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Computer Science & Engineering
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Specialization: Computer Science

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Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2012	7.85
Intermediate/+2	CBSE	Central Academy, Kota	2008	83.40
Matriculation	CBSE	Birla Senior Secondary School, Pilani	2006	86.00

Job Offer • Received job offer from **Future Group** in **future e-commerce infrastructure limited** as a Software Engineer.

Scholastic Record • Was in top **0.01** in **IIT-Joint Entrance Exam** (2008) among 400000 students
• Was in top **0.01** in **All India Engineering Entrance Exam** (2008) among 800000 students.
• Awarded **Merit-cum-means Scholarship** by IIT Bombay for the period 2010-2012 on the basis of academic performance.
• Awarded the **National Talent Search Scholarship (NTSE)** 2006 by the National Council for Educational Research & Training (NCERT), New Delhi.
• Secured **37th** rank in **State Level Talent Search Scholarship (STSE)** 2006 by the National Council for Educational Research & Training (NCERT), Ajmer.
• Attended **Summer School on Information Retrieval** organised by Yahoo at IISc Bangalore, 2011.

Internships • **LabView Heap Peek** (Summer 2011)
National Instruments R&D, India Guide: Mr. Ashish Jain
◊ Worked on **LabView Heap Peek** in which a user can peek into internal data structures without attaching debugger.
◊ Implemented a system which, shows SourceModel and DFIR hierarchy for all vi's of project with functionality of searching nodes and showing the properties of selected element in hierarchy or vi.
◊ Also implemented **DOTStringVizualizer for Visual Studio** using GraphViz.
◊ The project is part of a module to be **added to a LabView Product** to help developers of LabView NextGen.
• **CollegeFinder Android App.** (Summer 2010)
Apptility Software Pvt Ltd, India Guide: Mr. Brij Singh(Director)
◊ Successfully designed and developed CollegeFinder CodeMunch API based Android App.
◊ Search colleges by location, stream, name and gives all relevant information about the colleges.
◊ Provides user to directly browse website of colleges, send mails, make a phone call and flexibility of using user's own location for search.
◊ Uses google, youtube, flicker API to show other relevant information about colleges.

Undergrad Thesis • **Collective Quantity Consensus Queries over Web Tables** (July'11-Present)
CSE Department, IIT Bombay Guide: Prof. Sunita Sarawagi
◊ Goal of thesis is to answer quantity queries by obtaining consensus from multiple tables on the Web. Example of Search queries are "Planet, Distance from sun", "USA State, Population" etc and results will be structured tables.
◊ The idea is to correctly annotate table columns and then merging several tables containing a mix of categorical and numerical attributes.
◊ Clustering on attributes of tables and inference on Probabilistic Graphical Models of problem are used.
◊ The work is part of an ongoing project **WWT: Table queries on the World Wide Web** whose aim is to answer table augmentation queries from unstructured lists on the web.

Major Projects	<ul style="list-style-type: none"> Chat Normalizer (Yahoo Hack U 2010) <ul style="list-style-type: none"> Developed an application which transforms the sentences containing short form of words to actual grammatically correct English sentences. Used pronunciation of letters to form pronunciation of words to get most likely words Language Model is used to score the sentences, many other type of filtration done when there is tie between highest score sentences. <i>Motivation</i> : Knowing that there are language translators but they work on correct sentences so this application work as intermediate for language translators. <i>Performance Metrics</i> : Works on almost every sentence in our day to day life chat. Declared Yahoo Hack U Winner
	<ul style="list-style-type: none"> Railway Traffic Management (Autumn 2010) <i>Guide : Prof. S. Sudarshan</i> (CSE Department, IIT Bombay) <ul style="list-style-type: none"> Implemented user interface for activities like adding a new train, altering the existing train Worked with real problem of Indian Railway System using database of Indian Railways Devised efficient routes using algorithmic approaches. Client needs and different train types were accounted for in the analysis. Achieved minimum impact on current system after adding new trains or deleting existing train
	<ul style="list-style-type: none"> Autonomous Defensive Robot (Jan'11-April'11) <i>Guide: Prof. Kavi Arya</i> (CSE Department, IIT Bombay) <ul style="list-style-type: none"> Designed an abstraction to represent and solve the problem of enemy infiltration by detecting and shooting a moving ball in an arena. Designed a monitoring system to do image processing on feeds from two high resolution cameras Implemented a wireless channel for the bot and central system to communicate.
	<ul style="list-style-type: none"> Linear Differential Equation Solver (Spring 2009) <i>Guide: Prof. Amitabha Sanyal(IIT Bombay)</i> <ul style="list-style-type: none"> It deals with solving linear differential equation of any order and gives particular solution of it and plots graph of solution. Reduced the differential equation to linear equation using Taylor Polynomial and Leibnitz rule & used Matrix application to solve linear equations.
Other Projects	<ul style="list-style-type: none"> Implemented Part of Speech Tagging using Machine Learning techniques. BNC corpus was used for training and testing purpose. Implemented 8x8 puzzle solver using various heuristics in A* algorithm. Implemented a part of Operating System in C capable of File Handling and Virtual Memory Utilization as part of course project in Operating Systems course Implemented a basic compiler for C language using lex and yacc
Organizational Activities	<ul style="list-style-type: none"> Technical Secretary , Hostel-9 (2009-2010) <i>Member of 22 member three tier Hostel Council to carry out Technical Affairs of Hostel 9.</i> <ul style="list-style-type: none"> Formulated multiple teams and organized supervised practices for the Technical General Championship. Implemented creative techniques to decrease the electricity consumption of the whole hostel. Recognitions <ul style="list-style-type: none"> Awarded Hostel Technical Color for brilliant performance in Technical General Championship. Awarded Hostel Organizational Mention for accomplishing 3-fold increase in hostel participation in tech events. Student Counselor of IIT-JEE at IIT Bombay (2009) <ul style="list-style-type: none"> Guided new entrants at IIT's about choosing their branch.
Relevant Courses	<ul style="list-style-type: none"> Introduction to Stochastic Models, Linear Algebra, Probability and Random Processes, Calculus, Probabilistic Graphical Models, Artificial Intelligence, Linear Optimization, Foundations of Machine Learning, Numerical Analysis and Web Search & Mining