

SCHOLASTIC ACHIEVEMENTS

- Ranked **9 out of 96** in the department
- Secured **All India Rank 55** in **IIT JEE (Advanced)** 2013 out of **1.5 lakh** candidates
- Secured **All India Rank 16** in **IIT JEE (Main)** 2013 out of **13 lakh** candidates
- Awarded **AP** grade in **Calculus** and **Differential Equations**
- Awarded **Gold Medal** in **Indian National Physics Olympiad 2013** (top 35 from all over India)
- Attended **Vijyoshi camp** in 2012 organised by **IISc** (Indian Institute of Sciences)
- Qualified for **INMO** (Indian National Mathematical Olympiad) 2013
- Secured **All India Rank 8** in **NSTSE** 2011 conducted by Unified Council
- **National top 300** in National Standard Examination in Physics and Astronomy (**NSEP and NSEA**)
- Pursuing a **Minor** in **Applied Statistics and Informatics**

SCHOLARSHIPS

- Offered **INSPIRE** Scholarship for being in top 1% of Maharashtra HSC Examination
- Awarded the **KVPY Fellowship** for the period 2012-13
- Awarded Scholarship from **St. Thomas School, Ranchi** for being the **City Topper** and **Third State Topper** in **ICSE 2011**

PROJECTS

- **Chess Playing Bot** (June - July 2014)
Mentor: MVC Deepak
 - Created a **mechanical framework** to move the chess pieces across the board **automatically**
 - Implemented the **Mini-Max and Alpha-Beta Pruning** algorithms to design the chess engine's AI
 - Used **Stepper and Servo Motors** to control the mechanical parts
 - Interfacing of all the components done on **Beaglebone**
- **Tetris** (Jan 2014)
Guide: Prof. Rushikesh K Joshi
 - Developed the popular game of **Tetris** using the **FLTK** Library of **C++**
 - Implemented **Event Handling** and **Time based Randomization** for generating falling blocks
- **Physics Simulation Engine** (Oct - Nov 2013)
Guide: Prof. Supratim Biswas
 - Developed an **Electromagnetic Simulator** for charged particles using **Simplecpp** developed by Prof. Abhiram Ranade (CSE, IITB)
 - Accurately **illustrated** the motion of charged particles under **external as well as their own Electro-magnetic Forces**
 - **Extendable** to any force with **Inverse Law Behaviour**

TECHNICAL SKILLS

- **Languages** : C, C++, Python, Prolog, Bash, OpenCV C++ Library
- **Web Development** : HTML, CSS, JavaScript, PHP, MySQL
- **Softwares** : Eclipse, L^AT_EX
- **Electronics** : Arduino, Beaglebone

COURSES UNDERTAKEN

- | | |
|--------------------------------------------------------|-----------------------------------------|
| • Computer Programming and Utilization | • Discrete Structures* |
| • Calculus | • Data Structures and Algorithms + Lab* |
| • Introduction to Electrical and Electronics Circuits* | • Modern Physics |
| • Abstractions and Paradigms + Lab | • Linear Algebra |
| • Data Analysis and Interpretation* | • Differential Equations |
| • Software Systems Lab* | • Biology |
| • Introduction to Probability Theory* | • Basics of Electricity and Magnetism |
| • Quantum Physics and application | • Chemistry |

** to be completed by November 2014*

POSITIONS OF RESPONSIBILITY

- **Teaching Assistant**
MA105 for Prof. Ravi Raghunathan
 - Entrusted with training 42 students and their evaluation
- **Convener**
Electronics Club
 - Managing and participating in various club related activities in the institute
 - System administrator for the club website
 - Acted as a Super Mentor for 5 teams, having 4 members each, for freshman competition, XLR8
- **Web Secretary**
Computer Science and Engineering Association
 - Tasked with maintaining and updating the CSEA website
 - Involved in planning and executing other events of the association
- **Coordinator**
Media, E-Cell
 - Responsible for creating and publishing articles for E-Cell's Magazine, EnSpace
 - Also involved in bringing dealing with sponsors for the magazine

INTEREST AND HOBBIES

- Image Processing
- Cryptography, Encryption and Security
- Algorithms
- Competitive Coding
- Robotics and Electronics : One of the core members of Parinat, IIT Bombay's Humanoid Project
- Journalism : Involved with InsIghT, the media body of IIT Bombay

EXTRACURRICULARS

- Bagged the 1st prize in Advertisement Making Competition for Freshizza, the Freshman Cultural Event
- Won 2nd prize for making a Pokemon simulation game in Scratch
- Secured 1st prize in school for Quizzing
- Anchored a couple of events in school
- Participated in XLR8 and Line Follower Competitions in 2013
- Nurture a love for reading mystery and fiction based novels
- Beginner at playing guitar