

# Shashi Shekhar Singh

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## EDUCATION

M.S., Computer Science, University of Massachusetts Amherst (Sept, 2006 – Dec, 2008)

- **GPA: 4.0/4.0**

B.S., Computer Science, Indian Institute of Technology, Guwahati, India (1999-2003)

- **GPA: 9.26/10** (Ranked **2nd** in the entire batch of undergraduate students at IIT Guwahati)

## RESEARCH/WORK EXPERIENCE

- February 2009-Current: **Software Developer, Bloomberg LP, Princeton, New Jersey**
  - Working as a Software Developer in Data Solutions group.
- September 2006-December 2008: **Research Assistant, Computer Science Dept., University of Massachusetts Amherst**
  - Working as a Research Assistant with Prof. Ramesh Sitaraman in Algorithms Lab.
- June 2008-August 2008: **Software Engineering Intern, Lycos Inc, Waltham, Massachusetts**
  - Design and implementation of distributed video encoding.
- August 2007 – May 2008: **Teaching Assistant, Computer Science Dept., University of Massachusetts Amherst**
  - Teaching Assistant for undergraduate *Algorithms* and *Operating Systems* courses.
- January 2006-July 2006: **Senior Software Engineer, Yahoo R&D, Bangalore, India**
  - Design and development of various front-end and back-end features of the HotJobs product of Yahoo.
- April 2005-January 2006: **Software Engineer, NED Lab, Hewlett Packard, Bangalore, India**
  - Design of a framework for development of fail-safe software on HP Non-Stop Servers.
- July 2003-March 2005: **Research Scientist in Defense Research Lab, Govt. of India, Delhi**
  - Design and development of a secure messaging system for defense communication.
- May 2002-July 2002: **Summer Intern, ITC GmbH, Dortmund, Germany**
  - Design and development of a software package that automated the functionality of a "Content Management System".

## PUBLICATIONS

- D Agrawal, D. Ganesan, R. Sitaraman, Y. Diao, **S. Singh** 2009. **Lazy-Adaptive Tree: An Optimized Index Structure for Flash Devices**. Conference on Very Large Databases (VLDB), 2009.
- M Ravi Prakash Reddy, **S.S. Singh**, Sandeep A, Sandeep D, R.A. Ahmed, "**Fail Safe Software on Non-Stop Kernel**", Patent Disclosure filed in October 2005 at Hewlett Packard.
- **S.S. Singh**, S. Chattopadhyay, "**Genetic Algorithmic Technique for Integrated Testing of Cores and Interconnects in SOCs**", *7th VLSI Design and Test Workshops, Bangalore, India*, August 2003 (**undergraduate thesis**).

## COMPUTER SKILLS

Languages: C, C++, Java, Perl, PHP, SQL, GTK, Python  
Operating Systems: Linux, Windows, Solaris  
Technologies: XML, JavaScript, Java Servlets, JSP, Apache, Lex, Yacc, Oracle, Eclipse

## COURSE WORK

- **Graduate course:** Advanced Algorithms, Advanced Computer Networks, Distributed Operating Systems, Theory of Computation, Artificial Intelligence, Hot Topics in Operating Systems, Programming Languages, Performance Evaluation.
- **Undergraduate courses:** Data Structures & Algorithms, Randomized Algorithms, Parallel Algorithms, Programming Languages, Software Engineering, Databases, Operating Systems, Formal Languages & Automata, Theory of Computation, Compilers, Computer Networks, Computer Graphics, Computer Architecture, Data Communication, VLSI Design, Numerical Linear Algebra, Management of Organizational Behavior.

## AWARDS & HONORS

- Awarded outstanding achiever award for the best technical idea presented in Idea Fest organized at Hewlett Packard, India.
- Merit Scholarship for academic excellence at IIT Guwahati from the Ministry of Human Resource and Development, Government of India.
- Ranked 2nd among the 40 students of Computer Science and Engineering Department. Also hold the 2nd rank in the entire batch of undergraduate students at IIT Guwahati (ranked on the basis of GPA).
- Selected for guest studentship at University of Dortmund, Dortmund, Germany, offered to 15 Computer Science and Engineering (CSE) students across 5 IITs, and secured 2nd position in this class, 2002.
- Selected in Joint Entrance Examination for admission into IITs (top 0.1% out of more than 120,000 candidates appearing for IIT Joint Entrance Exam 1999).
- Awarded merit scholarships for securing first rank in school and 8th rank in Senior Secondary in the whole state.
- Received CBSE Merit certificates (awarded to top 0.01% of students in CBSE board exams) for Mathematics.