

Sitaram Asur

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Research Interests

Data Mining, Web and Social Network Analysis.

Education

- **The Ohio State University** Columbus, OH
PhD, Computer Science and Engineering Sep 2003 - Jun 2009
- **Visvesvaraya Technological University** Bangalore, India
Bachelor of Engineering, Information Science Engineering 1998-2002

Professional and Academic Experience

- **Microsoft Research** Redmond, Washington
Research Intern Mar 2009 - Jun 2009
- **The Ohio State University** Columbus, OH
Graduate Research Associate June 2005 - Mar 2009
Supervisor : Dr. Srinivasan Parthasarathy
- **The Ohio State University** Columbus, OH
Graduate Teaching Associate Sep 2004 - May 2005
 - **Instructor:**
Introduction to Computer Science (CSE100).
 - **Teaching Associate:**
Introduction to Neural Networks (CSE 779)
Introduction to Data Mining (CSE 694)
- **IBM Research, T.J Watson Center** Yorktown Heights, New York
Research Intern Jun 2007 - Sep 2007
 - Worked on extending IBM's Parallel Machine Learning framework.
- **Oracle India Pvt Ltd** Hyderabad, India
Applications Development Engineer Mar 2003 - July 2003
 - Developed Business Intelligence Software for Management Applications using the oracle 9i advanced concepts of materialized views
- **Indian Institute of Science** Bangalore, India
Student Intern Oct 2002 - Jan 2003
 - Worked on developing an Expert System intended for Customer Relationship Management (CRM) Applications
- **Indian Space Research Organization (ISRO)** Bangalore, India
Student Intern Apr 2002 - July 2002

- Was part of a group that developed a Real Time System to automate the process of temperature scheduling for satellite thrusters

Awards

Computing Innovations Fellowship Award	2009
Outstanding Research Award, Department of Computer Science and Engineering, Ohio State University	2009
Best Application Paper Award - SIGKDD 2007	2007
Travel Fellowship to attend SIGKDD conference	2007
Travel Fellowship to attend ISMB conference	2007
Travel Fellowship to attend ISMB conference	2006
University Fellowship (Ohio State University)	2003-2004
Graduate Teaching Assistantship (Ohio State University)	2004-2005
Graduate Research Assistantship (Ohio State University)	2005-2009
University Rank 7 in B.E. (Visvesvaraya Technological University) out of students from 110 affiliated engineering colleges	2002

Journal Publications

- **Sitaram Asur**, *Srinivasan Parthasarathy, and Duygu Ucar*. An Event-based Framework for Characterizing the Evolutionary Behavior of Interaction Graphs. To Appear in ACM Transactions on Knowledge Discovery from Data (2009).
- **Sitaram Asur**, *Duygu Ucar and Srinivasan Parthasarathy*. An Ensemble Framework for Clustering Protein-Protein Interaction Networks. *Bioinformatics* Vol. 23, i29-i40. July 2007.
- **Sitaram Asur**, *Pichai Raman, Matthew Eric Otey and Srinivasan Parthasarathy*. A Model-based Approach for Mining Membrane Protein Crystallization Trials. *Bioinformatics* , Vol. 22(14), e40-e48.

Conference and Workshop Publications

- **Sitaram Asur and Srinivasan Parthasarathy**. A Viewpoint-based Approach for Interaction Graph Analysis. To Appear in the Proceedings of the 15th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (SIGKDD 2009).
- **Sitaram Asur and Gregory Buehrer**. Temporal Analysis of Web Search Query-Click Data. To Appear in the proceedings of the third ACM workshop on Social Network Mining and Analysis held at the 15th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (SNA-KDD 2009).
- *Xintian Yang, Sitaram Asur and Srinivasan Parthasarathy*. A Visual-Analytic Toolkit for Dynamic Interaction Graphs. In the Proceedings of the 14th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (SIGKDD 2008).
- **Sitaram Asur, Srinivasan Parthasarathy and Duygu Ucar**. An Event-based Framework for Characterizing the Evolutionary Behavior of Interaction Graphs. In the Proceedings of the 13th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (SIGKDD 2007). **Won Best Application Paper Award**
- **Sitaram Asur and Srinivasan Parthasarathy**. Correlation-based Feature Partitioning for Rare Event Detection in Wireless Sensor Networks. In the Proceedings of the 1st ACM Workshop on Knowledge

Discovery from Sensor Data at the 13th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (Sensor-KDD 2007).

- **Sitaram Asur**, *Duygu Ucar and Srinivasan Parthasarathy*. An Ensemble Framework for Clustering Protein-Protein Interaction Networks. In the proceedings of the 15th Annual International Conference on Intelligent Systems for Molecular Biology(ISMB 2007).
- **Sitaram Asur**, *Srinivasan Parthasarathy and Duygu Ucar*. An Ensemble Approach for Clustering Scale-free Graphs. In the proceedings of LinkKDD workshop held at the 12th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (LinkKDD 2006).
- *Duygu Ucar*, **Sitaram Asur**, *Umit Catalyurek and Srinivasan Parthasarathy*. Improving Functional Modularity in Protein-Protein Interactions Graphs Using Hub-induced Subgraphs. In the proceedings of the 10th European Conferences on Principles and Practice of Knowledge Discovery in Databases (PKDD 2006), Lecture Notes in Computer Science(LNCS-4213), Springer-Verlag publishing, 2006.
- **Sitaram Asur**, *Pichai Raman, Matthew Eric Otey and Srinivasan Parthasarathy*. A Model-based Approach for Mining Membrane Protein Crystallization Trials. In the proceedings of the 14th Annual International Conference on Intelligent Systems for Molecular Biology(ISMB 2006).
- *Duygu Ucar, Srinivasan Parthasarathy, Sitaram Asur and Chao Wang*. Efficient Pre-processing Strategies for Functional Clustering of a Protein-Protein Interactions Network. In the proceedings of IEEE 5th Symposium on Bioinformatics and Bioengineering, (BIBE 2005) .

Presentations

- **A Viewpoint-based Approach for Interaction Graph Analysis**. At the 15th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (SIGKDD 2009), Paris, France, Jun 2009.
- **Temporal Analysis of Web Search Query-Click Data**. At the 3rd Workshop on Social Network Mining and Analysis (SNA-KDD 2009), Paris, France, Jun 2009.
- **A Visual-Analytic Toolkit for Dynamic Interaction Graphs**. At the 14th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (SIGKDD 2008), Las Vegas, USA, Aug 2008.
- **An Event-based Framework for Characterizing the Evolutionary Behavior of Interaction Graphs**. At the 13th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (SIGKDD 2007), San Jose, USA, Aug 2007.
- **An Ensemble Framework for Clustering Protein-Protein Interaction Networks**. At the 15th Annual International Conference on Intelligent Systems for Molecular Biology(ISMB 2007), Vienna, Austria, July 2007.
- **Detecting Hepatotoxicity in Clinical Trials Data : An Anomaly Detection Approach**. At the 30th Annual Midwest Biopharmaceutical Statistics Workshop (MBSW 2007), Muncie, Indiana, USA, May 2007.
- **An Ensemble Approach for Clustering Scale-free Graphs**. At the Workshop on Link Analysis: Dynamics and Static of Large Networks at the ACM International Conference on Knowledge Discovery and Data Mining (SIGKDD 2006), Philadelphia, USA, August 2006.
- **A Model-based Approach for Mining Membrane Protein Crystallization Trials**. At the 14th Annual International Conference on Intelligent Systems for Molecular Biology (ISMB 2006), Fortaleza, Brazil, August 2006.

Skills

Languages: C/C++, L^AT_EX, Perl, SQL, Matlab, C#

Academic Background: Data Mining, Machine Learning, Databases, Computer Architecture, Operating Systems, Algorithms, Databases, Parallel Computing, Compilers/Programming Languages and Computer Networking.

Professional Activities

Program Committee Member : ECML/PKDD 2009, COMAD 2009.

Reviewer for:

- IEEE Symposium on Bioinformatics and Bioengineering (BIBE) 2005.
- ICDM Temporal Data Mining (TDM) Workshop 2005.
- ACM International Conference on Knowledge Discovery and Data Mining (SIGKDD) 2006, 2007, 2008.
- 2nd International Symposium on Computational Life Science (CompLife) 2006.
- IEEE International Conference on Data Mining (ICDM) 2005, 2006.
- ACM SIGMOD International Conference on Management of Data (SIGMOD) 2007.
- Conference on Information and Knowledge Management (CIKM) 2007.
- 13th International Conference on Database Systems for Advanced Applications (DASFAA) 2008.
- 17th International World Wide Web Conference (WWW) 2008, 2009.
- 25th International Conference on Data Engineering (ICDE) 2009.

References

- Dr. Srinivasan Parthasarathy, Associate Professor.
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2015 Neil Avenue, 395 Dreese Labs, Columbus OH 43210.
Email : srini@cse.ohio-state.edu, Phone : 614-292-2568.
- Dr. Ramesh Natarajan, Research Staff Member.
IBM T.J. Watson Research Center, Yorktown Heights, NY 10598.
Email : rnamesh@us.ibm.com, Phone : 914-945-2766.
- Dr. Gregory Buehrer, Scientist.
Microsoft Live Search, Microsoft Corporation, Redmond 98052.
Email : buehrer@microsoft.com, Phone : 425-704-0049.
- Dr. P. Sadayappan, Professor.
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