	Harman Preet Singh	09D11027
Energy Systems Engineering	UG Third Year(Dual Degree)
Indian Institute of Technology, Bombay	Male
Specialization: Energy System Engineering	DOB: 4th July 1991

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2011	7.08
Intermediate/+2	CBSE	Subodh Public School	2009	84.40
Matriculation	CBSE	Maheshwari Public School	2007	90.00

SCHOLASTIC ACHIEVEMENTS

- ✓ School **GOLD MEDAL** for academic excellence in CBSE 10th board exam (securing >90% marks in 3 subjects).

POSITION OF RESPONSIBILITY

Technical Nominee, Hostel 9   [July'2011-Present]
- ✓ Guide and Instruct the Technical Secretaries of hostel
- ✓ Keep an over view of their performance.

Technical Secretary, of Hostel 9   [July'2010-July'2011]
- ✓ Was able to secure over all **3rd position** between 13 hostels.
- ✓ Was **awarded organizational color** for organization skills.
- ✓ Was **awarded Tech special mention** for enthusiasm in technical events.
- ✓ Was Responsible for the Technical affairs in the hostel and in the institute scenario.
- ✓ Represented Hostel in inter hostel competitions.
- ✓ Acted as a member of technic which conducts technical events in the hostel.

Technical mentor, appointed by technic   [Aug'2010-Present]
- ✓ Worked as technical mentor to freshmen for Trackmania event in which they had to build F1 car.
- ✓ Guided and motivated a group of around 20 freshmen on how to participate and build wireless car.

Coordinator, In Techfest'2011(Asia's largest technical festival)   [Jan'2011]
- ✓ Lead a team of 8-10 Organizers to conduct 4 different LAN competitions in Gaming Zone.

ACADEMIC PROJECTS AND TRAINING

C++ Programming, course project in guidance of Prof. Deepak B. Phatak   [Oct-Nov'2009]
- ✓ Organized a group of 5 batch mate to systematically write C++ code to verify two finger prints were same or not.
- ✓ Brought out the dynamic aspect of my programming skill in writing an algorithm for fingerprint recognition unique identification (UID).

Web Designing, summer training in HTML, PHP and JavaScript   [June-July'2011]
- ✓ Developed a school based teacher evaluation system.
- ✓ Developed website for student to find home tutions.
- ✓ Developed Web form for Job applicants and connected it with a SQL Database.

Embedded systems, Summer Training: [May-Jun' 2010]
- ✓ Studied about basic electrical components and 8051 family of microcontroller (majorly AT89C51).
- ✓ Studied the coding involved in microcontroller.
- ✓ Worked and build some small household and industrial applications of microcontroller like watch, water level in tank, LCD display, etc.

Rajasthan Electronics and Instruments Ltd, Summer Training. [18-25 May'2011]
- ✓ Visited the various department and studied the various manufacturing processes , the company policies and Marketing
- ✓ Studied the manufacturing processes of solar panel and observed the various applications.
- ✓ Studied the making and working of milk tester machines.
- ✓ Observed the working of Electronic meters used at homes.

Electronics Project, course project by Prof. Rajesh Gupta [Mar-Apr'2011]
- ✓ Made a digital clock with alarm using microcontroller.
- ✓ Used transformer to step down voltage
- ✓ Used array of Seven Segment display to display the time.
- ✓ Programmed all functions of alarm like Silent and Snooze.

Grain Boundary, guided by Ajay Singh Panwar. [Jan- Apr 2010]
- ✓ Made a model and explained grain boundary in course project.

Piezoelectric material, Presentation [Jan- Apr 2010]
- ✓ Gave a presentation on piezoelectric material in front of a class of about 100 students under the guidance of Prof. Ajay Singh Panwar.

TECHNICAL EVENTS

Capture the Flag GC, Inter hostel competition [2011]
- ✓ Secured 2nd Position between 13 hostels.
- ✓ Made a line following bot that could perform dual functions of attacking and defending.

Crossover, Techfest [Jan'2010]
- ✓ Qualified in the first round of crossover event in which we had make a manually controlled machine which crosses a pit and competes against another robot in a one on one knockout event.

Wireless car, F1 conducted by technic [Aug 2009]
- ✓ Made a wireless, battery powered four wheeled RC car. The car used differential mechanisms for turns and RC circuit for wireless communication

Line follower, for freshmen [2009]
- ✓ The line-following was implemented using LED-Photodiode sensors and basic logic circuit, designed a circuit and experimented with different photodiodes sensors and the use of potentiometer as a potential divider.

Extra-Curricular Activity:

- ✓ NSO Guitar [2009]
- ✓ Was part of Mountaineering expedition to (valley of flowers) organized by Rajasthan Education Departmental, adventure and cultural society. [Jun-July 2011]

SOFTWARE SKILLS:

- **Computer Languages**: C, C++.
- **Web Designing**: HTML, PHP, JavaScript.
- **Designing Software's**: Photoshop, After Effects, and Flash.
- **Technical Software's**: Keil compiler, Proteus, SEQUEL, Scilab, Eagle.
- **Database**: SQL Server.
- **Operating Systems**: MSDOS, Windows, Ubuntu.
- **MS office**: Word, Excel, Power point.