



**Amit Maurya**  
**Mechanical Engineering**  
**Indian Institute of Technology, Bombay**  
**Specialization: none**

**100100009**  
**UG Third Year (B.Tech.)**  
**Male**  
**DOB: 03/06/1993**

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2013	7.18
Intermediate/+2	CBSE	Vidyamandir Sr. secondary school	2010	85.40
Matriculation	Maharashtra State board	Queen Mary's High School	2008	91.69

#### AWARDS AND ACHIEVEMENTS

- Awarded the prestigious **Gandhian Young Technological Innovation Award 2013** under **MLM** category (More from Less for Many) for sustainable and frugal innovation 'Robotic Dredger' at IIM-Ahmedabad
- Secured an **All India Rank 1964** in IIT-JEE 2010 which is among **top 0.5 % of participants**
- Secured an **All India Rank 64** in ISAT-2010 conducted by Indian Institute Of Space Science and Technology
- Achieved a **percentile of 99%** in ALL INDIA ENGINEERING ENTRANCE EXAMINATION (AIEEE) conducted by CBSE, New Delhi in 2010
- Secured **Rank 25** and **cash prize** in Maths Talent Search Examination (MTSE) in 2007

#### KEY ACADEMIC PROJECTS & INTERSHIPS

- National Thermal Power Corporation [Vindhyachal Plant (3760 MW)]** (December 2012)
  - Vocational training in Boiler and Maintenance Department of the thermal power plant
  - Analyzed in detail, various plant components like furnace, condenser, boiler drum, rankine cycle, etc
- Plume Diagnostics** | Guide : Prof. Arindrajit Chowdhury (Jan 2013 - current)
  - The aim is to study thermodynamic properties like temperature variation with the help of tools like MATLAB, spectrometry, etc within a rocket exhaust plume by building small scale lab rocket model
- Micro-machine Tool Integration Study** | Guide : Prof. Ramesh Singh (Autumn 2012)
  - The goal of this project was to study the integration of servomotor driven XY stages, pneumatic actuated Z stage of spindle, spindle software 'Drive Master', Sieb & Meyer controller, and Aerotech controller into the micro machine by understanding various parameters of machining like cutting velocity, depth of cut, etc
- Robotic Dredger** | Guide : Prof. C. Amarnath (Summer 2012)
  - It is an automatic assembly of mechanical parts mounted on a two-hull boat which can dig, transport and dump a certain amount of underwater sediments of a lake from bottom to the shore. The assembly was designed and simulated in AutoCAD and Solid works
  - The mechanism designing, fabrication and machine automation was done at UMIC, IITB
- Track signaling and Layout study** | Guide : Prof. Narayan Rangaraj [Operation Research] (Summer 2011)
  - Field visits to various important stations on suburban section of Western Railways for comprehensive understanding of turnouts, signals and their effect on daily schedule of Local trains of Mumbai
  - Proposed viable solution to handle traffic of increasing population of Mumbai on the basis of statistics, technical study and data collected on Excel during field visits

#### SOFTWARES AND PROGRAMMING SKILLS

- LANGUAGES:** C/C++, HTML
- Operating Systems:** Windows, Linux
- SOFTWARE:** Solid works, AutoCAD, MATLAB, Adams

## COURSES DONE

Core Courses	Lab Courses	Mathematics	Additional learning
*Kinematic and Dynamics of machines	Experimentation and Measurement	Calculus	Introduction to Electrical and Electronics Circuits
*Applied Thermodynamics	Physics	Linear Algebra	Power Electronics
*Textile Machines Design & Automation	Chemistry Lab	Differential Equations	Digital Electronics
Manufacturing Processes I & II	Engineering Graphics & Drawing	Numerical Analysis	Analog Electronics
IEOR	Fluid Mechanics lab		Computer Programming and Utilization
Fluid Mechanics	Solid Mechanics Lab		Economics
Strength of Materials	Manufacturing Practice Lab		Engineering Metallurgy
Solid Mechanics	*Heat transfer & Metrology		Modern Physics
Heat transfer	*Kinematic and Dynamics of machines lab		Chemistry
Thermodynamics			Sociology
Engineering Mechanics			*Environmental science

Note: \*courses currently going on in sixth semester i.e. spring 2013

## POSITION OF RESPONSIBILITY

- **Marketing manager**, Radiance 2013, Mechanical Department technical festival (August 2012-March 2012)
  - Led a two tier team of **30 students** to execute the marketing strategy and achieved 150 % growth in sponsorships
  - Pioneered and organized the '**Green Motion**' campaign under which tree plantation drive was held at various locations in Mumbai with NGO GreenYatra and 4000 eco-friendly long notebooks were distributed among student fraternity of IITB and children at NGO 'Teach For India'
  - One of the co-founder of '**Mech Club**', a club dedicated to mechanical activities, software workshops, etc operating under umbrella organization of Radiance
- **Literary Arts Secretary** of Hostel 7 (2011-2012)
  - Led the hostel to **top 3 position** in the inter-hostel literary arts General Championship **after a gap of many years** by increasing participation of hostel inmates through various lit. events
  - Renewed the **hostel library** after incorporating new books to the old ones.
- **Coordinator**, Marketing, Entrepreneurship Cell, IIT Bombay (2011-2012)
- **Coordinator**, Marketing, Mood Indigo, Asia's Largest College Cultural festival (2011-2012)
- **Organizer**, Ozone, Techfest, Asia's Largest College Technical festival, 2011
- **Class Representative** in the school for three consecutive years 2006, 2007, and 2008

## EXTRA CURRICULAR ACTIVITIES

- Active player in the hostel football premier league
- Acclaimed with '**Hostel Cultural Achiever**' for overall contribution in cultural events of the hostel in 2012
- Won '**Mystery Box**' competition at Radiance 2012
- Was part of winning team of **Wolfpack Quiz GC** (2011-12) at IIT Bombay
- Actively involved in **NSO Yoga** in freshman year 2010-2011
- Was conferred with the "**Best Student of the Year**" award for all round performance in Academics and Co-curricular activities in STD. X in the year 2008
- Other Interests : Badminton, Swimming, Table-Tennis and Cricket