



Apoorv Maheshwari
Aerospace Engineering
Indian Institute of Technology, Bombay

09001012
UG Third Year (B.Tech.)
Male
DOB: Dec 7, 1991

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	7.44
Intermediate/+2	Central Board of Secondary Education	Modi Public School, Kota	2009	88.40
Matriculation	Central Board of Secondary Education	St. Anselm's Sr. Sec. School, Bhilwara	2007	89.60

SCHOLASTIC ACHIEVEMENTS

- Secured All India Rank 1193 (out of 3,85,000 appeared) in JEE-2009
- Received Certificate of Merit in Mathematics in 10th (in 2007) & 12th (in 2009) CBSE Examinations
- Secured 1st rank in district in State Talent Search Examination (conducted by Rajasthan Govt.)
- Secured AIR 33 in 10th National Science Olympiad (conducted by Science Olympiad Foundation)

INDUSTRIAL EXPERIENCE

ZEUS NUMERIX PVT. LTD.

Bengaluru, May'11-Jul'11

Summer Trainee

DETERMINATION OF STEALTH SETTINGS FOR AIRBORNE VEHICLES LIKE LIGHT AND MEDIUM COMBAT AIRCRAFTS

- It was an onsite project with Aeronautical Development Agency, Bengaluru
- Validated Radar Cross Section values of objects like LCA/MCA by comparing the results obtained by parallel code with those obtained from serial code
- Documented the details of the solver prepared for calculating RCS value

OPTIMIZATION OF REGIONAL TRANSPORT AIRCRAFT WINGLET USING GENETIC ALGORITHM – PHASE II

- It was a project given to the company by Centre for Development of Advanced Computing, Bangalore
- Modified original script to include a mass factor in the fitness function
- Validated and verified the results obtained from the Phase I

RESEARCH PROJECT

THEORETICAL ANALYSIS OF SHOCK-TURBULENCE INTERACTION

Jan'11-Apr'11

Guide - Prof. Krishnendu Sinha

- Wrote a code to determine and visualize 3D interaction of a turbulent flow with the vorticity-entropy shock wave

ACADEMIC PROJECTS

DESIGN A SYSTEM FOR ELECTRICITY PRODUCTION IN RAIN HIT AREAS

July'10-Nov'10

Guides – Prof. P.M.Mujumdar, Prof. Hemendra Arya, Prof. K.Sudhakar

- Designed a process of production of electricity in rain hit areas using rainwater
- Studied technical as well as economical aspects of the process, using QFD method

UNIQUE USER IDENTIFICATION SYSTEM

July'09-Nov'09

Guide – Prof. D.B.Phatak

- Project aimed at developing a fingerprint identification system.
- Developed an algorithm to match the fingerprint with database and to recover details if matched

DESIGN A SOCIAL NETWORK SYSTEM AMONG HOSTEL INMATES

Jan'11-May'11

Guides – Prof. Anirudha Joshi, Prof. Ravi Pooviah

- Designed a social networking website for hostel mates using the designing process involving concepts like contextual interviews, conceptual models, etc

SOFTWARE SKILLS

- **CFD Tools:** OpenFOAM, CFDExpert
- **Operating Systems:** Windows, Linux (Ubuntu)
- **Programming Languages:** C++, C, FORTRAN, Python, HTML, LaTeX
- **Softwares:** MS Office, MATLAB, Mathematica, TecPlot360, Scilab, Lab View, ParaView

POSITIONS OF RESPONSIBILITY

CONVENER, VAANI – THE HINDI CLUB OF IIT BOMBAY

June'10-May'11

- Conceptualized and published a book named '*Spandhan*', containing the literary creations of the students and alumni of IIT Bombay
- Conceptualized and organized all Hindi related student activities such as Institute Kavi-Sammelan, poetry championships, creative writing competition, debating, etc

EDITORIAL BOARD MEMBER, AAWAAZ – THE HINDI MEDIA BODY OF IIT BOMBAY

Apr'11-Current

- Part of the core team which initiated investigative articles on campus issues

EVENTS COORDINATOR, TECHFEST'11

Jan'11

- Managed the whole trip and events of an international magician, Zlwin Chew

TECHNICAL ACHIEVEMENTS

- Developed and built a Chuck Glider and Remote Controlled Plane in March, 2010
- Participated in Boomerang Making Competition conducted in Zephyr'09
- Participated in Wireless Remote Controlled Car Competition organized by technical club of IIT Bombay

CO-CURRICULAR AND EXTRA CURRICULAR ACTIVITIES

SOCIAL SERVICE

- Contributed to **road side tree plantation** and was appreciated for it by leading newspaper, **Dainik Bhaskar**

SPORTS

- Completed a month long rigorous **Mountaineering Course** in the Himalayas conducted by ABVIMAS, Manali
- Received **Hostel Sports Special Mention** for the academic year 2010-11

CULTURAL

- **One** of the 3 selected students from IIT Bombay to perform with national level poets at **Institute Holi Kavi Sammelan (2010)** and was awarded by IIT Bombay for the performance
- Received **Hostel Cultural Special Mention** and **PAF (Performing Arts Festival) Special Mention** for the academic year 2010-11
- Performed as a **vocalist** in the winning band of **Goonj'11, Inter-hostel hindi band competition**
- **Semi-finalist** in Mood Indigo's solo singing competition
- Photographs were exhibited in **Kala Darshan'11, Annual Art Exhibition** of IIT Bombay

OTHER

- Secured an overall **13th** position in **Virtual Stock Market** held in IIT Bombay (conducted by **Economic Times** and **Entrepreneurship Cell, IIT Bombay**)

KEY COURSES

Computing of High Speed Flows, Fluid Mechanics, Aerodynamics, Control Theory, Engineering Design, Thermodynamics, Solid Mechanics, Propulsion, Aerospace Structural Mechanics, Modelling and Simulation Laboratory, Control Systems Laboratory