Sriram Mohan

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Education

Ph.D. in Computer Science, May 2007.
Indiana University, Bloomington, USA.
*D*issertation: "ACXESS - A Framework for Designing Specifying and Enforcing Access Control for XML".
Minor - Human Computer Interaction.

M.S in Computer Science, May 2003.
Indiana University, Bloomington, USA.

B.E. in Computer Science and Engineering, May 2001.
University of Madras, Madras, India.
*T*hesis:"NetRep- Internet Call Center for a Distributed Environment".

Teaching Experience

Assistant Professor - Rose-Hulman — Bloomington, IN, USA
CSSE — Fall 2007-Current

- CSSE 371- Software Requirements and Specification

Instructor - Indiana University — Bloomington, IN, USA
Introduction to Software Systems — Summer 2003-2007
The "Introduction to Software Systems" (C212/A592) course is an in-depth, introduction to programming which follows the introductory functional programming class. It covers advanced programming concepts and practices, including use and design of interfaces and libraries, types and type-checking, run-time systems, programming environments, system programming, and the programming development cycle. Students are trained to become proficient at designing and developing medium-sized programs and using the following tools: imperative programming style, object-oriented programming style, simple graphics, basic operating system concepts and commands, and a debugger.

I served as the course instructor for the 'Introduction to Software Systems' course (taken by both graduate and undergraduate students) and utilized Java as the programming language of choice. My responsibilities included giving lectures and leading discussion sessions, designing assignments,course projects and exams, and other class management activities.

Associate Instructor - Indiana University — Bloomington, IN, USA
Software Engineering — Fall 2002-2006
"Software Engineering for Information Systems" (P465/466/565/566) is a one year

class aimed at providing students with a taste of real world project development. The class has an engineering component which teaches a disciplined approach to the design and implementation of information systems. The primary vehicle for really learning this material is a full-year team project aimed at developing a real system for a real client. In conjunction with the engineering program, the class also has a management component (B665/666) in which select students are trained in managing project teams developing software for real world clients.

I served as the associate instructor for the 'Software Engineering for Information Systems and the Software Engineering Management' courses taught by Prof. Edward Robertson. My responsibilities included leading lecture and discussion sessions, hosting office hours, grading and solving technical and inter-personal conflicts amongst team members, training project supervisors and managers and helping them manage their teams.

Associate Instructor - Indiana University Bloomington, IN, USA
Network Technologies and Administration Fall 2001
The "Network Technologies and Administration" (A247/A547) course aims at teaching students about networking from a technical as well as a practical perspective. Information covered includes, networking topologies, networking protocols, network operating systems, and desktop operating systems. Students are given real world experience with systems and technologies in place in both business and educational institutions.

I served as the associate instructor for the 'Network Technologies and Administration' course (taken by both graduate and undergraduate students) taught by Prof. Jeff Whitmer. My responsibilities included designing assignments, course projects and exams, grading, leading lab and discussion sessions, and hosting office hours.

Select Research Projects

Research Lead, *ACXESS - Access Control for XML with Enhanced Security Specifications* A framework for designing, specifying and enforcing access control for XML. Aug 2004 - current.

Research Lead, *XER - eXtensible Entity Relationship Modeling for XML* A conceptual modeling approach for XML. Aug 2003 - current.

Research Lead, *DOCBASE* A document Management system for XML. Aug 2002 - current.

Research Lead, *WeInteract* A pervasive audience participation system. Aug 2002-Jun 2003.

Managerial Experience

Indiana University Bloomington, IN, USA
Research Associate Fall 2006-Current
I am currently employed as a Research Associate by the Indiana University School of Informatics. My responsibilities including conducting research on the ACXESS framework, and developing new techniques for securing semi-structured data and

mentoring and supervising undergraduate and graduate student research.

Indiana University — Bloomington, IN, USA
Project Manager and Quality Assurance Manager — Fall 2002-2006
I have worked as a project manager for 12 student teams (each academic year) as they undertook projects for real life clients. My responsibilities included meeting with teams on a weekly basis, collecting and reviewing status logs written by the teams, personally monitoring the status of the teams' performance, providing technical guidance to the teams, guiding the teams through the waterfall model, keeping an eye out for potential problems and solving them when necessary and assessing the performance of the teams and of its members individually.

Awards

Research Grant - Office of the Vice Provost of Research, Indiana University 2005-2006

Iota Nu Phi - National Honor Society for Informatics - Inducted 2006

CIKM Conference Student Travel Grant, ACM Fourteenth Conference on Information and Knowledge Management, Bremen, Germany 2005.

EDBT Research Scholarship Award, EDBT Endowment, EDBT Summer School on XML Databases, S.Margherita, Sardinia, Italy 2004.

Second Place, Student Design Competition,ACM Special Interest Group in Computer Human Interaction, Vienna, Austria 2004.

Academic Scholarship, Indiana University Bloomington, USA,2001-2006.

Academic Travel Grants, Indiana University Bloomington, USA,2001-2006.

Young Researcher Award, IEEE Student Association, India, 2000.

Academic Proficiency Awards, University of Madras India,1997-1999.

Academic Proficiency Awards, Punjab Association, India,1995-1997.

Professional Activities

Organizer - BringItOn - a three-day workshop hosted by Indiana University for undergraduate computer science students in Indiana

Computer Science Graduate Student Association's Representative on the Undergraduate Curricula Committee - Indiana University 2003-2006

Presenter - Just BE - An outreach program presented at regional K-12 schools to corrective negative perceptions about computer science.

Graduate Panel - BringItOn - a three-day workshop hosted by Indiana University for undergraduate computer science students from Historically Black Colleges and Universities (HBCUs)

Just Be Representative on "Get IT Started" - advising and helping students start an outreach program similar to Just BE as a part of BringItOn

Organizer - International Student Orientation at Indiana University 2004-2007.

Reviewer - IEEE Transactions on Knowledge and Data Engineering.

Reviewer - The British Computer Society Computer Journal.

Reviewer - International Conference on Data Engineering.

Reviewer - ACM Conference on Computer and Communications Security.

Welcome Committee Member - Computer Science Graduate Student Association 2004-2006

Program Committee Member - 18th International Conference organized by the Information Resources Management Association.

Refereed Publications

1.*A Generalized Rewrite based Framework for Access Control for XML* , with Arijit Sengupta and Yuqing Wu, atnternational Conference on Knowledge-Based and Intelligent Information & Engineering Systems. 2007

2.*IPAC - An Interactive Approach to Access Control for Semi-Structured Data* with Yuqing Wu. Demonstration at the International Conference on Very Large Databases 2006.

3.*ACXESS - Access Control for XML with Enhanced Security Specifications*, with Arijit Sengupta, Yuqing Wu and Jonathan Klinginsmith, Demonstration at the International Conference on Data Engineering, 2006.

4.*Access Control for XML - A Dynamic Query Rewriting Approach*, with Arijit Sengupta and Yuqing Wu, at the ACM Conference on Information and Knowledge Management, 2005.

5. *Conceptual Modeling for XML - A Myth or Reality*, with Arijit Sengupta. Database Modeling for Industrial Data Management: Emerging Technologies and Applications. Idea Group Inc. 2005.

6.*DocBase - The INEX Evaluation Experience*, with Arijit Sengupta. Initiative for the Evaluation of XML Retrieval 2004, Springer LNCS.

7.*WeInteract - A Pervasive Audience Participation System*, with Vasudha Chandrasekaran, Sidharth Saxena and Om Prakash Pathipaka. ACM Special Interest Group on Computer Human Interaction 2004.

8.*Extensible Entity Relationship Modeling*,with Arijit Sengupta and Rahul Doshi, in J. Harnad et al. Eds. Proceedings of the XML 2003 Conference.

9. *Conceptual Modeling for XML using XER*, with Arijit Sengupta. Workshop on Information Technology and Systems (WITS) 2003.

Under Review

A Generalized Access Control Framework for XML Applications with Yuqing Wu. Submitted.

A Framework for Access Control for XML - Beyond Subtree Hiding, with Arijit Sengupta and Yuqing Wu. Submitted.

XER - Extensible Entity Relationship Modeling, with Arijit Sengupta. Submitted.

DocBase - A Document Centric Approach to Managing XML Data, with Arijit Sengupta and Ramesh Venkatraman. Submitted.

Posters

ACXESS - Access Control for XML with Enhanced Security Specifications, with Arijit Sengupta, Yuqing Wu. Second Midwest Database Research Symposium, Chicago, Illinois, 2005.

Data Modeling and Optimizing XML Databases, with Arijit Sengupta. First Midwest Database Research Symposium, Chicago, Illinois, 2004.

White Papers

Access Control for XML - A Dynamic Query Rewriting Approach, with Arijit Sengupta and Yuqing Wu . Technical Report No. 609, Computer Science, Indiana University.2005.

Formal and conceptual models for XML structures - the past, present and future with Arijit Sengupta. Technical Report no. 137-1, Information Series Department Working Paper Series. Indiana University, April 2003.

Risk Management, An Annotated Bibliography, Masters Thesis, Computer Science, Indiana University.2003.

NetRep - Internet Call Center for a Distributed Environment, Undergraduate Thesis, Computer Science and Engineering, University of Madras.2001.