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Computer Science & Engineering
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UG Third Year (B.Tech.)
Male
DOB: 01/01/1992

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2010	7.86
Intermediate/+2	RBSE	Maa Bharti Sr. Sec School Kota	2008	82.00
Matriculation	RBSE	Kessav Vidya Mandir	2006	90.67

SCHOLASTIC ACHIEVEMENTS

- Winner of **Yahoo Hack U Contest -2010**.
- Secured **All India Category Rank 6th** in **IIT Joint Entrance Exam (2008)** out of 375000 students.
- Awarded scholarship for winning the **All Rajasthan (State) Talent Scholarship Award(2006)** by **Saraswati Sikshan Sansthan**.
- Secured **31st** position in secondary examination by Board of Secondary Education, Rajasthan (State) and was awarded scholarship.

PROJECTS

- **Yahoo Hack U 2010**
 - Developed a Mobile based application which captures an image of a product and gives it's top 5 best price and details from Amazon, rediff books
 - Used Gnu-gift package for Image Processing , And YQL for Html parsing.
 - Our idea was chosen to be 2nd amongst 40+ teams which participated in the event and was admired to be very innovative because of the immense utility to millions of consumers, and that too with the help of mobile devices
- **Hindi POS Tagger** (June 2010)
Guide: Prof. Pushpak Bhattacharya CSE Department, IIT Bombay
 - Studied part of speech tagger for Hindi language, increased it's Accuracy by **4%** from **94%** to **98%**.
 - Did **4-fold cross validation error analysis** to measure the accuracy of software given to us.
 - Did a theoretical research on the behavior of tags and **derived a equation** which governs **sensitivity analysis** of change in tags on the system input.
 - Currently working on the **sensitivity analysis** of individual tags.
- **Image Computation using the Sum-Product Algorithm** (December 2009)
Guide: Prof. Supratik Chakraborty
 - Implemented the **sum-product message passing algorithm** using **Binary Decision Diagrams (BDDs)** and **Factor Graph** which was further used in **Quatified Boolean Equation Solver**.
 - Implemented the algorithm, achieving **upto 100 times speedup**
 - Was able to **process large circuits** that were considered unmanageable earlier.
- **Face Detector** (April, 2009)
Guide: Prof. Amitabh Sanyal
 - Developed a face detection program in PLT-Scheme (functional programming).
 - Given an image, it detected the faces in the image and gave the output in the form of black-white image with face region as white and non-face region as black.
 - It Encircles the face Human face if human faces are present in the picture
- **Matrix Package and FreeCell Game** (November 2008)
Guide: Prof. Abhiram Ranade
 - Developed a matrix package and well known game of **FreeCell** in C++ with VGA GUI.
 - Uses Object Oriented Programming extensively for storing and handling data by considering most of the entities as objects such as cards, deck and a column

- It had support of matrix operations of inverse, multiplication, addition and subtraction and many other non-matrix operations like calculating mean, standard deviation, etc. of the entries of matrix.
- It had a well designed frontend, showing instructions to user, hotkeys to change the entries of matrices and recalculate different quantities without need to rerun the program.

• **Management : Marketing strategy and Product Suggestion** (Autumn 2009)

Guide: Prof. Dinesh Sharma, School of Management, IIT BOMBAY.

- Did **marketing strategic analysis** of NESTLE and suggested new product line with related horizontal expansion was suggested with the pricing, promotion, distribution and sales strategies.
- SWOT analysis, PESTLE and 4P analysis, Market segmentation of NESTLE were done.

COMPUTER SKILLS

- **Programming Languages:** C/C++, MIT Scheme, Java, HTML.
- **Software:** MS Office, Matlab, Photoshop, Flash, OpenOffice.org, Emacs.
- **Script Language:** Perl, Bash Scripting
- **Operating Systems:** Linux, Windows.

RELEVANT COURSES UNDERTAKEN

(till April 2011)

<ul style="list-style-type: none"> • Operating Systems • Compilers • Computer Architecture • Artificial Intelligence • Database and Information Systems • Networking Theory • Implementation of Programming Languages • DESIGN AND ANALYSIS OF ALGORITHMS • Algorithm Design • Graph Theory 	<ul style="list-style-type: none"> • Data Structure and Algorithms • Automata Theory and Logic • Logic Design • Discrete Structures • Abstractions and Paradigms in Programming • Comp. Programming and Utilization • Calculus • Numerical Analysis • Ordinary Differential Equations
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POSITIONS OF RESPONSIBILITY

- Working as **Department Social Secretary** to carry out social activities in CSE department for the current academic session.
- Worked as **Coordinator** of **Mood Indigo 2009** (IIT Bombay's Annual Cultural Festival). Conceptualising and organizing an event with participation from 250 colleges all over India.
- Worked as **Coordinator** of Hospitality Department in **Techfest 2010** (Annual Technical Festival of IIT Bombay).

EXTRA-CURRICULAR ACTIVITIES

- Secured **1st** position in Incorpora, a 4-days **Virtual Stock Market** competition of IIT Bombay.
- Member of the Hostel Hockey team in Inter Hostel Championship.
- Awarded Certificate for successfully completing the **Cadet** training in the Air Force Squadron of **NCC**, India at IIT Bombay, 2008.
- Participated in **Rifle shooting** and **Rock Climbing** in the annual NCC camp at IIT Bombay, 2008.

DECLARATION

I hereby declare that the information written is true to the best of my knowledge and in case of any discrepancy I shall be held responsible