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ACADEMIC QUALIFICATION

Degree/ Certificate	***Institute***	***Year***	***CGPA/ Percentage***	***Remarks***
B.Tech (Hons.), Computer Science and Engineering	IIT Kharagpur	Enrolled in: July, 2007 Expected date of Graduation: May, 2011	9.34 (out of 10)	Institute Rank 14 out of 799
Indian School Certificate Examination (XII)	Little Flower School, Jamshedpur	2007	97.5%	School Rank 1
Indian Certificate of Secondary Education (X)	Little Flower School, Jamshedpur	2005	96.8%	School Rank 1

ACADEMIC ACHIEVEMENTS AND AWARDS

- Secured **First Rank** among 799 students in the Institute with a **CGPA of 9.92/10** in 2007-2008.
    - Received Technology Alumni Association (Delhi Chapter) Award
    - Awarded Goralal Syangal Scholarship
    - Awarded Technology Alumni Association Scholarship (Calcutta Chapter)
- Received the Prof. Sunil Kanti Sen Memorial Prize for scoring the **highest marks** in **English for Communication** in First Year.
- Currently maintain a Department Rank of **5 out of 41** B.Tech students in my Department.
- Consistently remained the **topper** in a batch of 50 all through my school years.

PROJECTS

Bachelor Term Project *(July 2010 till date)*	• Studying low power ARM architecture and working towards reducing power consumption by modifying the scheduling algorithm. • *Project supervised by*: Mr. Kallol Biswas, CEO, NucleoDyne Systems, Inc., Cupertino, California and Prof. J. Mukhopadhyay, Department of Computer Science and Engineering, Indian Institute of Technology, Kharagpur.
Embedded System Development *(May 2010 – July 2010)*	• Project undertaken as part of Compulsory **Summer Internship**. • Developed a scheduler for a micro-kernel on an ARM board (ARM920T). • Created a virtual memory environment for processes to run in a Round Robin fashion on the ARM core with the boot loader Das U-Boot running on it. • *Project supervised by*: Mr. Kallol Biswas, CEO, NucleoDyne Systems, Inc., Cupertino, California.
Systems Programming *(May 2009 – May 2010)*	• Worked on Linux Kernel Development, more specifically on Virtual Memory. • Have worked on hacking of Linux kernel, programming in Unix environment and designing of kernel modules. • Delivered a seminar on Memory Management in the Linux Kernel in my college. • *Project supervised by*: Mr. Kallol Biswas, CEO, NucleoDyne Systems, Inc., Cupertino, California.
RoboCup *(February 2009 – August 2009)*	• Participated in Simulation League at RoboCup Challenge @ India 2009, a National Robotics Event based on Robo Soccer. • Designed algorithms for robots to play soccer in a simulated environment based on the concept of Multi-Agent Collaboration and Decision-Making. • *Project supervised by*: Prof. J. Mukhopadhyay, Department of Computer Science and Engineering, Indian Institute of Technology, Kharagpur, and KRAIG (Kharagpur Robotics and Artificial Intelligence Group)

Autonomous Road Navigation *(October 2008 – February 2009)*	• Programmed an autonomous robot capable of navigating on a road and stopping at traffic signals, for participation in the event 8Mile, a part of Kshitij '09, the annual techno-management fest of IIT Kharagpur. • Based on Computer Vision, Image Processing and Artificial Intelligence. • Used line detection algorithms, edge following to keep the robot on the road, and advanced image processing using Matlab to keep track of the road and change of color of the traffic light. • *Project supervised by*: KRAIG (Kharagpur Robotics and Artificial Intelligence Group). • Secured the **Best Algorithm** Position in the event.
Rendering Multiple Objects with Shadows *(March 2009 – April 2009)*	• Part of Computer Graphics course taken up in the Fourth Semester. • Project involved generation of surfaces by revolution of curves, rendering them in an environment illuminated with multiple light sources of multiple colours. • Used the ray-tracing and z-buffer algorithms and successfully rendered a small illuminated room with the objects placed on the floor. • Implemented all the algorithms from scratch and completed the project **without the use of Java3D**. • *Project supervised by*: Prof. Partha Bhowmick, Department of Computer Science and Engineering, Indian Institute of Technology, Kharagpur.
Orthogonal Polygon Creation and Matching *(October 2008 – November 2008)*	• Part of Algorithms-I course taken up in the Third Semester. • Used a modified version of Inflate-Cut algorithm for random polygon creation to overcome the limitation of non-collinearity of edges. • *Project supervised by*: Prof. Partha Bhowmick, Department of Computer Science and Engineering, Indian Institute of Technology, Kharagpur.

POSITIONS OF RESPONSIBILITY

- **Captain** for **OpenSoft**, SN Hall of Residence for the term 2010-2011. OpenSoft is an Inter-Hall software designing competition.
- **Vice Captain** for **OpenSoft**, SN Hall of Residence for the term 2009-2010.
- Member of **Student Council** in school during 2004-2005.
- **Organiser** of the three-day **Annual School Fest** in the year 2004 along with twelve others.

EXTRA CURRICULAR ACTIVITIES

- Member of **KRAIG** (Kharagpur Robotics and Artificial Intelligence Group).
- Won in **Math Olympiad**, Kshitij'08 (Annual Technical Fest of IIT Kharagpur, the biggest techno-management fest of Asia) and qualified for the Finals in Kshitij'09.
- Won a **p**rize in **Overnite (an ACM certified programming contest)**, Kshitij'10 and qualified for the Finals in Kshitij'08 and Kshitij'09.
- Won **Best Algorithm** prize in **8Mile**, a Robotics event involving Image Processing and Road Navigation in Kshitij'09.
- Won in **Nightshift**, a design-based event in Kshitij'09. Designed a can-crusher from scratch.
- Practised **Yoga** for two years as part of Extra-Academic Activity. Secured a grade of **Ex** (10 out of 10) at the end of First Year and **A** (9 out of 10) at the end of Second Year.
- Have formal training in **Painting** from **Bangiya Sangeet Parishad**, a pioneering cultural group in the State of West Bengal. Completed Seventh Year with First Division and received the Ratna Award.