Scholastic Achievements

- Awarded a scholorship amount of Rs 40,000/- in Zephyr-09 under merit-cum-mean scheme.
  - Zephyr is the Annual fest of Aerospace Engineering Department - IIT Bombay.
- Attended the annual Indian Space Week-06 program at ISRO SriHariKota.
- Achieved 98%(980/1000) marks in Intermediate Public Examination(IPE)(12th standard) conducted by AndhraPradesh Intermediate board.
- Secured district first rank in SSC - 2006 with 95.5%(573/600) marks, one of the 20 toppers in SSC - 2006 of AndhraPradesh State.

Key Academic Projects

Adomian Decomposition Method   *Prof J.C.Mandal*
                                                                        Jan'10-Nov'10

- Studied the Adomian Decomposition Method(ADM) for analytically solving Non-Linear algebraic , Ordinary and Partial differential equations. Applied this method to obtain a closed form solution for the oblique shock angle (β) of Fluid Mechanics for which there is no closed form expression till today. Have obtained a pretty good and compact expression for the higher shock angle, using Maxima(Symbolic-Manipulator) for evaluating mathematical expressions.
  - Adomian Decomposition Method is a creative and effective method for solving Non-linear equations. It iteratively decomposes the non-linear part as series of Adomian polynomials.It is well known for it's rapid convergence.
- Doing a second stage of Supervised learning in which Adomian Decomposition Method is applied for solving **system of** coupled Non-Linear algebraic equations.

Re-Entry Dynamics   *Prof Hari.Hablani*
                                                                        May'10-Dec'10

- Doing a project which involves study of different cases of dynamics of Re-Entry vehicle . Generated Scilab codes for understanding the same.

Technical Skills

- Have been working with Symbolic Manipulater - **Maxima** for evaluating mathematical expressions.
- Have been using **MATLAB** in the different courses such as Measurement and Instrumentation Lab,Modelling and Simulation Lab, Control Theory.etc. Genrated **Scilab** codes for better understanding of Dynamics of Re-Entry vehicle.
- Using **Python** as the base programming language for simulation of fluid flow using Particle Methods (Will be completed by Nov'10).

- Very good **C++** programming skills. Obtained a 'very good' grade in **Advanced C++** course conducted by Contimuing Education Programme of IIT Bombay. Good web designing skills using HTML and CSS.

- Have been using LaTeX for making presentations and for writing reports , articles, letters.etc.

Key Course Projects

Prevent the of loss of Sugarcane crop during Heavy Rains   *Engineering Design*
Autumn 2009

- Various steps undergone (such as stake holders identification, Functional requirements, Concept generation and evaluation , QFD.etc.) in the design of a products which prevent the destruction of sugar cane crops were studied.

History of Rockets   *Introduction to Aerospace Engineering*
Spring 2008

- Presented the History of Rockets as a part of Introduction to Aerospace Engineering course.

Advanced C++ Project   *CEP-2010:Advanced C++ course*
Summer 2010

- As a part of Advanced C++ project , Constucted a hashtable to read in the words of a document and assign some number to them and store them in their respective locations in the hashtable along with the frequency count.

Scientific Calculator(Graphical Interface)   *Computer Programming and Utilization*
Spring 2008

- Made a scientific caluculator in graphical Interface using C++ as a part of Computer Utilization and Programming course.

Completed Courses

Mathematics	Aerospace Engineering	ComputerScience
Calculus	Introduction to Aerospace Engineering	Computer Programming(C++)
Linear Algebra	Solid Mechanics	Advanced C++ Programming
Differential Equations	Fluid Mechanics	**Others**
Differential Equations-II	Thermodynamics	Electicity & Magnetism
Introduction to Numerical Analysis	Measurement & Instrumentation Lab	Economics
Basic Algebra(*Minor*)	Modelling and Simulation Lab	Chemistry

Extra Curricular Activities

- Holder of National Cadet Corps (NCC) "B-Certificate".

- Represented Hostel-06 in Institute Table Tennis General Championship(GC).

- Quarterfinalist in the intra Hostel Table Tennis championship-2009.

- Made a RC-Plane as a part of Zephyr-09 Compitions

- Organizer of Techfest-09 gaming zone .