

Sarvjeet Singh

217 Nimitz Dr, #9
West Lafayette, IN 47906

sarvjeet@purdue.edu
(765)-418-9201

Objective

To obtain a challenging position as an intern in the field of software development.

Profile

IIT graduate currently pursuing PhD in Computer Science with research interests in Uncertain Data Management, Privacy and Security in Databases and Systems and Artificial Intelligence. Diversified technical skills ranging from proficiency in programming languages to developing software and hardware. Excellent analytical, presentation and communication skills with strong leadership qualities and a team player.

Education

Purdue University, West Lafayette, IN.	Aug 05 – till date
PhD in Computer Science GPA: 3.92/4.0	
Purdue University, West Lafayette, IN.	May 05
M.S. in Computer Science GPA: 4.0/4.0	
Indian Institute of Technology (IIT), Bombay, India	May 03
Bachelor of Technology in Computer Science and Engineering GPA: 9.0/10.0 (Departmental Rank: 7th)	

Experience

Graduate Research Assistant , Computer Sciences, Purdue University.	Jan 07- till date
Currently working on research issues related to managing uncertain data and working on Orion which extends PostgreSQL to deal with imprecise or uncertain data.	
Graduate Research Professional , Rosen Center for Advanced Computing, Purdue University.	Dec 05-Dec 06
Developed mobile applications for deployment in intelligent environments using technologies such as J2ME and did research on issues related to communication technologies like RFID and Bluetooth.	
Graduate Teaching Assistant , Computer Sciences, Purdue University.	Aug 05-Dec 05
Assisted students with their problems and graded lab assignments in graduate level Operating Systems course.	
Summer Intern , Amazon.com, Seattle, WA.	May 05-Aug 05
Developed a high performance fault tolerant business application with the help of distributed caching and databases	
Graduate Research Assistant , Computer Sciences, Purdue University.	Aug 03-May 05
Worked on issues related to Privacy and Security in Databases	
Summer Intern , Media Lab Asia (Arm of MIT Media Lab, USA), Mumbai.	May 02-Jul 02
Developed and implemented a prototype of a <i>Multilingual & Meaning Based Search Engine</i>	
Research Associate , Center of Studies in Resources Engineering, IIT Bombay.	May 01-Jul 01
Developed and implemented algorithms for registration and analysis of satellite images	

Computer Skills

Programming languages: C/C++, Java, Ruby, Scheme, LISP, ML, Pascal, Fortran, Unix shell programming, VHDL, 8085 and 8086 Assembly language.

Operating Systems: Unix/Linux, Windows, Mac OS X

Databases: Oracle 9i, XPath, XQuery, JDBC, SQL, PostgreSQL, PL/pgSQL, MySQL

Miscellaneous: J2EE and EJB, PHP, Servlets, OpenGL, HTML, XML/XSL, Java Script, CSS, J2ME, BREW

Selected Projects (More Information at <http://sarvjeet.com/projects.shtml>)

- Orion: A Database System for Managing Uncertain Data
- Zecosystem: An infrastructure for context-aware neural environments
- Multilingual and Meaning Based Search Engine
- Phoebes: An Artificial Creativity Engine for Generating Music
- Distributed Banking System
- An Online Stock Exchange
- GUMNAM: A two-way anonymous communication protocol
- Voronoi Diagrams for Moving Object Databases
- Library for threshold signatures
- A Distributed Peer to Peer File Sharing System

Publications

- S. Singh, R. Shah, S. Prabhakar, C. Mayfield, J. Neville, S. Hambrusch, R. Cheng. **Unified Model for Uncertainty Management in Databases** (In submission)
- S. Singh, C. Mayfield, R. Shah, S. Prabhakar and S. Hambrusch. **Cost Estimation for Uncertain Data** (In submission).
- S. Singh and S. Prabhakar. **Privacy-Preserving Private Database Commitment** (In submission)
- S. Singh and K. Madhavan. **Mobile Communications infrastructure for context-aware neural environments** (In submission)
- S. Singh, C. Mayfield, S. Prabhakar, R. Shah and S. Hambrusch. **Indexing Uncertain Categorical Data**, In IEEE 23rd Conference on Data Engineering (ICDE 2007), Istanbul, Turkey, April 2007.
- R. Cheng, S. Singh, S. Prabhakar, R. Shah, J. Vitter and Y. Xia. **Efficient Join Processing over Uncertain Data**. In the ACM 15th Conf. on Information and Knowledge Management (ACM CIKM), 2006.
- R. Cheng, S. Singh and S. Prabhakar. **U-DBMS: A Database System for Managing Constantly-Evolving Data**. In Very Large Databases Conf. (VLDB 2005 Demo), Trondheim, Norway, Aug 2005
- M. Surve, S. Singh and P. Bhattacharyya. **Agro-Explorer: A Meaning based Multilingual Search Engine**. International Conference on Digital Libraries (ICDL), New Delhi, India, Feb 2004
- P. Bhattacharyya, S. Singh, U. Gundevia, U. Misra and T. Chandra. **A Multi-Lingual, Meaning Based Search Engine**. International Conference on Universal Knowledge and Language, Goa, India, Nov 2002
- S. Mukherji, K.S. Rao and S. Singh. **Registering SAR Interferometric images using cross-correlation**. National symposium on recent advances in Remote Sensing and GIS technologies for Natural Resource Management, Mumbai, India, Dec 2001

Professional Activities

- External Reviewer for many conferences including SIGMOD 07, VLDB (05,06,07), ICDE (05, 06, 07, 08), DASFAA (05, 06, 07,08), ACM SAC (05, 06), COMAD 05, MobiDE 05, SSDBM 07 and SSTD 05
- Computer Science Graduate Committee representative and webmaster for Graduate Student board (2005-06)
- Treasurer (2005-06) for Upsilon Pi Epsilon

Honors and Awards

- Recipient of Verizon Foundation Scholarship 2005-06
- Member of Upsilon Pi Epsilon (Computer Science Honors Society)
- Awarded Scholarship by Misys Foundation, Oxford(UK) 2000-03
- Award travel grant for attending DMSN 05 Workshop held in Trondheim, Norway
- Ranked among the top 0.1% of about 100,000 students appearing for the IIT JEE-99
- Scored 97% in National (Indian) Mathematics Olympiad
- Ranked 10/700 in Bitwise 2K++ Algorithm Intensive Programming Contest (IIT Kgp 2001)