ACADEMIC ACHIEVEMENTS

➢ Secured **All India Rank 69** , **IIT-JEE 2009**
➢ **Represented India** in **Asian Physics Olympiad 2008,** held in Ulan Batar , Mongolia
➢ Ranked **All India 6** and **2**nd **in state** in **All India Secondary School Examination**, 2007 with **97.8%.**
➢ Recipient of the prestigious **National Talent Search Examination (NTSE)** scholarship awarded by the Govt. of India.
➢ Won **Silver** Medal in **Homi Bhabha Bal Vaidnyanik Exam (**conducted by **Greater Bombay Science Teachers Association)** in both 2006 and 2003.
➢ **Gold medalist** in **Ganit Pradnya Examination** (Conducted by **Maharashtra Ganit Adhyapak Mandal**) 2005.
➢ Among **All India top 100** in NSTSE conducted by Unified Council for **5 years**(2003-2007)
➢ Among **top 10 in India** in **DAV Talent Search Scholarship Exam**(conducted by DAVCCE) in the years 2005,2006,2007
➢ **High Distinction** in **Australian National Chemistry Quiz** conducted by **Royal Australian Chemical Institute** in 2006, 2007, 2008.Awarded **Silver Plaque** in the year 2006.
➢ **AIR-4** in **National Science Olympiad** in the year 2004
➢ **AIR-5** in **Nationwide Biotech Olympiad** in the year 2007.

RELEVANT COURSES UNDERTAKEN

ELECTRICAL-

- Network Theory, Electronic Devices and Circuits, Analog Circuits,
- Digital Systems ,
- Electrical Machines and Power Electronics ,
- Circuit Simulation in Power Electronics ,
- Microprocessors ,
- Signals and Systems , Communication Systems ,
- Probability and Random Processes .

COMPUTER SCIENCE –

DiscreteDataStructures
Data Structures and Algorithms ,
Operating Systems

LABS –Communication Systems Lab , Microprocessors Lab , Experimental and Measurement Laboratory, Electronic Devices Lab, Digital and Analog Lab, Machines Lab.

AREAS OF INTEREST

Power Electronics , Digital Design , Embedded Systems , Algorithms

PROJECTS

o *FS UK 2012:2011*
   -Part of *IITB Racing Team* and working on Electrical part of the electric car which is to be raced in FS 2012 , on Silverstone Circuit, UK.
   -Working on motor control, battery management and powertrain of the car.

o *UID USING FINGERPRINT MATCHING:2009*
   Course Project(Guide : Prof Deepak Phatak)
   -Part of Computer Programming and Utilization Course.
   -Was part of *minutiae detection* team.
   -*Developed the algorithm* to find the minutiae using image processing in C++.

o *TARGET IDENTIFICATION AND SHOOTING:2010*

Summer Project(Under Electronics Club IITB)
-Used *image processing* (using *OpenCV)* and *microcontroller (ATMega 16)* to control a
laser pointer using *servo motors* so that it points at the target.
-*Conceived the algorithm* for image processing and *built the robotic assembly.*

- o **DIGITAL FOOSBALL:2011**
  Course Project(Guide: Prof.Sachin Patkar)
  -Developed the code for game of foosball(2 player) on bicolour LED matrix(5x10) and
  implemented it on *FPGA Board(Spartan)* .
  -The coding was done in Verilog.

- o **LDPC DECODER DESIGN (Ongoing) : 2011**
  Summer Project (Guide: Prof.Sachin Patkar & Yash Bhagwat)
  -*Verifying the working and implementation* of a pipelined decoder for LDPC, an error
  correcting code.
  -Design being verified on the Xilinx Virtex-5 LX110T platform.
  -Involved coding in VHDL.

- o **CAMPUS UID(Ongoing):2011**
  In-Semester Project(Under Technovation , STAB)
  -Currently working on *communication(Ethernet)* and *validating unit* of this project.
  - Validation is done using *barcode* of Student ID-card .

- o **MUSIC PLAYER(Ongoing):2011**
  Self Project
  -Working on making a music player from scratch with proper display and controls
  -The processor used will be *ATMega 128* and the songs will be stored in SD card.

EXTRA CURRICULAR ACTIVITIES

COMPETITIONS
- ➢ **1**[st] prize in Science Quiz held at **National Science Festival** KHOJ conducted by **DAV Centre for Creative Education** in 2004.
- ➢ Stood 2nd in **Electronics Quiz** held at Aagomani(Technical fest of Electrical Engineering Dept IITB),2009
- ➢ Awarded **Vigyan Bhushan** for project on **Organic Farming (Vermiculture)** at **National Science Festival** KHOJ conducted by **DAV Centre for Creative Education** in 2006.
- ➢ Participated in Solar Splash , a solar boat racing competition held in **TechFest-2010** ,IIT Bombay
- ➢ Participated in **RC Car racing** competition held at IIT Bombay, 2009.

SPORTS:
- ➢ Won **Freshmen Football Tournament** in IIT Bombay,2009
- ➢ Participated in **Institute Football League** of IIT Bombay,2010
- ➢ **NSO –Football**,Spring-Autum-2009
- ➢ Played in Football and Hockey GC .
- ➢ Top goal scorer in intra hostel football league.

CULTURAL:
- ➢ Participated in **Ad Making GC** and **Book Cover Design** GC.

COMPUTER SKILLS

Languages: C,C++ ,Java, Python, SQL , PHP , Javascript , HTML ,Verilog HDL,VHDL
Softwares: MATLAB , Xilinx ISE,SEQUEL(IITB Circuit Simulator) PSpice , Eagle , Mathematica , AutoCAD, SolidWorks .Worked on both Linux and Windows.

DECLARATION

I , **Saurabh Mishra**, hereby declare that the above information is correct to the best of my knowledge