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 *IIT Bombay*

- 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 - Ongoing)*
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 *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 *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 *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, LaTeX
- **Electronics** : Arduino, Beaglebone

Positions of Responsibility

Teaching Assistant : Calculus (MA105) *(July '14 - Present)*
TA for Prof. Ravi Raghunathan and Prof. Srikanth Srinivasan *IIT Bombay*

- Entrusted with **teaching and evaluating** 42 students
- Offered TAship 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

- **Computer Science** : Data Structures and Algorithms + Lab*, Discrete Structures*, Abstractions and Paradigms + Lab, Data Analysis and Interpretation*, Software Systems Lab*, Computer Programming and Utilization
- **Mathematics** : Calculus, Linear Algebra, Differential Equations, Introduction to Probablility Theory*
- **Others** : Introduction to Electrical and Electronics Circuits*, Biology, Quantum Physics and application, Basics of Electricity and Magnetism

**to be completed by November 2014*

Extracurriculars

- Bagged the 1^{st} **prize in Advertisement Making Competition** for Freshizza, the Freshman Cultural Event
- Won 2^{nd} **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 1^{st} **prize** in school for **Quizzing** and **represented** my school in **City Level Competitions**
- Stood 2^{nd} in **Environmental Debate** conducted by **Forest Department, India**