



Agam Garg
Electrical Engineering
Indian Institute of Technology, Bombay

08007027
B.Tech.
Male
DOB: 26/01/1990

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	7.81
Intermediate/+2	Rajasthan Board of Secondary Education	Shiv Jyoti Senior Secondary School, Kota	2008	83.20
Matriculation	I.C.S.E	The Doon School, Dehradun	2006	90.80

INTERNSHIP

iNautix (a BNY Mellon Company), L&D Department, Chennai

(May-July, 2011)

FlipBook

- Received a **Pre-Placement Offer** letter from the company for my work
- Designed and programmed an application for iPad (using JAVA, servlets, JDBC), extracting **Live Headlines and News** from business sites like reuters.com, cnn.com onto its pages, detailing about a stock market listed company like MSFT
- Displays Headlines and News from their (iNautix) database on the pages as well
- Useful to **Investment Brokers** to get updates about a required company
- Used jQuery to add the flipping animation to the pages

ADDITIONAL COURSES UNDERTAKEN

Statistics and Mathematics: Data Analysis and Interpretation, Probability and Random Processes, Complex Analysis, Differential Equations-II, Ordinary Differential Equations, Linear Algebra, Calculus
Humanities: Environmental Studies, Contemporary Urban India, Introduction to Economics, Philosophy

POSITION OF RESPONSIBILITY

Sports Secretary , Hostel-9

(Aug'09-April'10)

- Conducted games like foosball, TT, volleyball successfully to promote sports culture in the hostel
 - **Initiated and formulated** the concept of inter-wing cricket tournament inside the hostel
 - Aimed at increasing the participation of inmates in hostel activities
 - Successfully executed the event, **3-fold increment in participation** attained
 - Improved upon the sport's infrastructure and conducted events with a total budget of ₹130,000
- Performance Metrics*
- Secured **4th position out of 14 hostels** in Sports General Championship, which was **10th** the previous year
 - Awarded **Hostel Organizational Special Mention** in recognition of my work as the Hostel Sports Secretary

Techfest Coordinator:

(Sept'09-Jan'10)

- Led a team of **10 volunteers** to organize a stunt bike show (bikers from UK) in front of **15,000** spectators
- Coordinated with them to formulate the event and come up with a **time-line** for the show
- Worked with my other colleagues (coordinators) to help them with their events as well

COMPUTER-PROFICIENCY

- **Programming Languages:** C++, JAVA, verilog HDL, 8085 assembly language
- **Web Designing:** HTML-5
- **Software:** MATLAB, ModelSim, Xilinx, Ansys
- **Operating Systems:** Microsoft Windows, Linux

EXTRA-CURRICULAR

Sports:

- Was part of the **IIT Bombay Basketball Team** for **Inter IIT Sports Meets** (Dec, 2010)
 - Was in the **opening 5** players of the team
 - Won **silver medal** for being the Runners-up in the tournament
- Played a pivotal role in inter-hostel basketball championship (Feb, 2011)
 - **Gold:** Lead the team of 10 players and **won the trophy** for the General Championship
- Represented hostel in Hockey (**Gold, 2010 and 2011**), Squash and Football

Recognitions:

- Awarded **Hostel-Sports colour** for two consecutive years for my exceptional performance in basketball and other sports (2009,2010)

Technical:

- Made an **autonomous line follower** robot, that can tackle predefined obstacles, by the use of logic gates based programming only (Feb, 2009)
- Designed a **multi-terrain vehicle**, capable of maneuvering through both land and water for Techfest'09

Cultural:

- Directed and acted in a **silent, short musical movie** for a competition among first year students
 - Secured **2nd position** among a total of 10 entries (Sept, 2008)
- Performed in inter-hostel **dance** competition, GYRATIONS, in 2nd year

PROJECTS

Undergraduate Thesis:

(Aug-Nov, 2011)

OFDM Transmitter Design

- Designing a **baseband OFDM transmitter and receiver**, including FFT and IFFT, **on FPGA hardware**
- Programming all modules in **Verilog** programming language and implementing using Spartan-3E FPGA kit

Image Processing:

(Aug-Nov, 2011)

Object Tracking

- Implemented Object tracking algorithm using image processing in a video sequence
- Fragmented video into a series of still images and then applied **two different algorithms** to follow any object throughout the series of images
- Applied and tested the algorithms in cases of **static and dynamic occlusion** and compared their usability

Computer Programming and Utilization-C++

(Aug-Nov, 2008)

IIT Bombay Road Map

- Programmed in C++, a **virtual guide** to IIT-Bombay campus road map and a list of possible destinations inside
- Implemented **optimized programming** to suggest the **shortest distance** by road between two chosen destinations by the user from the list, graphically by marking it on the map
- Developed a **graphical user interface** using Sprite library, showing the whole road system
- Added graphical features like odometer to the program using sprite library

Digital Circuits

(Jan- April, 2010)

Fastest Finger First

- Created and tested the logic of the game, using encoders and logic gates like NAND
- Made a maze of 9 LEDs, glowing randomly (using gates), and corresponding switches for each player
- Used LED displays to keep the score of each player

Digital Signal Processing

(Aug-Nov, 2010)

Image Processing Filters

- Analyzed the effect of noise on an image and **reconstructed the original image** using MATLAB
- Implemented spatial filters like Mean, Median filters on the image and studied their utility in noise reduction
- Studied and experimented the use of Laplacian and Gradient of an image in **Edge Detection techniques**