

SCHOLASTIC ACHIEVEMENTS

- 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** for being in **top 35** in **Indian National Physics Olympiad 2013** from all over India
- Qualified for **INMO** (Indian National Mathematical Olympiad) 2013 and **INChO** (Indian National Chemistry Olympiad) 2013
- Attended **Vijyoshi camp** - 2012 organised at **IISc, Bangalore** and **KVPY Summer Program at IISER, Pune**
- Secured **All India Rank 8** in **NSTSE 2012** conducted by Unified Council
- In **State-wise top 300** in Maharashtra in National Standard Examination in Astronomy (**NSEA**), 2012
- 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 School Topper. Also **City Topper** and **Third State Topper** in ICSE 2011

PROJECTS

- **Chess Playing Bot** (June - July '14)
Institute Technical Summer Project
 - Created an **x-y slider framework** to move the pieces across the board using **Beaglebone**
 - Implemented the **Mini-Max** and **Alpha-Beta Pruning** algorithms to design the chess engine's AI
 - Designed an algorithm to identify the user's moves by **Image Processing** in OpenCV
 - Selected for **Technovation 2014** and for exhibition in **Inclusive Innovations Expo, Pune**
- **Parinat** (Feb '14 - Present)
Technovation, IIT Bombay
 - Project aimed at making a **Humanoid** that can **transform into a car**
 - Used OpenCV for face detection and object detection. Presently working in Coding sub-division to integrate the entire bot using **Robot Operating System (ROS)**
- **Snooze Alarm** (August '14 - Ongoing)
Guide: Prof. Sharat Chandran, CSE Department, IIT Bombay
 - Formulated a **Rube Goldberg Machine** using the Physics Simulation Engine, **Box2D**
 - The concoction implements various methods to wake the person when he/she tries to turn it off
- **Tetris** (Jan '14)
Guide: Prof. Rushikesh K Joshi, CSE Department, IIT Bombay
 - Made the game of **Tetris** in C++ using the cross-platform graphics library **Fast, Light Toolkit (FLTK)**
- **Physics Simulation Engine** (Oct - Nov '13)
Guide: Prof. Supratim Biswas, CSE Department, IIT Bombay
 - Developed an **Electromagnetic Simulator** for charged particles using the **Simplecpp** graphics library developed by Prof. Abhiram Ranade (CSE, IITB)

INTERESTS

- Algorithms
- Artificial Intelligence
- Computer Vision & Graphics
- Cryptography
- Combinatorics & Graph Theory

TECHNICAL SKILLS

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

POSITIONS OF RESPONSIBILITY

- **Teaching Assistant : Calculus (MA105)** (July '14 - Present)
TA for Prof. Ravi Raghunathan and Prof. Srikanth Srinivasan
 - Entrusted with **teaching and evaluating** 42 students
 - Offered TAs for **PH107** and **CS101** as well
- **Convener** (April '14 - Present)
Electronics Club, IIT Bombay
 - **Managing, conducting** various club related activities and **system administrator** for the club website
 - Conducted **sessions** for Freshmen on **Basic Electronics and Line Follower Bot**
 - **Super Mentor for 10 teams**, having 4 members each, for freshman competition, **XLR8 and Line Follower**
- **Web Secretary** (June '14 - Present)
Computer Science and Engineering Association (CSEA), IIT Bombay
 - Made the **CSEA Website** using **Windows 8** based theme. Responsible for maintaining and updating it
 - Involved in planning and executing other events of the association
- **Coordinator** (May '14 - Present)
Entrepreneurship Cell, IIT Bombay
 - Responsible for **creating and publishing articles** for E-Cell's Magazine, **EnSpace**
 - Also involved in **bringing and dealing with sponsors** for the magazine

KEY COURSES UNDERTAKEN

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| • 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*

EXTRACURRICULARS

- Bagged the 1st **prize in Advertisement Making Competition** for Freshizza, the Freshman Cultural Event
- Won 2nd **prize for Game Development Competition** organised by WnCC, IIT Bombay
- Stood in the **top 10 teams in XLR8**, a RC Car Racing competition organized by Robotics Club, IITB
- Successfully participated in **Line Follower Competition** organized by Electronics Club, IITB
- Secured 1st **prize** in school for **Quizzing** and **represented** my school in **City Level Competitions**
- Stood 2nd in **Environmental Debate** conducted by **Forest Department, India**