



Apoorv Agarwal  
Chemical Engineering  
Indian Institute of Technology, Bombay

09002033  
UG Third Year (B.Tech.)  
Male  
DOB: 21/04/1990

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	7.18
Intermediate/+2	CBSE	M.S.M.S. Vidyalaya, Jaipur	2008	86.20
Matriculation	CBSE	M.S.M.S. Vidyalaya, Jaipur	2006	88.60

### Scholastic Achievements

- Secured All India Rank **793** in IIT-JEE (Joint Entrance Examination) 2009, among over 4,00,000 candidates (top 0.2%) all over the nation.
- Secured All India Rank **1225** in AIEEE (All India Engineering Entrance Exam) 2009, among over a million candidates (top 0.1%) all over the nation.
- Selected in the Singapore International Airlines (SIA) Youth Scholarship Program 2007.
- Scored **800/800** on the SAT subject tests of Mathematics and Physics.

### Industrial Experience

- GlaxoSmithKline Pharmaceuticals Ltd., Nashik** [May'11-Jun'11]  
*Topic:* Work Study on Eltroxin 100 mcg
  - Conducted Maynard Operation Sequence Technique (**MOST**) method analysis on the entire manufacturing suite, by compiling a 30 day datasheet recorded by me.*Machine proposals and articles, along with site engineers*
  - Developed a proposal for a vacuum system for the **Scorpio tablet filling** machine. Also developed a proposal for a **turn-table mechanism** along with the EHS department, for faster and easier packing.
  - Submitted an article relating to the **ergonomic practices** which could be implemented at various points.
- State Bank of India (SBI) Funds Management Pvt. Ltd., Jaipur** [Dec'10]  
*Project:* Performance of Indian Mutual Funds vs. their Style Benchmarks
  - Employed known indices and **constructed** 3 new indices for calculation, based on Sharpe's theory.
  - Used various performance indices such as the Jensen's alpha, Fama's measure, Treynor ratio, etc.*Case Study:* Performance of Indian Equity Mutual Funds in a Bear Market
  - Study (from **5 years** of data) concluded that Fund Managers should have a passive approach.
- Oil and Natural Gas Corporation (ONGC) Ltd., Mumbai** [Jun'10]  
*Topic:* Design of Oil Handling Systems: Gas-Liquid and Liquid-Liquid Separators
  - Assigned to improvise on the existing machinery and prepared a report of the suggestions.
- SEAROC Cancer center, S.K. Soni Hospital, Jaipur** [May'10]  
*Topic:* Clinical Trials on Bioavailability of Chemotherapeutic Agents in Cancer Patients
  - Observed the effects of **anti-cancer drugs** and molecules on the concerned disease, their **half-life** and **side-effects** on the patient's body.
- Industrial Visit – Rashtriya Chemicals and Fertilizers (RCF) Ltd.** [Jan'10]  
*Guide:* Prof. Sanjay M. Mahajani Department of Chemical Engineering, IIT Bombay
  - Completed the training program on **Sulphuric Acid** manufacturing and prepared a report and presentation, with emphasis on **DCDA** (Double Contact Double Absorption) technology.

- **Rail Vikas Nigam Ltd. (RVNL), Jaipur** [Dec'09]  
*Topic:* Gauge Conversion of section Rewari-Ringus-Phulera-Ajmer
  - Studied the electrical lay-out and gauge conversion of the sites to broad gauge.
  - Constructed a report on the work done by the company.

### Course Projects

- **Numerical Analysis Project** [Mar'2011]  
*Guide:* Prof. Mani Bhushan Department of Chemical Engineering, IIT Bombay
  - Devised algorithms to calculate solutions of differential equations using orthogonal collocations and finite difference method by **Scilab**.
- **Mini National Unique Identity Project** for IIT Campus students [Oct'09-Nov'09]  
*Guide:* Prof. D.B. Phatak Department of CSE, IIT Bombay
  - **Team leader** of 5, with an overall **team** of **40** students for the analysis of fingerprint data.
  - The project aimed to develop a unique id for every student in the campus for attendance and academic purposes, using **C++** concepts of multi-dimensional arrays.

### Technical Skills

- Programming Languages: C++, C, Java.
- Software Proficiency: Scilab, Matlab, Eclipse, Adobe flash.
- Operating Systems: Windows, Linux.

### Positions of Responsibility

- **Music Secretary of Hostel – 9, IIT Bombay** [2010-11]
  - Recipient of the Hostel **Organisational colour** and **PAF colour**.
  - Hostel grabbed **2<sup>nd</sup>** and **4<sup>th</sup>** positions in the inter-hostel Music General Championships.
- **District Level Table Tennis Team Captain** [2005-07]  
 [2006-07]
  - Team reached the CBSE table tennis **state finals** with me as captain.
  - I won 1 and was the runner up in 2 railways state table tennis competitions.
- **School magazine Hindi editor** [2004-05]

### Extra-Curricular Activities

- I was a member of the National Service Scheme (NSS) group, IIT Bombay [2009-10]
  - Member of **Abhyasika**, which aims to educate poor children and provide free tuition.
  - Member of the Group for Rural Activities (**GRA**), which focuses on the development of rural areas and went to **2** villages for the same.
- I was an active member of **Disha** Organisation, Jaipur and often went to teach a school in a rural area
- I was an active member of the **HAM Club** of IIT Bombay in my freshman year.
- I have a keen interest in playing the guitar and synthesizer, and was part of the school choir.

### Certifications

- Currently pursuing the Certified Financial Planner (**CFP**) Certification by FPSB, India.
- I am a NSE Certified Market Professional (**NCMP**) **Level 3** –
  - Cleared **12 NCFM** modules (including CMDM, DMDM, IAPM, OTSM and SMBM).
  - Cleared **2 NISM** series modules (series I and VII).
- **Tech skills** workshop on Latex, shell scripting, Java, Python, HTML and CSS by STUDe Club, IIT Bombay. [Dec'09]
- Summer course in Adobe Flash and Adobe Illustrator by Arena Multimedia. [May'07-Jul'07]