

**ACADEMIC QUALIFICATIONS :**

Degree/Certificate	Year	Institute/Board	%/CGPA
B.Tech, Electronics & Electrical Comm Engg.	2011	IIT Kharagpur	8.63/10.0
AISSCE, Class XII	2006	CBSE	84.6 %
AISSE, Class X	2004	CBSE	84.6%

**ACADEMIC DISTINCTIONS :**

- **All India Rank 458** in **IIT-JEE** among 3,00,000 candidates, 2007
- **All India Rank 45** in **AIEEE** among 6,00,000 candidates; **State Rank 3** in Punjab, 2007, Awarded CBSE Merit scholarship
- **All India Rank 1** in **AIEEA** organised by ICAR among 50,000 candidates, 2007, Got full fee scholarship offer
- **All India Rank 21** in **PB-CET** among 80,000 candidates, 2007
- Among top-30 design entries **throughout India** for TI-Analog Design Contest, 2009

**SELECT PROJECTS/PUBLICATIONS :**

*3D model reconstruction from 2D images (B.Tech Project) (Funded by DST, Govt. of India)* *Jul 10 – Present*

- **Live 2D images** feed from camera, Extracting 3D data points from images **Surface reconstruction** from 3D sparse data, Texturing of surfaces, Devised a **new approach for surface rendering**
- New method for triangulation and meshing, **Research paper submitted.**

*Self-powered Personal Health Monitoring System (Funded by Texas Instruments)* *June 09 – Mar 10*

- **Design of a Shoe (using PZT dimorphs)** to scavenge enough energy to power body sensors and transmitters
- Useful in **medical applications**, Obtained enough power to power a body pulse sensor and a transmitter.
- Research paper : **Self Powered Wearable Health Monitoring System, ICMENS 2010, Changsha, China.**

*Modeling of MEMS Accelerometer* *Apr 09 – Jul 09*

- **Optimizing piezoresistive accelerometer** in terms of high sensitivity with various factors such as mass, elasticity of materials by analyzing various movements of mass and beams
- Practical use involves accelerometer in airplanes and is set for use in **Student Satellite, IIT KGP**

**INTERNSHIP :**

*Summer Intern, Software group ISS, RWTH Aachen, Germany* *May 10 – Jul 10*

Responsibility	<ul style="list-style-type: none"> <li>▪ Parallelization of sequential <b>MPEG-1(MP3) decoder</b></li> <li>▪ Use of <b>CPN language</b> to convert C code to CPN and then use pthreads to use other cores</li> <li>▪ <b>Verification</b> of CPN language as suitable for parallel algorithms</li> </ul>
Achievements	<ul style="list-style-type: none"> <li>▪ Realized a <b>48-pthread</b> parallel code of the same sequential version</li> <li>▪ For the same code, achieved a <b>speedup of 30%</b> on a Quad-core machine.</li> </ul>

**POSITION OF RESPONSIBILITY :**

- **Head, OBC Team**, Student Satellite (STUSAT), IIT Kharagpur
  - Currently heading **On-Board Computer Diagnostics-Hardware & Software team**, STUSAT, IIT Kharagpur
  - Responsible for **proper working of satellite**, **coordination** of different subsystems, **communication** with ground station
  - Responsible for **payload control**, **data encoding/decoding**, telemetry data and exception handling in different conditions
- **Vice-Captain, Hockey Team.**
  - Served as Vice-Captain of **RK Hall** hockey team, 2009-10 and **MMM Hall** hockey team, 2007-08
  - Instrumental in organizing a team that won gold medal in open-IIT event 2010-11 and bronze medal in inter-hall, 2008-09
- **School Head-boy** for 2004-05 and house-leader in 10<sup>th</sup> class (youngest ever) itself despite having 12<sup>th</sup> class students
- Served as **Coordinator**, Illumination, Gold-winning RK Hall, 2009-10

**EXTRA-CURRICULAR ACHIEVEMENTS :**

Sports	<ul style="list-style-type: none"> <li>• <b>Member, IIT Kharagpur Hockey Team</b>, Inter-IIT games 2008-09 and 2009-10 and Shaurya, 2008 and 2009               <ul style="list-style-type: none"> <li>▪ <b>Bronze Medal</b> at 44<sup>th</sup> Inter-IIT games 08-09 and <b>Top-scorer</b> of IIT Kharagpur at 44<sup>th</sup> inter-IIT games, <b>Gold Medal</b> at Shaurya, 2008 and <b>Silver Medal</b> at Shaurya, 2009</li> </ul> </li> <li>• <b>Member, IIT Kharagpur Weightlifting Team</b></li> <li>• <b>Bronze Medal</b> in Inter-Hall <b>athletics</b> games as a part of RK Hall Team, 2008-09</li> <li>• <b>Bronze Medal</b> in <b>Inter-Hall Weightlifting</b> as a part of Gold-winning RK Hall Team, 2008-09</li> <li>• Member, RK Hall Hockey Team, represented in Inter-Hall and open-IIT events, 2008-09 and 2009-10               <ul style="list-style-type: none"> <li>▪ <b>Silver medal</b> in open-IIT, 2008-09, <b>Gold medal</b> in open-IIT, 2010-11 and <b>Bronze medal</b> in Inter-Hall, 2008-09</li> </ul> </li> </ul>
Technical	<ul style="list-style-type: none"> <li>▪ <b>Gold Medal</b> in <b>Inter-Hall Product Design</b> competition as a part of RK Hall team, 2008-09</li> <li>▪ <b>Gold Medal</b> in <b>Inter-Hall Chemical Innovation</b> competition as a part of RK Hall team, 2008-09</li> </ul>
Community Service	<ul style="list-style-type: none"> <li>▪ <b>National Cadet Corps (NCC)</b> of Indian Army, Annual Training Camp : Successfully completed, 2003</li> <li>▪ <b>National Service Scheme (NSS)</b> of Ministry of youth affairs &amp; sports, India. Dwitiya Sopan Camp : Successfully completed, 2002. Organised <b>literacy &amp; healthcare awareness rallies</b> in villages.</li> </ul>