

ACADEMIC EXCELLENCE/SCHOLARSHIPS

- Secured **All India Rank 300** in IIT Joint Entrance Examination, 2010 out of 0.5 million candidates
- Obtained **All India Rank 152** and State Rank 21 in AIEEE, 2010 out of 1 million candidates
- Recipient of prestigious **NTSE (National Talent Search Exam) scholarship**
- **Topped** RPET'10 (Rajasthan Pre-Engineering Test)
- Secured **41st rank** in NSTSE(National Science Talent Search Examination); Awarded scholarship
- Secured **AP(outstanding performance)** in Economics given only to 8 students out of 856 students
- Pursuing **minor degree** in Computer Science

KEY PROJECTS

INFRARED HARP (Designed the electronic version of musical instrument)

[May'12-June'12]

http://stab-iitb.org/wiki/IR_Harp

Electronics Club Summer Project (ECSP 2012)

- The project involved designing an **electronic version of Harp** (musical instrument) using Infra-Red sensors instead of strings and **digital synthesis of sound**
- Part of **hardware team**. Designed and tested circuits to be implemented on PCB (printed circuit boards)
- Assisted the coding team in developing algorithm to interpret the sensor data and output the stored waveforms at the frequency assigned to plucked strings using interrupt
- Our project was listed as one of the best projects and demonstrated to the whole institute in Institute Technical Exhibition

ELEVATOR SYNCHRONIZATION PROJECT

[Mar'12-Apr'12]

Digital Circuits Lab Project

- Devised a circuit to **synchronize a LED based display** unit with the elevator
- Designed circuit for elevator to make it **time and energy efficient** using priority encoders
- Elementary digital logic was incorporated which involved usage of **digital integrated chips** like delay flip flops, logic gates, counters, shift registers, multiplexers, etc.
- LED's were used to provide signals for working of the elevator in the control room. **Full user interface** for the elevator was designed using LED's and push buttons

C++ PROJECT

FOOSBALL GAME (Developed the game in C++ and EZ windows)

[Sep'11-Nov'11]

CS 101 Course Project (Guide Prof. D.B. Phatak)

- Team Leader of a 5 member team (total 3 teams). Our team designed the algorithm for the collision of ball with walls and players and movement of players
- Designed the user interface using keyboard
- Helped the A.I.(Artificial Intelligence) Team to define computer player movements
- Integrated the code made by all teams into final executable program

OTHER PROJECTS

AUTOMATION OF TRAFFIC SIGNALS

[Feb'12]

- **Developed a prototype** of density based **dynamic traffic signal system** in a team of 2. The signal timing changes automatically on sensing the traffic density at the junction
- Implemented using a Microcontroller of 8051 family duly interfaced with sensors
- The signals from the IR receivers are fed to the Microcontroller to follow the program with the time, changing as per the zonal signal received

FUNCTIONING OF ADSL MODEM

[Feb'11]

EE112 Term Paper (Guide: Prof. J. Vasi)

- Disassembled and analysed an ADSL modem in a group of three, understood its architecture and identified various integrated chips and their role in the functioning of the device
- Exhaustive literature review of working of major components, penned the work into proper block diagrams

SOFTWARE SKILLS

- **Programming Skills** : C/C++, HTML, CSS
- **Operating Systems** : MS Windows, Linux
- **Software** : MATLAB, LTSpice, Scilab, Eagle, SolidWorks, Microsoft Office, Adobe Photoshop

RELEVANT COURSES UNDERTAKEN

- **Core Courses** : Control Systems, Digital Signal Processing, Digital Communications, Signal and Systems, Communication System, Microprocessors, Power Systems, Electric Machines and Power Electronics, Electromagnetic Waves, Electronic Devices, Solar Photovoltaic
- **Labs** : Digital Signal Processing Lab, Digital Systems Lab, Analog Circuits Lab, Microprocessor Lab, Communication Lab
- **Statistics** : Data Analysis and Interpretation, Probability and Random Processes
- **Computer Science** : Data Structures and Algorithms, Discrete Structures, Computer Networks

TECHNICAL ACTIVITIES

- **Awarded Hostel Technical Colour** for exemplary contribution to hostel technical activities
- **Trackmania**: Engineered a wireless remote control car and designed the hardware part on my own
- **Robotics**: Designed a line following bot capable of reading data (in form of LED's) and display that data for 3 sec. Also designed manual bot capable of throwing balls with great accuracy

INTERNSHIPS

SHARP EDGE PVT. LIMITED

[Dec'11]

Digital Content for engineering course material

- Developed **case studies and applications** for easy conceptualisation of engineering concepts
- Provided content value addition ideas like **inclusion of applets, simulations and animations** for enhanced learning and to explain complex engineering concepts digitally
- Developed **market expansion strategy** and studied Indian market to identify need for digital education

POSITIONS OF RESPONSIBILITY

MANAGER, PUBLIC RELATIONS, THE ENTREPRENEURSHIP CELL, IIT BOMBAY

[Apr'12 – Present]

- Leading a two tier team of 30 coordinators and 50 organisers to conceptualize and execute impeccably the public relations which involves **research, planning, communication and publicity** aspect of
 - **Eureka!** (Asia's Largest Business Plan Competition, accredited by Thomson Reuters)
 - Year round activities of **E-n-B Club**, the Entrepreneurial club of IIT Bombay
 - **Entrepreneurship Summit**, biggest entrepreneurial meet in Western India
- Collaborated with Harvard in conducting a 3 Day conference(**HUII – Harvard US India Initiative**) in IIT Bombay – Publicised the conference nationwide and brought 300 registrations in just 3 days
- Increased the number of applicants from **3666(Eureka! 2011)** to **5127(Eureka! 2012)** through massive and more efficient PR campaigns

SECRETARY, TECHNICAL AFFAIRS, HOSTEL 5

[July'11 – Apr'12]

Responsible for **revamp of hostel technical scene** to make it one of the most respected hostels in technical fraternity (took hostel from **7th to 1st position** in the span of 1 year)

- Spearheaded the hostel to **victory in Tech GC** for the first time in history of the hostel
- Conducted various **intra-hostel competitions and workshops** like MATLAB, CAD (solid works) to increase the enthusiasm of the hostel in technical activities

EXTRA-CURRICULAR ACTIVITIES

CULTURAL ACTIVITIES

- Awarded **PAF(Performing Arts Festival) Special Mention** for two consecutive years(2011,2012)
- Participated in Gyration(Inter-hostel **dance competition**)

MISCELLANEOUS ACTIVITIES

- Participated in Cricmania(Institute Cricket League), carom GC(General Championships)
- Part of winning **intra hostel football** team in H5 Premier League