

Jasleen Singh

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Objective

Seeking an internship position to research new technologies and develop tools.

Education

- 2009-Present: M.S. in Computer Science, University of California, Los Angeles (UCLA)
- 2002-2006: B.Eng. in Computer Engineering, Nanyang Technological University (NTU), Singapore. Major GPA: 3.5, Overall: 3.4

Skills and Interests

- Java, C, C++, C#, Python, Web (HTML, CSS, Javascript), Linux and Windows
- I am very interested combining visual arts and computer science to produce the next generation of graphical effects and interfaces. I have a strong programming background with experience in designing and implementing large (>100K LOC) projects requiring sound software engineering, and those which are relatively small but require domain-specific knowledge. I am also interested in applying the results of my research to create a commercial unit, a lab spinoff or a startup.

Work Experience

- 12/2008-09/2009: Research Officer, Nanyang Technological University, Singapore
- 06/2007-11/2008: Founder and Engineer, Infoscienc Pte. Ltd. Singapore
- 06/2006-05/2007: R&D Engineer, Hiperware Pte. Ltd. Singapore
- 07/2004-12/2004: Intern, Sun Microsystems Inc. Singapore

Projects

- (At NTU): Developed a distributed, multiplayer, mixed-reality bicycle racing game which could be played using either indoor trainers or real outdoor bicycles.
- (At NTU): Conceived and prototyped an Audience Response System, using commercial, off-the-shelf components. The software was field-tested in a class of about 20 students and is in process of being deployed more widely.
- (At Infoscienc): Created a startup and worked on several projects, both core to the aim of the company and on outside contracts. As the primary goal of the startup, I worked on the design and implementation of search engine for videos and images. As part of the project, I created a distributed back-end for storage and processing of large amounts of multimedia data. I also worked on a contract project and singlehandedly developed an application for modeling complex physical systems based on the Modelica language (<http://www.visualphysics.net/proteus/>)
- (At Hiperware): Worked as one of the original developers at Hiperware, a startup focused on creating tools for cluster computing. As part of a team of two, I developed a visual prototyping tool to create independent software components and then combine them in a workflow. I also

designed and created the middleware platform to run components in a distributed fashion with automatic scheduling, instrumentation and failover.

- (At Sun): Designed and implemented a workflow management system for executing a workflow on the Sun Grid Engine. Involved in research on topics like web-services, XML, Grid Computing and networking and implemented a GUI application using open-source libraries.
- (Freelance): Developed a CAD and visualization tool for bicycles.
- (UROP): Developed a mobile graphical calculator, using J2ME on a mobile phone and a .NET web-service.
- (Design & Dev. Project): Wrote the software to control a mobile robot with intelligent maze navigation capability. Application consisted of a UI with sound and animation, serial interface to the robot and algorithms for fastest path and traveling salesman problem.

Publications

- A Multi-Player, Mixed Reality Bicycle Racing Gaming System, J. Singh, F.F. Yap, International Simulation and Gaming Association, 40th Annual Conference, Singapore.
- A System for Collaborative Web-Based Physical System Modelling and Simulation. Y. Zhang, J. Singh, F.F. Yap, International Simulation and Gaming Association, 40th Annual Conference, Singapore.
- Grid Workflow Management System, J. Song, J. Singh, C. K. Koh, Y. S. Ong & C. W. See, International Journal on Information Technology (IJIT), Singapore, 2005, Vol. 11, No. 4, pp. 50-57.
- Grid Workflow Management System, J. Song, J. Singh, M. Koh, Y.S. Ong and S. See, 2nd Workshop on Grid Computing and Applications, Singapore, 5 May 2005.
- mgc – Mobile Graphical Calculator: Accessing a Web-Service from a Mobile Device, Proceedings of the 10th National Undergraduate Research Opportunities Program Congress, 2004.

Honors and Awards

- On Accelerated Bachelors Programme, offered to top 10% of freshman year undergraduates.
- SIA/NOL Scholarship, offered to 50 students all over India, covering full tuition fees and living allowances for undergraduate studies and Nanyang Technological University, Singapore.
- Second Rank in Regional Mathematics Olympiad, out of about 10,000 participants.
- National Talent Search Scholarship, given to only about 600 students in India.
- SBGST Memorial Merit Scholarship and K K Das Medal (1st in ICSE in school).

Personal

- Male, Single, 25 years old. Indian citizen. Singapore Permanent Resident.

References

- Available upon request