	Sandeep Kumar Verma	110040063
	Civil Engineering	UG Third Year (B.Tech.)
	Indian Institute of Technology Bombay	Male
		DOB: 22/11/1992

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2014	5.95
Intermediate/+2	R.B.S.E.	New Taigore Sr Sec Boodhibaval	2010	86.63
Matriculation	R.B.S.E.	Swami Vivekanand Vidhya Mandir Sr Sec Tapukara	2008	84.67

SCHOLASTIC ACHIEVEMENTS

- Secured **AIR 6164** in **IIT JEE 2011 (**top **1.27%**) among approx. 5,00,000 students
- Ranked among top 1.12% students in All India Engineering Entrance Exam   [AIEEE-2011]
- Qualified **National defence academy** exam   [NDA-2010]
- Scored 96% marks (PCM) in class 12th
- Awarded RBSE scholarship for excellence in class 12th

KEY PROJECTS

DESIGN GUIDELINES AND INTELLIGENT MANAGEMENT OF GREEN BUILDINGS   [May'13 –Jul'13]
(Guide: **Prof. Monika Jain**, IIT Bombay)

- Conducted a detailed survey of selected buildings on campus to collect data on space usage, building materials and design, energy usage and water usage
- Prepared the model of the buildings using Google Sketch-Up
- Installed smart sensors in these buildings to monitor in real-time, energy use, temperature, humidity and air quality
- Simulated the building performance to understand how various parameters influence the energy usage in the buildings using online software Sefaria

NON DESTRUCTIVE TESTING IMPACT ECHO   [Jan'13 – May'13]
(Guide: **Prof. Sauvik Bannerjee**, IIT Bombay)

- Improved this method to detect cracks and voids in concrete slabs
- Processed the data using Wavelet, Vallen and MATLAB.

WEIN BRIDGE SINE WAVE OSCILLATOR   [Aug'12 – Nov'12]
Guide: Professor **S.P. Dutta Gupta**, IIT Bombay

- Designed an **operational amplifier** to demonstrate oscillations in electronic and electrical circuits
- Involved a combination of positive and negative feedback to drive the op-amp into an unstable state, hence causing the output to cycle back and forth at a continuous rate

C++ PROJECT – MINESWEEPER GAME   [Aug'11 - Nov'11]
Guide: Prof. **D.B. Phatak**, IIT Bombay

- Worked in a group to design Minesweeper game in C++ language
- The application implemented EZ Windows for GUI (Graphical User Interface)

Work Visit to "The Address"   [September'12]
Guide: **Prof K. Bajoria**, IIT Bombay

- Surveyed "The Address" which was awarded the best residential society project in Mumbai (undertaken by Larsen & Toubro Ltd)
- Practical experience of shuttering, blocking, reinforcing bar arrangement and curing

COMPUTER SKILLS
- Programming languages: C, C++, MATLAB
- Software proficiency: STAAD Pro, AutoCAD, MS office, Photoshop
- Operating system: Windows

COURSE UNDERTAKEN

DEPARTMENT COURSE: Engineering Mechanics, Solid Mechanics, Advanced Solid Mechanics, Structural Mechanics, Structural Analysis, Design of Structures, Soil Mechanics, Design of steel Structures, Engineering Law, Numerical Methods in Civil engineering, Geodesy, Water Resource Engineering, Hydraulic Engineering, Fluid Mechanics

TECHNICAL LABS: Solid Mechanics, Engineering Drawing, Design Laboratory, Geodesy, Soil Mechanics, Hydraulic Design

Mathematics: Calculus, Data Analysis and Interpretation, Linear Algebra, Differential

OTHERS: Basic Management, Economics, philosophy, Technology and Animation, Environmental Studies, Computer Programming and Utilization, Electrical and Electronics Circuits, Chemistry

POSITION OF RESPONSIBILITY

MAINTENANCE SECRETARY, HOSTEL 3   [May'12 - Apr'13]
- Worked as a maintenance secretary in the hostel council
- Elected by more than 300 inmates and responsible for solving maintenance related issues of the hostel occupied by more than 500 inmates
- Responsible for providing better hostel facilities and equipments to all the hostel inmates.

COORDINATOR, MOOD INDIGO 2012
- Worked as a coordinator in the services team for Mood Indigo 2012 which looked after the infrastructure of the whole festival; involved deals worth 4 lakhs

COORDINATOR, TECHFEST 2013
- Worked as a coordinator in infrastructure department team Techfest 2013 which looks after the infrastructure of the whole festival and also **involving deals**
- Worked as an organiser in events department of Techfest 2012 which includes proper execution of Robowars (Biggest robo fight in INDIA)

EXTRA CURRICULAR ACTIVITIES

- Integral member of **National Service scheme (NSS)** an organisation of IIT Bombay that is dedicated to social services and awarded in **appreciation** of the altruistic efforts   [2011]
- Awarded Hostel **Organisational Special mention** for exemplary work as Maintenance secretary of the hostel
- Awarded **special mention** for assisting in the development of infrastructure for the **Performing Arts Festival(PAF)**, the largest inter-hostel competition in the institute
- Designed and built wireless F1 car for Intra College event **'Trackmania'** organized by Tech club IIT Bombay
- Participated in the selection of 'Robocon '11', designed and built a robot which could pick up the boxes upto certain height and transport it to other place.
- Played for the winning Hockey team of Freshie General Championship   [2011]