Sunil Kumar Kumawat **120100042**
Mechanical Engineering **UG Second Year**
Indian Institute of Technology Bombay **Male**
Specialization: None **DOB: 06/07/1996**

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2014	8.60
Intermediate/+2	BSER, Ajmer	CLE Senior Secondary School, Kotputli	2011	94.46
Matriculation	BSER, Ajmer	New Modern Public Senior Secondary School, Kotputli	2009	87.33

SCHOLASTIC ACHIEVEMENTS

- Secured All India Rank of 1590 in IIT-JEE 2012
- Got 13th merit in 12th science Board Of Secondary Education, Rajasthan
- Came 3rd in 'Talent Hunt' exam held at State level during 2010-2011

NON-ACADEMIC TECHNICAL PROJECTS AND ACTIVITIES

1. INSTITUTE TECHNICAL SUMMER PROJECT(ITSP) **[May 2013-June 2013]**

- Built a remote-controllable ROBOTIC ARM which was able to pick up and transport an object kept anywhere in the hemispherical region(of radius 40 cm) to anywhere else in the constraint region around it
- our wiki page of the project : **http://stab-iitb.org/wiki/1RE07_Robotic_Arm**

2. QUAD ROTOR WORKSHOP **[March 2013]**

- Attended a workshop regarding the design and technical details of "**Quad Rotor**" organised by **Radiance 2013** at IIT Bombay and built one

3. ROBOTICS **[October 2012]**

- Developed a Line Follower bot using arduino programming in technical event XLR8 2.0

ACADEMIC PROJECTS

1. DESIGN OF EXPERIMENT (Experimental Engineering Project) Guide**: Prof. Prakash R.Apte**
[August 2013-October 2013]

- Planned an experiment to maximize the intensity of LED light output
- Achieved the proper combination of control factors and noise factors to calculate the maximum output closely matching with the observed value

2. PHASE DIAGRAMS (Engineering Metallurgy Project) Guide**: Prof. B. P. Kashyap** **[October 2013]**

- Analyzed Cu-Ni binary phase diagram and Development of its microstructure in equilibrium or non-equilibrium cooling
- Got an insight into Nucleation processes and Kinetics of phase transformations

3. SUDOKU (C++ Project) Guide**: Prof. Abhiram G. Ranade** **[November 2012]**

- Developed Sudoku(9X9) Solver in C++ and simplecpp graphics using recursive mechanism
- Created a user friendly interface which accepted input from mouse clicks

ACADEMIC COURSES

- **Core :** Engineering Mechanics, Workshop Practice, Engineering Drawing, Solid Mechanics, Thermodynamics, Engineering Metallurgy, Electrical and Electronics Circuits, Strength of Materials,

Manufacturing Processes, Fluid Mechanics, Experimental and Measurement Lab, Solid Mechanics Lab and Manufacturing Practice Lab

- **Non-Core** : Computer Programming and Utilisation, Calculus, Linear Algebra, Differential Equations, Numerical Analysis , Measure Theory , Modern Physics, Data Interpretation and Analysis, Chemistry, Economics and Electronic Devices

SOFTWARE SKILLS

- **Programming Language** : C/C++
- **Web Development :** HTML
- **Operating System :** Windows, Linux (Ubuntu)
- **Packages :** Mat Lab, AutoCAD and Easy scope, Microsoft Office

POSITIONS OF RESPONSIBILITY

1. Teaching Assistant, IIT BOMBAY

- Appointed as **Teaching Assistant** for the Modern Physics for 3rd semester under Prof. Shiva Prasad (**Dean AP, IIT Bombay**) and Prof. K. G. Suresh

2. COORDINATOR OF TECHFEST, 2014 [May 2013-January 2014]

- Part of the Infrastructure team to ensure smooth execution of the fest and ensure maximum participation in it
- Coordinating **Cassopian Wars, North Zone**- a national level competition to be held in 5 zones comprising 3 unique challenges, aimed at holistic development of robotics in India

3. COORDINATOR OF RADIANCE, 2013 [February 2013-March 2013]

- Ensured a successful organisation of the Mechanical Engineering Department Festival called Radiance
- Ensured a maximum participation in the competitions being organised during the fest

EXTRA CIRCULLAR ACTIVITIES

- Worked for **Perfoming and Fine Arts Festival** (PAF) in March 2013
- Took participate in wall panting during **Freshiza**
- Participated in **Crossy GC** at IIT Bombay
- Served at the Organizer post in the **Public** and **Horizons** Department in **MOOD INDIGO, 2012**