



Shashank Batra
Electrical Engineering
Indian Institute of Technology, Bombay
Specialization: Communication & Signal Processing

10D070038
UG Third Year(Dual Degree)
Male
DOB: 12-01-1992

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	8.02
Intermediate/+2	C.B.S.E.	Lawrence and Mayo School	2010	88.60
Matriculation	C.B.S.E.	St Pauls School	2008	89.80

ACADEMIC ACHIEVEMENTS

- Secured a rank of 279 in IIT JEE 2010 among 4,72,000 aspirants
- Among the top 0.2% in AIEEE-2010, out of 1 million candidates appeared
- Cleared the 2nd level of NTSE and was awarded a silver medal
- Secured a rank of 253 in the unified cyber Olympiad in 2008
- Secured a rank of 599 in NSTSE (National Level Science Talent Search Examination) 2007

INTERNSHIPS AND TRAINING

Axis Bank

May'12-July'12

Retailing division (Vashi branch, Mumbai)

- Studied the retailing sector of banking understanding various concepts like DD, RTGS, mutual funds, fixed deposits, online trading accounts and customer walk-ins
- Submitted a project report describing the model of the retail sector, identifying various issues and suggesting alternatives to make the process more efficient

Birthstone Capital

Dec'11-Jan'12

- Studied various portfolio companies and strategy deployed for their efficient operation
- Worked in a 4-member team to manage the portfolio companies and look for new investment opportunities; participated in meetings with potential investors

PROJECTS UNDERTAKEN

Digital electronics project

Mar'12

Guide - Prof. M.B. Patil

- Aimed to make a travelling message display unit which can be used in buses or trains
- Designed a circuit for LED matrices and decoders to show the route number and the name of the respective stations
- Instructions were given from FPGA to LED matrices via decoders. Coding – VERILOG Hardware Descriptive Language

Elementary universal remote

February'12

Guide : Prof. Anil Kottantharayil (Electrical Engineering, IIT Bombay)

- Engineered a remote control to be used as a single control for multiple devices on control from an external switch
- Implemented a novel method to use short-circuit current from a photodiode to generate potential drops of 12V aided by
- OPAMPs and MOSFET transistors
- Enhanced the remote design to be used as regulator that could control the speed of a fan upto 3 levels

Micromouse Maze solving software in C++

Sept'10-Nov'10

Guide- Prof. Deepak B. Phatak

- Programmed the Micromouse-maze solving algorithm using floodfill method of maze solving and object oriented approach and developed the graphics using simple GUI

Device Tinkering

Feb'11--Mar'11

Guide- Prof Juser M. Vasi

- Disassembled and analyzed Nokia 3110c cellular phone, understanding its architecture and identifying various integrated chips and their role in the functioning of the device.
- Summarized the working of the major functions of a cell phone like voice and data call reception, power distribution, multimedia functions, etc. into block diagrams
- Submitted a term paper representing various functions with flow charts

Market Analysis of Biscuit Industry

Guide- Prof Haripriya Gundimeda

- Conducted an extensive market research of the biscuit industry in India, understanding the marketing strategy of different brands and their control in the market share

POSITIONS OF RESPONSIBILITY

Entrepreneurship Cell

Aug'11-Mar'11

Coordinator - Operations Department

- Working in a team of 2 managers and 10 coordinators managing the logistics and onsite operations of E-Cell Events
- Was a crucial part of organizing **Ted-X** Talks conducted first time in IIT
- Organiser for Mood Indigo 2010 (Media department) and Techfest 2011 (Publicity)

COMPUTER SKILLS

- Programming Languages : Java, C++, Python, Verilog
- Softwares : MATLAB, Spice, Adobe Photoshop, Solidworks

COURSES

- **Core:** Network Theory, Signals And Systems, Analog Circuits, Electrical Machines And Power Electronics, Digital Systems, Probability & Random processes, Microprocessors, Communication Systems, Digital communication, EM waves
- **Breadth:** Electricity And Magnetism, Calculus, Linear Algebra, Complex Analysis, Differential Equations, Data Analysis And Interpretation, Engineering Graphics And Drawing, Mechanical Workshop Practice

EXTRACURRICULAR ACTIVITIES

TECHNICAL:

- **Trackmania-** Built a wireless remote control car for **Trackmania** (technical event for freshman at IIT BOMBAY)
- **Line Following Bot-** Designed and built an autonomous bot that can follow a white painted path on a black background

MISC:

- **Guinness Book of World Records:** Part of IIT Bombay **Rubik's Cube** Solving record [2012]
- Interests : Travel, Pool, Puzzles and Gaming