

<b>Education</b>			
<b>Year</b>	<b>Course</b>	<b>Institute</b>	<b>CGPA/Percentage</b>
2013 - present	Bachelor Of Technology in Electrical Engineering	Indian Institute of Technology, Kharagpur	9.43/10
2013	Central Board of Secondary Education(12th)	Delhi Public School, Bokaro	97.2%
2011	Central Board of Secondary Education(10th)	Delhi Public School, Bokaro	10/10

### **Academic Achievements**

<ul style="list-style-type: none"> <li>Placed <b>2<sup>nd</sup></b> in the department among <b>126 students</b> enrolled for the course</li> </ul>			
Olympiads and Rankings	<ul style="list-style-type: none"> <li>Secured an <b>All India Rank of 68</b> in the <b>IIT-JEE(Mains) 2013</b> and <b>829 in the IIT-JEE(Advanced) 2013</b></li> <li>Secured an <b>All India Rank of 11</b> in the <b>West Bengal Joint Entrance Examination</b></li> <li>Achieved <b>AIR of 1</b> in the National Science Olympiad (2012) organised by Science Olympiad Foundation</li> <li>Qualified Regional Maths Olympiad 2011, ranked <b>1<sup>st</sup></b> in state and qualified for the National Level</li> <li>Qualified National Standard Examination in Physics-2012, ranked in <b>top 5 (top 1%)</b> in state</li> <li>Qualified National Standard Examination in Astronomy-2012, ranked in <b>top 4 (top 1%)</b> in state</li> </ul>		
Scholarships	<ul style="list-style-type: none"> <li>Awarded Jagadish Bose National Science Talent Search (<b>JBNSTS</b>) scholarship 2013.</li> <li>Recipient of the Kishore Vaigyanik Protsahan Yojana (<b>KVPY</b>) Scholarship 2012-2013.</li> <li>Recipient of O.P. Jindal Engineering and Management Scholarship(<b>OPJEMS</b>) for the year 2014-2015.</li> </ul>		
Seminars and Camps	<ul style="list-style-type: none"> <li>Participated in <b>Vijyoshi IV camp</b> at IISc Bangalore, organized by KVPY and INSPIRE program 2012</li> <li>Attended lectures by eminent scientists at a summer camp organized by <b>IISER Kolkata</b>(KVPY program) 2012</li> </ul>		

### **Projects/ Research Internships**

<b>UBC-O</b>	<b>Dr Kenneth Chau</b>	<b>May' 15 - July' 15</b>
Overview	<ul style="list-style-type: none"> <li>Worked on a <b>rapid scanning microscope</b> to image an area of about 5mmX5mm in under 20 mins using cheap blu-ray readers and video microscopy with image processing techniques</li> <li>Developed quick <b>image sharpening and dirt removal</b> algorithms using OpenCV in C++</li> <li>Designed the control system of motion stages for moving the slide using LabView software</li> </ul>	
Progress	Developing an auto-focus control strategy and building an IOS app to make the product user-friendly and submitted a paper documenting the present results for review.	

<b>IIT Kgp</b>	<b>Indic View</b>	<b>October' 14 - present</b>
Overview	<ul style="list-style-type: none"> <li>Development of an OCR-cum-translator for Indian languages under the <b>Google Pilot program</b></li> <li>Worked on image processing techniques including deblurring, skew correction and thresholding</li> <li>Developed algorithm to segment words from image and thereby facilitate translation</li> </ul>	
Progress	Developing an android app and looking into strategies to feedback inaccuracies from user.	

<b>IIT Kgp</b>	<b>Autonomous Ground Vehicle</b>	<b>March'14 - present</b>
Overview	<ul style="list-style-type: none"> <li>Associated with the <b>computer vision</b> team responsible for the perception module of the car</li> <li>Designed algorithms for obstacle avoidance based on color as well as testing and modifying the implementation of the lane detection algorithm</li> <li>Part of the team at the <b>Intelligent Ground Vehicle Challenge</b> 2014 at Oakland University in Rochester, Michigan. The team qualified for Basic level of the challenge</li> <li>Represented the team at the <b>Mahindra Rise Prize -Driverless Car Challenge</b> Presentation phase</li> <li>Currently started contributing to the planning and controls team for testing the software module</li> </ul>	

### **Positions of Responsibility**

<b>Director, Public Relations,</b> IIT Kgp MUN, Oct'13-Jan'14	<ul style="list-style-type: none"> <li>Was responsible for inviting the participants and managing their accommodation in campus during the event.</li> <li>Increased footfall by about 60% from previous edition.</li> </ul>
<b>Vice-Captain,</b> <b>Bengali dramatics and elocution</b> Radhakrishnan Hall	<ul style="list-style-type: none"> <li>Conducted dramatics trials workshops for sophomores in the hall.</li> <li>Currently preparing a team for Open IIT <b>Bengali elocution</b> competition.</li> <li>Directing and coordinating a team of around <b>40 students</b> for Open-IIT <b>Dramatics</b>.</li> <li>Handling the yearly literary budget of 10,000 INR for the year 2015-16.</li> </ul>
<b>Students' Mentor</b> Electrical Engineering Department August '15 - Present	<ul style="list-style-type: none"> <li>Assigned to be the <b>mentor</b> for first year students of our department by <b>Student Welfare Group</b> under the supervision of the <b>Dean of Student Affairs</b>, IIT Kharagpur</li> <li><b>Conducted</b> short doubt clearing and counseling sessions for first year students of our department and helped them get acquainted with the institute system</li> </ul>

### **Skills**

Software	Languages(C,C++,JAVA), Matlab, OpenCV, ROS(Robot Operating System) ,Octave,LtSpice IV,Ms Oice(word, excel, PowerPoint), HTML, CSS,XML, MySQL, Gazebo IDE - Netbeans, Eclipse, Microsoft Visual Studio(2010 and 2012); OS - Windows,Linux(Ubuntu 14.04)
Hardware	Arduino, BeagleBone, Roboteq DC motor Controller

### **Extra-Curricular activities**

Cultural	<ul style="list-style-type: none"> <li>Actively participated in 6 plays as a senior member of <b>Technology Dramatics Society-Druheen</b> and directed and coordinated a team of around <b>30 students</b> for the freshers' play</li> <li>Won <b>2<sup>nd</sup></b> prize in Open-IIT <b>Bengali Elocution</b> 2014 among 25 participants.</li> <li>Part of the <b>Gold winning English and Hindi dramatics</b> and the <b>Silver winning Bengali Dramatics</b> teams.</li> <li>Awarded the <b>Best All-rounder Fresher</b> award at Radhakrishnan Hall of Residence, IIT-Kharagpur for the academic year 2014-2015 among 100 sophomores.</li> <li>Won <b>2<sup>nd</sup></b> prize in Open-IIT <b>English Debate</b> 2013 among 20 participants.</li> </ul>
Technical	<ul style="list-style-type: none"> <li>Won <b>Best Freshers' award</b> in <b>Geoaware</b> (Image processing event) in Kshitij-2014.</li> <li>Part of the <b>Gold winning</b> team in the event <b>Hack-A-Things</b> organised by TCS during Kshitij 2015.</li> <li>Attended Winter Workshop in <b>Image Processing</b> organised by <b>Robotix, IIT-Kharagpur</b> 2013.</li> <li>Won <b>2<sup>nd</sup></b> Prize in <b>Powerpoint Presentation</b> event among 20 teams at Quest- India's 1<sup>st</sup> <b>International Biotechnology Fest</b> at City Montessori School,Lucknow 2009.</li> </ul>