Scholastic Achievements:

- Selected for SHAHU MAHARAJ **SCHOLARSHIP for TOP 100 STUDENTS** OF MAHARASHTRA
- Matriculation**(91.06%)**, Mathematics – **99.33%**, Physics- **96.67%**, Chemistry-**96.67%**

Foreign Summer Internship:

Investigation of Damage Mechanisms of Flotation Cells in **Oilsands Industries** **[May'11–June'11]**

Under guidance of **Prof. M.G. Lipsett** (Mechanical Engineering, **University of Alberta, Canada**)

- **Modeled** the set-up for the experiment on **SOLID-WORKS**
- **Fabricated** 18 sample cylinders for the experiment and **assembled** various sensors
- **Laser profiled** cylindrical wall in **Metrology** Lab and Iterated **3-D simulation** to identify wear locations
- Conducted **PIV (Particle Image Velocimetry)** tests to confirm the flow fields of interest to see whether there is any sensitivity of the jet when the impeller is close to the bottom of the vessel
- Subsampled the Sand particles for **Roundness Measurements** to check for wear
- Developed a **Mathematical model** to find the **impact frequency** of sand particles at various heights of cylindrical wall with respect to distance from the impeller

Winter Internship:

To Analyze the Working of National and International Food Security Organizations **[Dec'11]**

Under guidance of **Prof. G. Raghuram** (Public Systems Group**, Indian Institute of Management, Ahmedabad**)

- Studied every aspect of **Operational Report** 2009-10 and 2010-11 of **Food Corporation of India (FCI)**
- **Analyzed** the detailed **Budget** of FCI from **2001 to 2012**
- **Compared** the **Working, Managing and Organizing** of International (**USA & Europe**) and National (**FCI**) Food Security Organizations
- Started writing **Case report** on the topic of "**Collaboration of AAL** (Adani Agri-Logistics) with **FCI**"

Academic Project:

Baja SAE India 2011 http://www.bajasaeindia.org/ **[March '10 –Jan '11]**

Under guidance of **Prof. R K Singh** (Mechanical Engineering, IIT Bombay)

- Designed the **Chassis, Wheel, Joints, brakes**, Engine Assembly of an All Terrain Vehicle
- Member of IIT Bombay team that participated in Baja SAE India 2011, a National Intercollegiate, **All Terrain Vehicle (ATV)** racing event, organized by the Society of automotive Engineers (SAE) India.
- In BAJA-SAE INDIA 2011, the team won the 1st prize as the **Fastest and Lightest car**
- Designed the vehicle chassis for **maximum driver comfort, resistance to front and side collisions**
- **Optimized the design** to obtain **a balance of weight and rigidity**
- Designed various wheel assembly components such as **hub, upright and suspension linkages** and performed extensive simulations to optimize their response to loading conditions like bump and braking

Engineering Metallurgy Project:

To Recommend Materials for '**Disc' used in 'Disc Brakes' in Automobiles** **[July'10-Nov'10]**

Under guidance of Prof. G V Prabhugaonkar (MEMS Department, IIT Bombay)

- Found alternative materials for 'Disc' used in 'Disc Brakes' in automobiles
  To make the disc
  - **Conductive** (To stop the wheel electromagnetically)
  - **Dissipate the heat quickly** evolved due to breaking
  - **High Tensile** and **high Shear Stress** sustainable
  - Of **Low Maintenance and low Cost** and of material of **high availability**

C++ project (Student's Mini Project):

Under guidance of **Prof. Deepak Pathak** (CSE Department, IIT Bombay) **[July'09-Nov'09]**

- Created **algorithms** in C++ to **store and recognize** database of students, fingerprints as their unique ID.
- Created algorithms in C++ for **image processing** to recognize students **fingerprints**
- Programmed in C++ for the **registration** of **800** students

Technical Skills:

- **3D Modelling** in Solidworks
- Finite Element Analysis (**FEA**) & **Simulation** in ANSYS
- **Product development** in Catia, **Designing** in Auto-cad , **Animation** in 3DsMAX
- **Simulink** in Matlab , **Computation** in Mathematica
- **Coding** in Micro controller
- **Programming Languages**: C, C++, Html and Java Script

Relevant Courses and Laboratories:

Elective Courses	Computer Integrated manufacturing , Collaborative Engineering, Rapid Product Development, Introduction to Optimization, Industrial Designing, Basics of Animation, Sociology
Mechanical Engineering Courses	Applied Thermodynamics, Kinematics and Dynamics of Machines, Heat Transfer, Industrial Engineering and Operations Research, Advanced Manufacturing Processes, Fluid mechanics, Strength of Materials, Manufacturing Processes, Engineering Metallurgy, Solid Mechanics, Thermodynamics, Engineering Mechanics
Other Courses	Numerical Analysis, Linear Algebra and Ordinary Differential Equations, Calculus, Electrical and Electronics Circuits , Chemistry, Economics, Computer Programming and Utilization, Modern Physics, Data Analysis & Interpretation, Environmental Studies: Science and Engineering
Mechanical Engineering Lab	Kinematics and Dynamics of Machines Lab, Heat Transfer and Metrology Lab, Manufacturing Processes Lab, Fluid Mechanics Lab, Solid Mechanics Lab, Manufacturing Practice Lab, Engineering Graphics & Drawing Lab, Mechanical Workshop Lab
Other Labs	Experimental and Measurement Laboratory (Electrical Engineering Lab), C++ Lab, Physics Lab, Chemistry Lab

Extra-Curricular Activities:

- **Organiser & Co-ordinator** of Mood indigo, Techfest , E-cell & Radiance (Mechanical Department Technical Festival) in **2009 & 2010** respectively
- Member of **N.S.S**.(National social Service) and worked in **G.R.A (group of rural Activities)**
- **Hobbies**- Swimming and Basketball