

# Gaurav Trivedi

## Address for correspondence

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## INTERESTS

Areas of interest include human computer interaction, computer vision and web technologies.

## EDUCATION

### National Institute of Technology, Karnataka

Bachelor of Technology, July 2008 - Present

*Currently pursuing V semester in the Department of Information Technology*

Cumulative GPA 8.44/10

### Delhi Public School, Vasant Kunj, New Delhi

All India Senior School Certificate Examination (Class XII, CBSE), May 2008

All India Secondary School Certificate Examination (Class X, CBSE), May 2006

## INTERNSHIPS & PROJECT WORK

### Augmented Air Hockey

NITK, Surathkal

*Ongoing*

To design and implement a low cost augmented reality based game of air hockey on an interactive surface table. It presents a new approach for playing the game using physical mallets and a virtual puck. It involves a real-time object tracking with a web camera, providing haptic and auditory feedback, and simulating the dynamics of a real air hockey table. It also provides interesting enhancements like playing the game over a distance and extending the game for more than two players.

*Publication:* "Air Hockey on an Interactive Table Top Surface", Gaurav Trivedi and Saket Gupta, 2011 The 3rd International Conference on Computer Modelling and Simulation, Mumbai, India (In Press)

### Dranimate

NITK, Surathkal

*April - May 2010*

A cross platform software for drawing and animating, developed as the Computer Graphics course mini project. Was awarded the top grade in class. Made with Qt and OpenGL.

### IT Intranet

NITK, Surathkal

*Summer 2009*

Conceptualised and developed a web based course management tool for various processes like registration, evaluation and communication. It enables the students and instructors to manage the entire life-cycle of a course - marking attendance, maintaining mark records and generating reports. Used open source technologies like PHP, MySQL & Drupal. *Currently being used at the National Institute of Technology, Karnataka, Surathkal.*

### Summer Intern

USP Media Solutions, New Delhi

*July 2009*

Created modules to prevent automated submission, posting testimonials and RSS feeds for the community blogging site YouthPad.com, provided assistance with general maintenance of the portal. Appreciated for extraordinary expertise in the domain and completing the assignment within a short duration.

## HONOURS AND AWARDS

- NTSE Scholar (National Talent Search Examination; selected amongst **top 0.5%** students from India)
- Represented Delhi in INMO (Indian National Mathematical Olympiad) in 2006-07 (Rank 14 in Delhi)
- Declared first amongst 'the geeks' in a 3 day, 5 round event; Computer Marathon at Engineer Golden Jubilee (National Level Techfest of NITK)
- Represented Delhi twice in InAO (Indian National Astronomy Olympiad) during 2006-08.

- JSTS Scholar (Junior Science Talent Search Examination), Rank 29
- Won over **80** awards in various competitions till date.
- AIR 104 in National Science Talent Search Examination (including AIR 7 in Biology)
- AIR 36 (7 in Delhi) in 4th National Science Olympiad organised by Wipro.

### **EXTRACURRICULAR ACTIVITIES**

- IEEE (*ieee.org*) student member and selected as an executive member for NITK-IEEE.
- Opera Campus Crew Member. Organised events, workshops, quizzes and meet-ups on behalf of Opera Software.
- Technical committee executive member for Engineer Golden Jubilee (*engineer.org.in*).
- Created a virtual flip book with interaction using hand gestures, to be used at the information desk at Engineer 2010.
- Developed an automated C code evaluation program for online contests at Engineer.
- Participated in the AI gaming event, Kode Kombat at Engineer 2009.
- Created a robot car which can take direction input from a java mobile application via Twitter or Bluetooth for the intra college IEEE BeTech Demo, 2010.
- Member of the Web Enthusiasts Club at NITK Surathkal.
- Completed a course in Fundamentals of Spirituality conducted by VOICE/ISKCON, 2009.
- Member of Code-Warriors (*code-warriors.org/node/18*), Technology club of Delhi Public School, Vasant Kunj. Represented school at various levels in Web Design, Programming, Quizzing and other tech-events during 2003-08.

### **TECHNICAL SKILLS**

<i>Languages</i>	C, C++, PHP
<i>Frameworks</i>	Qt 4, OpenCV, OpenGL
<i>Database</i>	MySQL
<i>Operating Systems</i>	Windows, Linux