" In 4th International Workshop on Value Modeling and Business Ontologies held at Vrije Universiteit in Amsterdam, the Netherlands, December 21-22, 2009. Co-authored with Luís Ferreira Pires, Marten van Sinderen, and Fons Wijnhoven.

"**Communications Middleware Requirements for Situation Awareness Systems**", In the Proceedings of the International Conference on Software, Knowledge, Information Management and Application (SKIMA), Nepal, 2008, Co-authored with Anutosh Maitra.

"**Situation Awareness Unified Process**", In the Proceedings of the Second International Conference on Software Engineering Advances (ICSEA 2007), France, 2007, Co-authored with Anutosh Maitra.

- "Web Based Requirements Management Approach for Organizational Situation Awareness", In the Proceedings of the 1st Workshop on Aligning Web Systems and Organisation Requirements (AWSOR'07), held in conjunction with International Conference on Web Engineering (ICWE), Italy. 2007, Co-authored with Anutosh Maitra.
- "Integrating Stateful Services in Workflow", In the Proceedings of the 13th Asia Pacific Software Engineering Conference (APSEC06), 2006, Co-authored with Sanjay Chaudhary, Prateek Jain and Zakir Laliwala
- "Spatial Data Access Patterns in Semantic Grid Environment", In the Proceedings of the Second International Workshop on Semantic-based Geographical Information Systems (SeBGIS'06), in conjunction with On The Move Federated Conferences (OTM'06), Montpellier, France, 2006, Co-authored with Anutosh Maitra.
- "Semantics and Rule Based Event-driven Services-Oriented Agricultural Recommendation System", "Fifth International Workshop on Distributed Event-Based Systems (DEBS 2006)", co-located with "26th International Conference on Distributed Computing Systems (ICDCS 2006)", Co-authored with Sanjay Chaudhary and Zakir Laliwala
- "Semantics based Event-driven Publish/Subscribe Service-Oriented Architecture" In the Proceedings of a workshop on "Emerging Services delivery platforms and software models for Next Generation Network Services SOFTPLATFORM2006", co-located with "The First International Conference on Communication Systems Software and Middleware (COMSWARE)", New Delhi, 2006, Co-authored with Sanjay Chaudhary and Zakir Laliwala
- "Towards Agricultural Marketing Reforms: Web Services Orchestration Approach", In the Proceedings of the IEEE International Conference on Services Computing (SCC 2005), 2005. Co-authored with Sanjay Chaudhary and Zakir Laliwala
- "Architecture of Sensor Based Agricultural Information System for Effective Planning of Farm Activities", In the Proceedings of the IEEE International Conference on Services Computing (SCC 2004), 2004, Co-authored with Sanjay Chaudhary and Zakir Laliwala

Technical Skills

Programming Languages: Java, C, C++ **Enterprise Technology:** J2EE, .NET **IDE:** Eclipse, Rational Software Architect, **Database:** Oracle, Postgres, MySQL, MS SQL, **Data warehousing:** Oracle Data Warehouse Builder **Server:** Tomcat, Glassfish **Operating System:** Windows (Certified), Unix, Linux (Red Hat, SUSE)

Architectural Framework: ToGAF, DoDAF, Zachman **Process Authoring:** IBM Rational Method Composer, EPF

Grid Computing: Globus Toolkit, OGSA-DAI, OMII **Semantic Web Technology:** Protégé, Sesame

GIS: Arc Info, Arc View, Arc GIS, GRASS. **Image Processing:** ERDAS, ENVI, EASI PACE **Spatial Database:** Oracle Spatial, PostGIS **Server:** Deegree, Geo Server

Digital Typesetting: Latex **Office Package:** Open Office, Microsoft **Graphics:** Inkscape, GIMP **e-Learning:** eXe, Reload Editor, Moodle, **CMS:** Plone, Joomla, Xoops

Certificates / Licenses

Operating Systems and Computer Networks

Microsoft Certified Professional (MCP) obtained in following exams

- Installing, Configuring and Administering Microsoft Windows 2000 Professional (070-210)
- Installing, Configuring and Administering Microsoft Windows 2000 Server (070-215)
- Implementing and Administering a Microsoft Windows 2000 Network Infrastructure (070-216)

Radio

- Amateur Radio Station Operator License (Call sign VU3SBW)

Coursework

- Artificial Intelligence and Expert Systems
- Algorithms and Object Oriented Programming
- Broadband Communication System
- Embedded Systems
- Data Warehousing and Data Mining
- Object Oriented Systems and Standards
- Computer Networks
- Communication Engineering
- Design and Analysis of Algorithm
- Distributed Computing

- Mathematics for Networks
- Signal Representation and Processing
- Grid Middleware Systems

Trainings Conducted

- Conducted Training on IBM Rational Rose Enterprise Suite at DA-IICT, India.
- Conducted sessions on Open Source GIS and Remote Sensing Tools at CEPT, India.
- Conducted lab sessions on Remote Sensing and GIS Tools at BVM College, India.

Oral Presentations

- Research paper “Service Semantics Classification: an Approach Towards Modular Service Ontology” In 4th International Workshop on Value Modeling and Business Ontologies held at Vrije Universiteit in Amsterdam, the Netherlands.
- Research seminar “Situation Awareness in a Complex World: A Knowledge Management Approach” at University of Twente, Enschede, the Netherlands.
- Session on “Distributed Data Management in Grid” at DA-IICT, India.
- Research paper “Spatial Data Access Patterns in Semantic Grid Environment”, in International Workshop on Semantic-based Geographical Information Systems, Montpellier, France.
- Public lecture on “Disaster Management- An ICT enabled Scenario” at DA-IICT, India.
- Public lecture on “Automated Disaster Management System - Primary challenges and planned remedies” at DA-IICT, India.

Professional Services

External Reviewer in Journal

- International Journal of Patterns
- International Journal of Knowledge-Based Organizations

Conference Program Committee

- International Conference on Networked Computing, Advanced Information Management and Digital Content and Multimedia Technologies 2009
- International Symposium on Management, Engineering and Informatics 2009
- International Symposium on Management, Engineering and Informatics 2008
- International Conference on Advanced Engineering Computing and Applications in Sciences 2008
- Knowledge Generation, Communication and Management 2008
- International Conference on Advanced Engineering Computing and Applications in Sciences 2007

Memberships

- Association for Computing Machinery (ACM)
- Association of Information Systems (AIS)
- Institute of Electrical and Electronics Engineers (IEEE)
- Indian Society of Geomatics (ISG)
- Indian Society of Remote Sensing (ISRS)

Personal Details

- Date of Birth : 20th May 1977
- Nationality : Indian
- Languages : English (fluent) , Hindi (fluent), Gujarati (native)
- Marital Status : Married

References

- Available on request