

ACADEMIC ACHIEVEMENTS

- Have a CPI of **8.87** currently.
- Among top 1 % (Ranked **217** in India) in IIT JEE 08.
- Ranked 574 all over India and 44th in the entire Maharashtra state in AIEEE 08.
- Among top 1% students in **Indian National Physics Olympiad-08, Indian National Chemistry Olympiad-08** and **Indian National Astronomy Olympiad-08**.
- Was among **top 23 all over India** at Junior National Astronomy Olympiad-06.
- Recipient of **National Talent Search Scholarship** awarded in Class X(10th) in year 2006.
- Came **1st all over India** in National Science Talent Search Exam in class 7(2003)
- Came 1st all over Maharashtra in MTS (Maharashtra Talent Search) in 2005 and 2nd all over Maharashtra in MTS (Maharashtra Talent Search) in 2004.
- Successfully cleared Regional Maths Olympiad (1st stage of maths Olympiad)
- Secured **92.55%** in Matriculation Exam 10th) from State board.
- Secured **88.33% (90% in PCM)** in Intermediate/+2 (HSC) from State Board.

SUMMER INTERNSHIP (2011)

- Worked at Texas Instruments (TI), Bangalore for duration of 11 weeks under the mentorship of Mr Naveen Srinivasamurthy.

Project Outline:

- Developed an interface single -handedly, for testing the next generation video compression algorithms based on new upcoming standard named HEVC.

- Completed **6 week long training** at Rashtriya Chemical &Fertilizers plant during 1st Year summer vacation (year 2009)

IMPORTANT PROJECTS

- Implementation Of **Digital Filter using DSP kit** Guide: Prof. Preeti Rao
 - Studied about the digital filters, their uses and how actual communication takes place.
 - Also studied how to write a code on DSP kit and implement it to get the required result.
 - Implemented a digital filter on MATLAB on the same lines as those studied for the DSP kit.
- Password Protected Login Interface In Hardware Guide: Prof M.B Patil
 - Designed an elementary circuit consisting of RAM (storage of password) which can determine if a Particular user has entered the correct password and grants him further access.
 - Successfully implemented the above circuit having multiuser and password change facility.
- Algorithm Development to convert data from **Tomography** to matrix form Guide: Prof Sridhar Iyer
 - Conceptualised how the data output from the tomography can be efficiently converted to matrix form by considering the way how the wave is incident ,so that the matrix can be solved easily to get the result.
- Analysis of **Graphic Equaliser** Guide: Prof Vikram Gadre
 - Analysed the working of audio graphic equaliser on the basis of the concepts learned in signals & systems.
 - Built a block diagram of graphic equaliser & studied various genres of music in fourier domain using this diagram (with its parameters).
 - Observed the visualisations shown in graphic equaliser and deduced conclusions from them.

- Development of an interface to play a game of Carrom Guide: Prof Abhiram Ranade
 - Developed a game of carom using C++ which takes in 3 inputs from user(position,angle of hit, speed of striker) .
 - The GUI showed how the game progressed after the strike (taking in account the laws of physics and game constraints) and awarded chance to each player according to each strike.
- Underwater Glider (for Boeing Student Design Project-09)
 - Simulated Glider dynamics using Matlab by taking aerodynamic equations in account.
 - Designed a working prototype for the glider.
- **Market Analysis** Of Tiffin Service in Mumbai Guide:Prof Haripriya Gundimeda
 - Conducted an in-depth analysis of past and present trends of market structure, market share, monopoly and the coordination of dabbawaalas in Mumbai

ELECTIVES

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|--|---------------------------|
| • Microwave Integrated Circuits | • Error correcting codes |
| • Advanced computing for Elec. Engineers | • Speech processing |
| • Image Processing | • Advanced Linear Algebra |
| • Cryptography | • Communication Skills |

Maths Course Undertaken

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|---|------------------------------------|
| • Calculus | • Linear algebra |
| • Differential Equations (ordinary & partial) | • Data Interpretation and Analysis |
| • Probability, Random variable & Stochastic processes | • Complex analysis |

TECHNICAL

- Line following Bot
 - Usage of Light detecting sensors to identify the track (white line on black background) and a subsequent logic circuit to control the motors to align the bot accordingly.
- R-F controlled car
 - Usage of R-F circuit to control the car wirelessly.

Programming & Software Skills

- Familiar with C++, Java, Verilog, 8085 assembly language, Windows & Linux platform, MATLAB, spice, multisim.

EXTRACURRICULAR ACTIVITIES

- Currently working as Election Officer of Hostel 7 (for the year 2011-2012).
- Represented Hostel 7 in Inter Hostel Chess & Carrom Championship.
- Won the first prize in an Inter College quiz in which many colleges (all over Mumbai) participated.
- Completed NSO in music in 2008 successfully & was part of team that sung on Republic & Independence Day in IIT Bombay.