



Ankur Mour
Aerospace Engineering
Indian Institute of Technology, Bombay

08001013
B.Tech.
Male
DOB: 19/09/1989

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	8.88
Intermediate/+2	St. Columbus School, New Delhi	St. Columbus School, New Delhi	2008	90.60
Matriculation	Don Bosco School, Guwahati	Don Bosco School, Guwahati	2006	89.50

ACADEMIC ACHIEVEMENTS

Scholastic

- The First and the only undergraduate student from IIT Bombay to be selected for an Exchange Program with **Nanyang Technological University**, Singapore for the Autumn Semester (July – December 2011)
- Consistently maintained **Department Rank 3** in a class of 47 students from 2008-2011
- Completed 24 credits towards accomplishing **Minor in Management** and 18 credits towards **Honors in Aerospace Engg**
- Secured the **13th** position in the State as well as the **State Highest marks** in Mathematics and Advanced Mathematics in the Class X Board Examinations, conducted by State Educational Board of Assam in 2006
- Topped in the Class IX, Class X and the Pre-Board Examinations in Don Bosco School

Competitions and workshops

- One of the top 50 students in the world shortlisted for the **Caltech Space Challenge 2011**, organized by the KISS, Caltech
- Selected as 2nd wait list to speak in "Fluid Mechanics and Heat Transfer" course in the **Indo-German Winter Academy 2010**
- Awarded Certificates of Merit in Olympiads like ASSET, AMTSE, NSTSE, NSO, NPO and others in the period 2003-2007
- Scored a total of 2080 in the Scholastic Aptitude Test (SAT) in 2007-08

PUBLICATION

- Authored a Paper "Indian Urban Pattern of Life Representations – the challenges and solutions of using AI implant to simulate traffic behaviors in Indian urban areas" selected for publication at the **2nd IWTDCS**, Brisbane, 22-23 September 2011
- Co-authored a technical paper "Surrogate based analysis and shape optimization of Aerostat envelope with Fins" whose abstract was selected for publication at the **14th AIAA/ISSMO MAO Conference 2011**, 20-22 September 2011

INDUSTRIAL EXPERIENCE

Boeing Research and Technology Centre, *Software Engineer* (Bengaluru, May 2011-July 2011)

- Software development activities including requirements elicitation, design, development, documentation and testing
- Integrated COTS and Boeing Proprietary Tools into the Analysis & Experimentation Centre environment
- Liaison with third party vendors as well as customers, for problem identification and timely rectification of the same

Agni Bio Power Energy Ltd. India, *Research Intern* (Chandigarh, Nov 2010 – Dec 2010)

- Part of the design team to analyze and develop the thermal system; obtained heat and pressure profiles in the system
- Modeled the air flow inside the Torrefaction Chamber using CFD tools and validated the results of the existing system
- Elicited flow dependencies, to design geometrical shapes and define design parameters for new scaled-up thermal system

Boeing Research and Technology Centre, *Research Intern* (Bengaluru, 6-11 Dec 2010)

- Literature survey of existing search algorithms used by air vehicles for reconnaissance
- Pseudo code development for integration with a Boeing Proprietary Tool the in order to optimize the **maritime surveillance for hostile vehicles** in Indian waters

Cranfield University, *Summer Research Intern* (Shrivenham, May 2010-July 2010)

- Conducted extensive research on existing road traffic simulation models and COTS AI Middleware software products
- Developed realistic agent – centric road traffic behavioral simulation model for Indian Urban terrain using AI implant 5.6
- Validation of the model was carried out in the form of Sensitivity Analysis Tests

KEY ACADEMIC PROJECTS

Modeling of finned aerostats envelope (*B.Tech Project*) (Jan 2011-May 2011)

- Extended the envelope shape parameterization to incorporate additional variables to allow adequately sized Y-shaped fins
- Created 3D Model in GAMBIT and the mesh in FLUENT for TCOM 365 Y Aerostat, to validate the parameterization

Response Surface for estimating aerodynamic coefficients of Aerostats (Dec 2009-April 2010)

- Parameterized the shape of the Envelope geometry for Aerostats and generated over 600 feasible shapes
- C_{DV} values were calculated using FLUENT CFD package and a response surface was generated using DESIGN EXPERT
- The abstract of the paper was selected for publication at the **13th AIAA/ISSMO MAO Conference 2010**

Design of Long Haul Transport Aircraft (Aug 2011- Nov 2011)

- Designing an aircraft with efficiency **15-20%** higher than current baseline models, using technologies available in 2020s
- Detailed structural, aerodynamic, propulsion, control and performance analysis, with 3D Models of aircraft and subsystems

Flight Gear Flight Simulator (*Supervised Learning*) (July 2009- Dec 2009)

- Generated detailed documentation on the flight simulator “Flight Gear” with an emphasis on open source promotion
- Developed video tutorials demonstrating various stages of flying as well as the different flight modes

Municipal Solid Waste Collection, Disposal and Utilization (July 2009 – Dec 2009)

- Proposed alternate economical and eco-friendly ways of municipal waste collection, disposal and utilization
- Designed fully automated side loading garbage collector trucks with a tractor-trailer configuration

POSITIONS OF RESPONSIBILITY

Internship Coordinator, Practical Training Cell (April 2010 – April 2011)

- Framed and implemented the practical training policy in coordination with 23 other students
- Responsible for securing internships for over **350 students** across the second and the third years
- Contacted and coordinated with over 100 Indian and multinational organizations (like Honeywell, GE, Airbus, Suzlon, NAL, Godrej etc.) and universities; planned the Internship schedule for the recruiters

Executive Panel Member, INSIGHT (March 2010 – Present)

- **Editor and correspondent** for Insight, official Students’ newsletter and the Media body of IITB
- Associated with four printed issues of the newsletter so far, highlighting issues like IITB elections, IITB Guest House etc.

EXTRA-CURRICULAR ACTIVITIES

TECHNICAL

- **Operating Systems:** Linux from various distributors and MS Windows 7/XP/Vista
- **Programming Skills:** Competent at coding in C/C++, Lua, Python and HTML
- **Software:** Matlab/SimuLink, Gambit, Fluent, AutoDesk, ProE, AI.implant, Creator, TerraVista, Virtual Battlespace 2, VR-Forces, Design Expert, ExtendSim, LabVIEW, MS Office, Linux Open Office, FlightGear, MS Flight Simulator.

CULTURAL

- **Freelance writer for Digit**, the most widely read Indian monthly technological magazine. Co-authored four issues of the 100-page booklet “Fast Track” till now; an in-depth reference guide to sub-topics of IT, like MeeGo, Chrome App Store etc.
- Member of School Debating Team at St. Columbus and **Associated Literary Editor** of the School Magazine in 2007-08
- Awarded the **First Prize** in Public Speaking in the Annual Columban Fest of St Columbus School 2006
- Awarded Certificate of Merit for three consecutive years 2003, 2004 and 2005 in Green Olympiad sponsored by Ministry of environment and forest, Government of India

SOCIAL

- Winner of the **Governor’s Award** as a Junior Red Cross volunteer in 2003-04
- Visited various slums to interact with people and teach elementary Maths and English to children
- Worked as a volunteer for different charity organizations like Helpage India and CRY.