



Neha Bharti Nogia
Mechanical Engineering
Indian Institute of Technology, Bombay

08010025
B.Tech.
Female
DOB: 07/04/1989

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	7.14
Intermediate/+2	CBSE	Kendriya Vidyalaya No.4, Jaipur	2007	84.60
Matriculation	CBSE	Kendriya Vidyalaya No.4, Jaipur	2005	82.00

Industrial experience

TATA Power, Engineering division, Mumbai

May-Jul, 2011

Safety Project:

- Investigated safety aspects of the **coal handling process** and identified the most hazardous zones
- Proposed construction of bridge on both sides for coal carrying conveyer belt to reduce human risks

Supercritical Power Plant Project:

- Researched alloys resistant to corrosion cracking and suitable for turbines at supercritical conditions
- Conceptualized and implemented **multi pass tube system** in supercritical boiler furnace
- Increased the heat flux which improved the overall efficiency from **32% to 40%**

Godrej & Boyce, Tooling Department, Mumbai

May-Jun, 2010

- Analysed the function, design, and metallurgy of press tool and casting die
- Explored the problem of **porosity of casting** due to shrinkage of metal during solidification in detail
- Designed Press tool dies and engine parts using Solid Works and Pro-E

Innovate Edu, E-Learning startup

May-Dec, 2010

A startup to enhance the quality of education in engineering colleges through E-learning Solutions in classroom teaching

- Revamped class content with advanced planning, **innovative teaching** and presentation methods
- Conceptualized and prepared interactive presentations with novel animations for easy clarification of concepts and doubts
- Presentations currently being used in 3 different **engineering college** curriculum of *Jabalpur*

Community service

Teach For India, Selection Team, Mumbai

Oct-Dec, 2010

NGO- Working towards educating the under-privileged and bringing about educational equity

Fellowship Program

- Played a vital role in the selection procedure for **TFI Fellowship Program** by defining parameters and structure of selection process
- Revitalized the volunteer recruitment and training program to better assist the Fellows in schools
- Successfully **conducted recruitment** of more than 100 fellows across Mumbai and Pune

Community Project:

- Involved in the project directed towards the betterment of **educational structure** in Indian society
- Created and maintained blog for updating various activities of the project

Help Age India, Jaipur

Aug-Sep, 2005

NGO-Working to raise resources to protect the rights of India's elderly

- Raised a fund of 12000 Rs. from around 400 people in 8 days
- Awarded **special mention** for creating awareness and assisting in raising funds

Academic Projects

Laser-Liga electron deposition

Nov-Dec, 2009

Researched and developed a method to fabricate polymer based arrayed micro needles

- Created a soft mould of borosilicate glass, using micro laser ablation
- Generated **nickel hard mould** through micro-electro deposition
- Used to economically mass produce parts with **micro-scale** features

Punching machine

Mar-Apr, 2011

- Designed and fabricated **single degree of freedom** input model using Geneva gear
- Developed a solid works model of the prototype
- Worked efficiently giving an equally spaced output at a frequency of 10Hz

Industrial Design project

Sep-Oct, 2009

- Designed a unique model of **portable notebook stand** using bamboo sticks
- Made the model compact so that sticks snap together to form a stand and fit together which can be packed in a bag
- Appreciated for simplicity and compactness of the model

State level project

Aug-Sep, 2006

- Selected among 4 students out of 400 participants in regional level to represent Rajasthan in **National Science Exhibition** organised by KV Sangathan
- Designed a working prototype of **Wright Brothers model** of first airplane and used airfoils to explain the principle of aerodynamics

Position of responsibility

Coordinator, Mood Indigo

Mar-Dec, 2009

- Led a team of 20 organizers, responsible for conceptualization and execution of two **dramatic competitions**, street play and one act play with a participation of 250 contestants
- Approached eminent dramatic personalities for judging the events

Extracurricular activities

Dance and Dramatics

- Performed a street play, **Red Alert**'2009 which was performed in 18 colleges and promoting **Blood Donation Campaign** 'KHOON CHALA' organized by Mood Indigo
- Represented IIT Bombay in One act play at Malhar'2009, cultural festival of St. Xavier College
- Performed one act play in freshmen orientation'2008
- Instructed at several institute level dance workshop of Salsa'2009

Sports

- Part of gold winning singles badminton inter hostel team
- Successfully completed **Para-sailing program**'2003 conducted by National Adventure Foundation Rajasthan Chapter

Hobbies

- Adventure sports enthusiast, love travelling, reading and dancing
- Professionally trained up to intermediate level in **Salsa**

Computer skills

- APPLICATION SOFTWARE- Solid Works , Pro-E, Photoshop, Flash
- PROGRAMMING LANGUAGE- C,C++, Matlab