**Sumit Kumar Yadav**  **09010034**
**Mechanical Engineering**  **UG Third Year (B.Tech.)**
**Indian Institute of Technology, Bombay**  **Male**
**DOB: 29 June 1992**

| Examination | University | Institute | Year | CPI / % |
|---|---|---|---|---|
| Graduation | IIT Bombay | IIT Bombay | 2011 | 7.35 |
| Intermediate/+2 | CBSE | The Army Public School, Pune | 2009 | 87.40 |
| Matriculation | CBSE | The Army Public School, Pune | 2007 | 95.00 |

## SCHOLASTIC ACHIEVEMENTS

- Secured an All India Rank of **1259** in Joint Entrance Examination (**IIT-JEE**) *(top 0.5%)*
- Secured an All India Rank of **1288** in All India Engineering Entrance Examination *(top 0.2%)*
- Secured an All India Rank of **63** in **National Cyber Olympiad** conducted by **Science Olympiad Foundation** in the year 2006 & **topped the school** in the same for 2 consecutive years
- Awarded Certificate of Merit in AISSE 2007 by CBSE for being in top 0.1% in Mathematics & Hindi

## TECHNICAL PROJECTS

- **MINI UNIQUE IDENTIFICATION**  [Oct-Nov 2009]
  *(Guide: Professor D.B. Phatak, Computer Programming and Utilization*)
  - Developed a program to detect and identify fingerprints of campus inmates
  - Developed a code for application of this project in taking attendance *(Team of 5)*

- **MATERIAL SELECTION AND DESIGN FOR ICE-AXE**  [Oct – Nov 2010]
  *(Guide: Professor G.V. Prabhugaonkar, Engineering Metallurgy)*
  - Collected extensive data about the competent materials
  - Analysed various factors involved such as cost, strength, variation of properties with temperature, safety, etc. Made a mathematical model giving weightage to these properties for coming to conclusion *(Team of 2)*

- **PERFORMANCE CHARACTERISTICS OF IC ENGINE**  [Dec 2010]
  *(Guide: Professor Sreedhara Sheshadri)*
  - Analyzed performance characteristics of four stroke gasoline spark ignition engines
  - Calculated performance and heat release characteristics of Alto engine *(Team of 3)*

- **MID-AIR HUMAN DOCKING AIRCRAFT**  [Aug 2011-Present]
  *(Guide: Professor Rajkumar S. Pant, Aircraft Design)*
  - Presently working to design an aircraft capable of transporting humans mid-air from and to another flying aircraft
  - Objective is to consider all possible factors like constraint analysis, refined sizing, drag and lift coefficients, operational and environmental issues in designing *(Team of 7)*

## COMPUTER AND PROGRAMMING SKILLS

- Programming Skills: C++, HTML
- Other Softwares: MS Office, Adobe Photoshop, Solid Works

## POSITION OF RESPONSIBILITY

- ➢ **NSS Activity Associate** [2010-11]
  - Helped in organising field trips and smooth conduction of Personality Development Programme (PDP) Workshops
  - Took classes for students (Standard XI) as part of Educational Outreach

- ➢ **Alumni Secretary, Hostel -8** [2010-11]
  - Major Contribution in **launch of HATS** (Hostel Alumni Team Stewardship) which raised funds over **Rs. 20 lakh** for the hostel
  - Organised the **First Hostel Alumni Reunion** which saw participation of over 35 alumni
  - Prepared the initial content and regularly updated the Hostel HATS Website
  - Participated in various Phonathon (US and India Chapter) to publicise HATS and Reunion

- ➢ **Co-ordinator, Marketing Department, Entrepreneurship Cell** [Oct 2010 – Mar 2011]
  - Worked in a team which was responsible for bringing sponsors like **Google, Dell, Essar** for our flagship event **E-Summit** with an overall sponsorship amount of Rs. 1.7 crore
  - With the help of organisers, handled the last minute tasks for smooth-running of event

- ➢ **Group Leader** in **Basic Mountaineering Course** by ABVIMAS, Manali of the group which won the award of **Best-Group**

## EXTRA CURRICULAR

**SPORTS**
- Completed **Swimathon, 12-hour non-stop Swimming** Challenge for **2 consecutive years** covering a distance of **16 km and 18.2 km** among very few from entire IIT including students, faculty and staff
- Successfully completed **26-day Basic Mountaineering Course** from Atal Bihari Vajpayee Institute of Mountaineering and Allied Sports **(ABVIMAS),** Manali in July 2010
- Awarded **National Cadet Corps** (NCC)-**'B' Certificate** by the **Government of India** in 2009-2010.
- Represented and earned points for hostel in Main Crossy, Water-Polo and Swimming

**CULTURAL**
- Awarded **Hostel-8 Freshmen of the Year (2010)** for contribution in Prod and Fine Arts which won the award for Best Prod in Performing Arts Festival (PAF)
- Awarded **PAF Special Mention (2011)** in the winning PAF for contribution in Prod and Acting

**TECHNICAL**
- Led a team of 4 members in Institute Level Technical Event **Robocon,** designed and made a bot which successfully completed the given task
- Stood **first in** Inter-School **Su-Doku Competition** (2007)

**HOBBIES AND MISCELLANEOUS**
- Participated in **YES!+ (Youth Empowerment and Skills)** Workshop course conducted by the **Art of Living Organisation.** Also, volunteered for organizing several such courses
- Organized **drive against use of plastic bags** in entire IIT Campus in **10-day Annual Training Camp (ATC)** by **NCC** apart from learning various adventure sports and firing
- Avid interest in reading, music(synthesizer) & puzzle solving, can **solve rubik's cube** in 2 min