



ACADEMIC RECORD

Year	Degree / Certificate	University / School	CGPA/%	
2011	Dual Degree : Mechanical Engineering	IIT Kharagpur	7.60/10	Additional CGPA : 9.00/10
2006	Class XII : ISC Board	Calcutta Boys' School	89.5 %	
2004	Class X : ICSE Board	Calcutta Boys' School	93.2 %	

ACADEMIC DISTINCTIONS

- Recipient of merit **Fellowship** given by the **MHRD, Indian Government** as a Teacher's Assistant, 2010.
- Secured Rank 2/40 in Biotechnology and **Department Change** in 1st year among 850 students by academic excellence, 2007.
- **National top 1%** among 30,000 and Rank 2/120 in school in NSEP, and qualified **Indian National Physics Olympiad**, 2006.
- Recipient of **merit scholarship** from **Larsen & Toubro Ltd.** for excellent Academic Performance, 2005-06.
- Offered **SIA-NOL scholarship** by **NTU, Singapore** for admission to Bachelors in an undergraduate course, 2006.
- Shortlisted in top 5% among 3,00,000 in level 2 of **National Talent Search Examination** of NCERT, 2004.
- **Rank 3** among 10,000 all over **West Bengal** in Saibal Roy Memorial Science Talent Search Examination, 2001.
- Awarded Certificate of Merit for achieving **meritorious position** in Talent Search Institute's **Maths Olympiad** in Std. 7, 2001.

CO-CURRICULAR ACTIVITIES

- **Designed** and constructed a **path-sensing robotic car** as a term project for Microprocessor applications laboratory, 2010.
- Participated in **Mechanical Design** (Nightshift, Nirmaan) and coding-based **Robotics** (Mission Mars) **events** in Kshitij, 2008.

INDUSTRIAL INTERNSHIPS

Pennsylvania Crusher Corp. ; K-Tron International		Philadelphia, USA	May '09 – July '09
WORK DONE	<ul style="list-style-type: none"> ▪ Worked in the Engineering and Manufacturing Divisions of the company in Philadelphia, PA and Akron, OH. ▪ Developed a BOM (Bill of Material) of a Feeder machine on SYMIX (ERP Software). ▪ Programmed a CNC Milling machine for the manufacturing of a Feeder disc from its AutoCAD design. 		
ACHIEVEMENTS	<ul style="list-style-type: none"> ▪ Optimized a mechanism for increasing tonnage of the Feeder machine by 80% (from 12 TPH to 22 TPH). ▪ Awarded certificate of Excellence from the CEO and Vice President for the work done in the internship. 		
Trombay Power Plant ; TATA Power		Mumbai, India	May '08 – July '08
WORK DONE	<ul style="list-style-type: none"> ▪ Worked in the Operations Department of the 500MW (Unit #5) Power Generating Section of the plant. ▪ Studied various subsections including 220kV, 6.6kV and 415kV electrical systems in the power plant. 		
ACHIEVEMENTS	<ul style="list-style-type: none"> ▪ Developed a correlation between the Thermodynamic Rankine Cycle and the Power Generating process. ▪ Awarded highest grade - "Excellent" among 45 interns in internship evaluation process at TATA Power. 		

RESEARCH PROJECTS

Modelling of 5-axis Subtractive Rapid Prototyping (SRP) machine		IIT Kharagpur	August '09 – present
WORK DONE	<ul style="list-style-type: none"> ▪ Completed Mathematical formulation and algorithm for the tool-path and 5-axis robotic control. ▪ Designed a prosthetic Femur Bone implant using Solid Works and manufactured it on a 4-axis SRP machine. ▪ MATLAB and C++ programming of B-Spline surface algorithm and tool path algorithm is being done. 		
ACHIEVEMENTS	<ul style="list-style-type: none"> ▪ Generated B-Spline curves and surfaces with 95% accuracy in MATLAB. ▪ The Algorithm being developed as M.Tech Thesis could be published as a research paper upon completion. 		
Heat Transfer Augmentation in Internal Flows using Nanofluids		IIT Bombay	December '07
WORK DONE	<ul style="list-style-type: none"> ▪ Modelled an experimental setup for the determination of the Nusselt number of a Nanofluid (Al_2O_3). ▪ Constructed intermediate apparatus for estimation of Thermal Conductivity. 		
ACHIEVEMENTS	<ul style="list-style-type: none"> ▪ Achieved 98% accurate experimental results of Nusselt number in comparison to theoretical calculations. 		

POSITIONS OF RESPONSIBILITY

Captain of Chess Team, Nehru Hall of Residence, IIT Kharagpur		2010 – 2011
<ul style="list-style-type: none"> ▪ Nominated by 500 students as a team leader in Inter-Hall events and representative in the Chess Sub-Committee at IIT Kharagpur. ▪ Structured a budget of Rs.5000 in Chess for the first time in 4 years. Organised workshops and tournaments among 200 freshmen. ▪ Panel Member for election of General Secretary Sports and Small Area Games Secretary in Nehru Hall of Residence. 		
Member of National Social Scheme, IIT Kharagpur		2006-2007
<ul style="list-style-type: none"> ▪ Organised social surveys and analysed the standard of living of 150 families across 3 villages around IIT Kharagpur. ▪ Set up a literary camp as a teaching facility for 70 children across 1 village around IIT Kharagpur. 		

EXTRA – CURRICULAR ACTIVITIES

BASKETBALL	<ul style="list-style-type: none"> ▪ Represented Nehru Hall of Residence in Basketball at Inter-Hall and Open-IIT level at IIT Kharagpur, 2007-10. ▪ Member of the National Sports Organization (NSO) of Basketball at IIT Kharagpur, 2007-08.
CHESS	<ul style="list-style-type: none"> ▪ Part of Silver-winning Inter-Hall Chess team of Nehru Hall of Residence at IIT Kharagpur, 2008. ▪ Promoted to "White Rook" (3rd highest) level in Chess at Russian Alekhine Chess Club in Kolkata, 1999. ▪ Awarded certificate of Merit for playing in Finals of State level Telegraph Chess Championship, 1998.
SOCIAL & CULTURAL	<ul style="list-style-type: none"> ▪ Part of Silver and Bronze-winning Inter-Hall Choreography teams of Nehru Hall of Residence, 2008 and 2009. ▪ Part of the Gold-winning Rangoli team and Illumination team of Nehru Hall of Residence, 2008.
TECHNOLOGY & QUIZ	<ul style="list-style-type: none"> ▪ Part of Bronze-winning Inter-Hall Cheminnovation team of Nehru Hall of Residence, 2009. ▪ Participated in Inter-school and Intra-school quizzes as a Quiz Club member in school, 2003-05. ▪ Winner of the Intra-school Bournvita Quiz Contest hosted by quizmaster Derek O' Brien, 1999.