

Abhishek Gupta

CONTACT INFORMATION	Department of Computer Science University of Illinois at Urbana-Champaign 201 North Goodwin Avenue 4103 Urbana - 61801 IL, USA	Cell: (217) 419-1243 E-mail: gupta59@illinois.edu www.guptaabhishek.com
RESEARCH INTERESTS	Parallel programming, High performance computing, Distributed algorithms, Communication optimizations	
EDUCATION	University of Illinois at Urbana-Champaign , Urbana, Illinois USA Ph.D. candidate in Computer Science, August 2009 - Present <ul style="list-style-type: none">• Advisor: Professor Laxmikant V. Kalé• Area of Research: Parallel Computing• Passed Qualifying Exam• GPA: 4.0/4.0 Indian Institute of Technology Roorkee , Roorkee, India B.Tech in Computer Science, 2004 - 2008 <ul style="list-style-type: none">• Senior Project: Parallelization of Crucial Video Surveillance algorithms for Cell Broadband Engine Processor• GPA: 9.84/10.0• Institute Rank: 1	
PROFESSIONAL EXPERIENCE	Parallel Programming Laboratory , Urbana, Illinois USA <i>Research Assistant</i> August 2009 to Present <ul style="list-style-type: none">• Worked on Scalable Tree Startup for parallel application such as Charm++ applications• Working on Communication optimizations and load balancing for high performance applications HP Labs , Palo Alto, California, USA <i>Summer Intern</i> May 2011 to August 2011 <ul style="list-style-type: none">• Worked on the project on Evaluation of HPC applications on Cloud Microsoft India (R & D) Pvt. Ltd. , Hyderabad, India <i>Software Design Engineer</i> July 2008 to January 2009 <ul style="list-style-type: none">• Worked in the team <i>Microsoft CRM (Customer Relationship Management)</i> as a software engineer Oracle Corporation-India Development Center , Bangalore, India <i>Summer Intern</i> May 2007 to July 2007 <ul style="list-style-type: none">• Worked on the project on Apache Tomcat Server Management integration in Oracle Enterprise Manager-Grid control• Development of multi-threaded SOAP request generator	
PUBLICATIONS	Gupta, Abhishek; Milojicic Dejan. Evaluation of HPC Applications on Cloud, awarded Best Student Paper <i>6th Open Cirrus Summit, Atlanta, Georgia, 2011</i>	

- Gupta, Abhishek; Gengbin Zheng, Kalé Laxmikant V. A Multi-Level Scalable Startup for Parallel Applications *In 1st International Workshop on Runtime and Operating Systems for Supercomputers (ROSS 2011) held in conjunction with ICS 2011*
- Sarood, Osman; Gupta, Abhishek; Kalé Laxmikant V. Temperature Aware Load Balancing for Parallel Applications: Preliminary Work. *In Workshop on High-Performance, Power-Aware Computing (IPDPS), 2011*
- Gupta, Abhishek; Heumann, Stephen; Krejcie, Alex. Parallelization of Video Surveillance for GPGPU. *Technical Report, Department of Computer Science, University of Illinois at Urbana-Champaign*. Nov 2010. <http://hdl.handle.net/2142/17379>
- Gupta, Abhishek; Preston, Kurt; Rodriguez, Alejandro. Debianrunner: Running Desktop Applications on Android Smartphones. *Technical Report, Department of Computer Science, University of Illinois at Urbana-Champaign*. Oct 2010. <http://hdl.handle.net/2142/17374>
- Gupta, Abhishek; Kumar, Praveen; Mittal, Ankush. Parallelization of Video Surveillance Algorithm for Cell Broadband Engine *International Conference on Advanced Computing Technologies* 2008.
- Gupta, Abhishek; Singh, Rahul; Maheshwari, Prakashdeep; *Parallelization of Crucial Video Surveillance algorithms for Cell Broadband Engine Processor*. Senior thesis, Indian Institute of Technology Roorkee, Roorkee, India.

RELEVANT
COURSEWORK

Graduate - Parallel programming, Distributed Systems, Parallel Computer Architecture, Parallel Numerical Algorithm, Advanced Operating System, Parallel Search, Independent Study

Undergraduate - Operating Systems, Advanced Computer Networks, Advanced Computer Architecture, Computer Networks, Artificial Intelligence, Fuzzy logic, Computer Architecture, Design and Analysis of Algorithms, Database Management System, Software Engineering, Data Structures, Theory of Computation, Compiler design, Graph Theory, Introduction to digital communication, System Software

AWARDS AND
ACHIEVEMENTS

- Recipient of **Saburo Muroga Endowed Fellowship**, Department of Computer Science at Illinois, August 2010 - May 2011
- **Presidents Gold Medalist** for being the topper of B-Tech (all branches) of graduating batch 2008, IIT Roorkee.
- Received **Certificate of merit and trust prize** for consecutive years for securing highest CGPA in B-Tech 1st year for the session 2004-05 , in B-Tech 2nd year for the session 2005-06 and in B-Tech 3rd year for the session 2006-07.
- Was awarded **Certificate of Merit and National Gold Medal** for being in the top 25 candidates at the **Indian National Physics Olympiad-2004**, hence attended a two -weeks orientation camp organized by HBCSE (Homi Bhabha Centre for Science Education), Mumbai for international Physics Olympiad.
- Received **Certificate of achievement and honorable mention** for participation in **ACM Asia Programming Contest** at Kanpur Site 2007 at IIT Kanpur.

TECHNICAL SKILLS

Programming: C, C++, C#, Java, Charm++, OpenMP, pthreads, MPI, JavaScript, UNIX shell scripting, GNU make, Cell Programming, CUDA, Assembly language(x86)

Computer Applications: T_EX (L^AT_EX), most common productivity packages (for Windows, OS X, and Linux platforms), Vim

Operating Systems: Most flavours of Microsoft Windows and Linux

REFERENCES

Available upon request