Sunil Kumar **09D01015**
Aerospace Engineering **UG Third Year(Dual Degree)**
Indian Institute of Technology, Bombay **Male**
DOB: 07-08-1992

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	5.99
Intermediate/+2	CBSE	KV,Sikar	2008	79.00
Matriculation	RBSE	DPS,Sikar	2006	83.00

SCHOLASTIC ACHEIVEMENTS

- Selected among the **top 1%** of the **0.4 million** students appeared for **IIT-JEE 2009** exam.
- Selected among the **top 1%** of the **1 million** students appeared for the **AIEEE 2009** exam

POSITIONS OF RESPONSIBILITY

Photography and Fine arts Secretary, Hostel-5 **[July10-Apr„11]**

- Elected by **300 hostel** members to represent the hostel in matters pertaining to **Photography and fine Arts**
- Was responsible for Fine arts work in Preforming Arts Festival(PAF) came **1st in fine arts** category and 3rd overall ,Awarded Hostel PAF color for exceptional contribution in PAF
- Successfully conducted various intra **hostel competitions and workshops** like hostel T-shirt making competition, hostel Flag making competition and Basic Photoshop workshop

Coordinator, Techfest, Events **[Aug10-Mar„11]**

- Lead to a team of **20 students** for the competition 'Aviator'
- Increased **number of registration by 100%** in comparison to previous year by introducing **new and innovative** ways for publicity
- Initiated a path breaking change in the event by introducing **"Air Show" by professionals** during the event and hence increasing number of **spectators by 3 times**.

EXTRA-CURRICULAR ACTIVITIES

Photography and fine Arts

- Represented hostel in Various institute general championships (GCs) like 3-D modeling, Photography, Cartoon making etc.
- Active member of **Pixel**-Photography club, **Rang**-Fine arts club of institute

Adventure Activities

- Completed **„Basic Mountaineering Course"** which includes rock climbing, Ice crafting, Snow crafting, gaining 15,000 ft. of height etc with **"A"** grade.
- Completed B level Training in **National Cadets Corps(NCC)**,Lead to the group of 50 inmates

Technical Activities

Wireless Remote controlled car (August 2009)

Guide: ***Technic Club*** *IIT Bombay*

- Designed a **wireless car** which had to pass through certain obstacles and complete a path in minimum time and secured **8th position out of 100** teams in the freshmen year

INTERNSHIP

National Aerospace Laboratories (Dec 2011)

Topic: ***NowCasting Winds***; Division: *CSMST*; Guide: De, *Manabendra M*-Scientist 'C'

- Study of Weather Prediction Model **"Varsha-General Circulation Model(GCM)"** launched by NAL,Bangalore
- Coding and Analysis for calculating Total Energy output for 2 months generated from two different wind turbines(Suzlon-82 and NEPC-Micon) at two different locations in India
- Theorytical and Statisctical comarison of result with actual data given in WindPro magazine.
- Determined the possible factors affecting results.

ACADEMIC PROJECTS

Control Design Project *(Autumn 2011)*

Guide: prof. Ashok Joshi

- **Designing and modeling** of a controller in closed loop to provide desired stability, Achieved specified Transient Response and Required Steady state Error using CE103 Temperature Control Setup

Modeling and Simulation Lab Project (Spring2011)

Short report on non-linear partial differential equation based automobile suspension System.

Design of mobile thermal comfort for people (Autumn2010)

Guide: *Prof. Hemendra Arya,Prof. P M Mujumdar, Prof. Krishna Rao Sudhakar*

- Analyzed basic requirements of stakeholders, Product
- Designed suit providing mobile thermal comfort for people living in hot and humid places.

Mini UID Project for IIT Campus (Autumn2009)

Guide: *Prof. Deepak B Phatak*

- Developed **C++ codes** for the development of the **fingerprint identification system**
- System was used in recording attendance, access control, conducting online exams
- Enhanced the technique by generating a database with **uniquely assigned fingerprint** identifications

KEY ACADEMIC COURSES

Core Courses: Introduction to Aerospace Engineering, Solid Mechanics, Aerospace structural mechanics, Introduction to Composites, Aircraft Structures Laboratory, Thermodynamics, Propulsion**,** Control Theory, Control Systems Laboratory, Modeling and Simulation Lab

Non-Core Courses : Computer Programming and Utilization**,** Overview of Macro and Micro Economics, Data Analysis and Interpretation**,** Modern Physics, Philosophy, Linear Algebra, Differential Equations, Calculus

COMPUTER SKILLS

- **Programming languages:** C , C++ , Python , Fortran
- **Soft wares:** MATLAB , latex, Scilab, Mathematica,Powet Point,Word
- **Operating System:** windows7,XP,Linux