

Archana Metallurgical Engineering & Material Science Indian Institute of Technology, Bombay 09011037

UG Third Year (B.Tech.)

Female

DOB: 22 June, 1990

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	7.63

ACADEMIC ACHIEVEMENTS:

- Got a rank within the top 0.5% students appeared in **IIT JEE 2009** with an **AIR 1497**.
- Got a rank within the top 0.14% students appeared for AIEEE-2008, securing AIR 1371.
- Secured a rank within the top 1% students appeared in Indian National Physics Olympiad 2008
- Secured a rank within the top 1% students appeared in Indian National Chem Olympiad 2008
- Qualified in the first phase of National Informatics Olympiad 2005.
- Qualified in the first two phases of the National Talent Search Examination 2005 organised by the National Council for Educational Research and Training.
- Qualified in the first phase of Indian National Astronomy Olympiad (Jr) 2004.
- Won gold medal and a cash award in the National Cyber Olympiad 2004

PRACTICAL TRAINING:

• Technical Analyst at Prophecis, Delhi (financial startup)

Duration: 1st June to 6th July, 2011 (5 weeks)

Built a **pattern matching** platform similar to **TradeStation** using **MATLAB**. The platform used **pattern recognition** to identify **chart patterns** on in-sample data of stock markets (**commodities**) and used the **statistically significant patterns** to trade on out-sample data. The platform so designed was **fully automated**.

Trainee at SAIL, Bhilai Steel Plant

Duration: 9th May to 28th May, 2011 (3 weeks)

Field-based work involved learning nuances of **steel-making** under training officers of **various departments** including Blast Furnace, Coke Oven, Blooming and Billet Mill, Wire and Rod Mill, Rail and Structural Mill, and Plate Mill.

PROJECT:

Mini National UID for IIT Campus

Guide: Prof. Deepak B Phatak, CS101 course project, Oct-Nov'09

- o The Project involved the generation of Unique Identity system for all the residents living in the IIT campus, on the lines of the Government of India's project of setting up a unique Identity system for all the citizens of the country
- o I led a 4 member team whose work involved writing the codes in C++ environment for the usage of the entire project (recording attendance, access control, conducting online exam). It also involved development of Graphical User Interface for the same.
- Manufacturing and Properties of Silly Putty :

Guide: Professor Ajay Singh Panwar. June 2010

Project involved making silly putty using basic materials and studying its properties.

Solidification microstructures in Ammonium Chloride and water mixture :

Guide: Professor M.P. Gururajan. June 2010

Project involved making a mould and studying the microstructures formed on pouring the mixture

- **Programming Project-** Designed codes in **MATLAB** to solve problems in Transport Phenomena.
- **Structures Project-** Created a 3-D model, made a presentation and reported the important data on stresses and strains developed in 'The **Howrah Bridge**'

POSITION OF RESPONSIBILITY:

• Web secretary of Hostel – 10, IIT Bombay, 2010-2011.

Work included updating the website, putting up notices and conducting intra-hostel polls.

• Co-ordinator in Mood Indigo, 2010

Work involved conceptualizing and executing two music band events (Hindi and Western) that ran over a span of all four days of Mood Indigo. Led a team of 5 organizers for the same. Also, helped in the conceptualizing and execution o various other events under Music, Literary Arts and Informal competitions.

TECHNICAL SKILLS:

- Programming Languages: C, C++, Python, R.
- Operating Systems : Ubuntu, Windows
- Applications : MATLAB, Scilab, MS Office

EXTRA CURRICULAR ACTIVITIES:

- Made an RF remote controlled car for F1 Race organized by Technic IIT-B.
- Participated as a guitarist with my band in Mood Indigo, 2009, IIT Bombay and Chaos 2010, IIM Ahmedabad.
- Performed as a guitarist in Surbahar 2010 and Swarsandhya 2011(Hindi Music events), and Unplugged 2010, 2011 and Acoustic Dusk 2009(Western Music events), Goonj 2011 (Inter-hostel Hindi music competition).
- Won 3rd position in inter-collegiate team event Pentathlon organized by Malhar, St. Xaviers.