



Ashish Sharma
Mechanical Engineering
Indian Institute of Technology, Bombay
Specialization: Thermal & Fluids Engineering

09D10004
UG Third Year(Dual Degree)
Male
DOB: 9.9.1990

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	8.47
Intermediate/+2	CBSE	J H Ambani school	2008	87.60
Matriculation	CBSE	J H Ambani school	2006	92.80

ACADEMIC ACHIEVEMENTS

- Currently pursuing a major in mechanical engineering and a minor in physics – in the V semester of the degree course
- Secured an All India Rank (AIR) of 615 in Indian Institute of Technology – Joint Entrance Examination 2009 (IIT-JEE 2009) among over 380,000 candidates (among the top 0.162% candidates)
- Secured an All India Rank (AIR) of 852 and a Gujarat State Rank (SR) of 19 in All India Engineering Entrance Examination 2009 (AIEEE 2009) among over 960,000 candidates (among the top 0.088% candidates)

RESEARCH INTERESTS

- Energy Science & Engineering
- Mechanics: Modelling, Experimentation, & Computation

PROJECTS

Baja SAE India 2011

IIT Bombay

Team IITB Racing

July '10 – January '11

- Was involved in the fabrication of the vehicle and also worked for the engine and powertrain team on modelling a Continuously Variable Transmission (CVT)
- The objective was to design, build, test, promote and race a prototype of a rugged, single seat, off-road recreational vehicle intended for sale to the non-professional, weekend off-road enthusiast
- Won the Raftaar award among over 70 teams

Unique Identification (UID) System for IIT Bombay

IIT Bombay

Professor DB Phatak

July '09 – November '09

- The objective was to mock-implement, in C++, the UID system being developed by the Unique Identification Authority of India (UIDAI) at the IIT Bombay level
- Led the team responsible for the 'Fingerprint Template Comparison' part in which input fingerprint templates were compared with those in the database

F1 Race competition

IIT Bombay

Team Blitzkrieg

October '09

- Developed a radio controlled (RC) car for the 'F1 Race' competition organised by IIT Bombay
- Received a special mention for best design among over 125 teams

RELEVANT SUBJECTS

By the summer of 2012, I would have taken, among others, the following subjects:

- **Mechanical engineering and related subjects:** Thermodynamics, Advanced thermodynamics and combustion, Applied thermodynamics, Heat transfer, Fluid mechanics, Fluid dynamics, Engineering mechanics, Solid mechanics, Engineering metallurgy, Strength of materials, Kinematics and dynamics of machines, Industrial engineering and operations research, Engineering design optimisation, Manufacturing processes I & II
- **Mathematics subjects:** Numerical analysis, Calculus, Ordinary differential equations, Linear algebra
- **Practical subjects:** Heat transfer and metrology laboratory, Fluid mechanics laboratory, Solid mechanics laboratory, Kinematics and dynamics of machines laboratory, Engineering graphics and drawing, Experimental and measurement laboratory, Workshop practice, Manufacturing practices laboratory, Manufacturing processes laboratory
- **Other subjects:** Computer programming and utilisation, Introduction to electrical and electronics circuits, Data analysis and interpretation, Classical mechanics, Introduction to quantum mechanics, Thermal and statistical physics, Psychology

SKILLS

- **Communication languages:** English, Hindi, French
- **Programming languages:** C/C++, JavaScript
- **Technical application softwares:** MathWorks MATLAB, Dassault SolidWorks
- **Other application softwares:** MS Office (Word, Excel, Powerpoint), Oracle, Adobe Creative Suite 4 (Photoshop, Flash, Dreamweaver)
- **Scripting languages:** HTML, CSS, ActionScript

MAJOR POSITIONS OF RESPONSIBILITY

Member, UG Academic Council, 2011-12

- Currently working in the Students' Advisory Body of the Special Academic Task Force (SAB-SATF) of the Undergraduate Academic Council, 2011-12
- Actively involved in the department curriculum redesigning process
- Responsible for coordinating academic and research activities in the department and representing the department in the council

OTHER COURSES

French Language – Levels A1 & A2

- Completed a course on French language – Level A1 and currently pursuing a course on French language – Level A2 organised by IIT Bombay in collaboration with the French Ministry of Foreign Affairs

Advanced Programming in C++

- Completed the certificate course on Advanced Programming in C++ organised by Continuing Education and Quality Improvement Programmes (CE&QIP), IIT Bombay

National Cadet Corps (NCC)

- Completed the A & B certificate course organised by 2 Maharashtra Engineering Regiment (2 Mah Engr Regt) NCC, Bombay
- Participated in the annual training camp for senior and junior division cadets which, among other things, included adventure activities and Self Loading Rifle (SLR) training

WIRES – Robotics

- Completed the certificate course on robotics offered by ThinkLABS & SINE, IIT Bombay