#### **Scholastic Achievements**

- All India Rank 61 in IIT-JEE (Joint Entrance Examination) 2010. of 0.455 million students
- All India Rank 3 in NEST (National Entrance Screening Test)-2010. of 18000 students
- Qualified to appear for the Indian National Chemistry Olympiad (INChO) -2010 based on performance in National Standard Examination in Chemistry(NSEC) (For top 300 in NSEC) and has been awarded a book prize for top 1% in the nation .
- Qualified to appear for the Indian National Physics Olympiad (INPhO) -2010 based on performance in National Standard Examination in Chemistry(NSEP). (For top 300 in NSEP)
- Awarded **Certificate of Merit** by Central Board of Secondary Education (**CBSE**) for being among **top 0.1** % in 'Science' and 'Social Science' in All India Secondary School Examination 2008.
- Secured **AIR 4** in NIMO (National Interactive Maths Olympiad)-2009 and **AIR 5** in NISO (National Interactive Science Olympiad)-2009 conducted by Eduheal Foundation.
- Secured **AIR 5** in the XXXIX National Mathematics Talent Competition (**NMTC**)-2007 conducted by Association of Mathematics Teachers of India (**AMTI**).
- Secured **AIR 15** in 10th National Science Olympiad (NSO) 2007 conducted by Science Olympiad Foundation(SOF).

## **Summer Project - GSoC'12**

Gnucap plugin for schematic files (Google summer of Code) May 2012 to August 2012

- Worked with the organisation 'The GNU Project' on the project 'Gnucap' (GNU Circuit Analysis Package) under the mentorship of Albert Davis [gnucap.org]
- Programmed in C++. The plugin can be loaded dynamically at run-time
- My work involved the following:
  - o Reading through the existing codebase to understand it
  - o Figuring a way to map schematic file to Verilog-AMS and vice-versa
  - Implementing a plugin which will import a schematic file and convert into a Verilog-AMS netlist and also export an existing circuit in schematic format

# **Course Projects**

- Traveling Message Display (Guided by Prof. M.B.Patil and J.John, EE214- Spring 2012)
  - Worked in a team of 3
  - o Display a scrolling message taken using keypad on an LED Array
  - o Used an FPGA board: DE0 NANO and programmed using Verilog-HDL
  - o My work involved writing verilog modules for taking input from the keypad and processing

- Simulation of Micromouse (Guided by Prof. Deepak B. Phatak, CS101 Autumn 2010)
  - o Led the team of 12 members.with 3 subteams of 4 members each
  - $\circ$  Designed n×n mazes, Solved them for the shortest path using Bellman-ford algorithm in C++ and Simulated the solution using EzWindows GUI.
  - o My work involved programming the display over GUI and interlinking the different parts
- Term paper on Working of a Cordless Telephone (Guided by Prof. Vasi J., EE112 Spring 2011)
  - o Opened and Analyzed a Cordless phone.
  - Worked in a team of 3 members.
  - Written a 12-page Term paper with details of working of the phone.

### **Interests and Hobbies**

- Digital Electronics, Microprocessors and VLSI Design
- Computer Science fields like Artificial Intelligence and Natural Language Processing
- App Development and Programming

### **Technical Skills**

- **Programming Languages**: C++,Java,Python,Ruby **Operating Systems**: Ubuntu, Windows
- Tools: Matlab, Mathematica, Scilab, Latex, Photoshop Web designing: HTML, CSS, Javascript
- EE tools: Spice, Verilog-HDL, Verilog-AMS, Arduino

#### **Technical Activities**

- Yahoo! HackU -2012: Built an android app and web interface, 'MapIt' which can be used to create customizable maps of localities with greater information
- Line-follower competition-2011 : Designed and built a line-following bot using IR sensors and coding the microcontroller using Arduino software
- Trackmania-2010: Built a remote-controlled four-wheeled car (bot).

#### **Extra Curricular Activities and Achievements**

- Participated in **Unnati**, the **NSS** (National Service Scheme) group of IIT Bombay.
  - Has been involved with the GRA (Group for Rural Activities) as part of curriculum in I year
  - Went to Village trips in Autumn 2010 and Spring 2011.
  - o Continued as a voluntary member of the NSS Team in the subsequent year.
- Worked as 'Organiser' in **Techfest-2011** in the Lecture Series department.
- Participated in the Inter-hostel Hockey GC.

## Courses currently taking (Autumn 2012)

- EE Core Courses:
  - Microprocessors, Microprocessors Lab
  - o Communication Systems, Communications Lab
  - Electromagnetic Waves
- Additional Courses:
  - Foundations of VLSI CAD
  - Artificial Intelligence
  - Data Structures and Algorithms
- Institute Core courses:
  - Psychology