



Sunil Kumar
Aerospace Engineering
Indian Institute of Technology, Bombay

09D01015
UG Third Year(Dual Degree)
Male
DOB: 07-08-1992

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	9.00
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

ACADEMIC PROJECTS

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, 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

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**.

COMPUTER SKILLS

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

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

Remote controlled plane

(Mar'10)

Guide: **Prof. Krishna Rao Sudhakar**

- Designed and operated an RC plane using **balsa wood** with **rudder** and **aileron** controls.
- Studied the basic concepts of lift, drag and moment

Chuck glider and Boomerang

(Feb'10)

Guide : **Prof. Krishna Rao Sudhakar**

- Designed and modeled **balsa wood chuck glider** and a **paper plane (Flying Time:12 seconds)**
- Participated in the **boomerang** making competition