

## EDUCATION

2015-2020	Int. MSc in Mathematics and Computing Indian Institute of Technology, Kharagpur	CGPA : 8.33
2015	Intermediate in CBSE, Central Academy, Kota	96.2 %
2013	Matriculation in ICSE, Saint Francis School, Deoghar	97.2 %

## TECHNICAL SKILLS

PROGRAMMING	Proficient in Python, C, C++ and Java Competent in Javascript, Lua, Matlab, Android and Shell Scripting
LIBRARIES / FRAMEWORKS	ML/NN: Scikit-learn, Tensorflow, Torch, OpenCV Others: Numpy, Scipy, Pandas, Matplotlib, Django, Flask
SYSTEMS / PLATFORMS	Git, Linux
MARKUP / TEMPLATING	HTML, CSS, LaTeX

## EXPERIENCE

MAY - AUG 2017	Developer at Google Summer of Code	SunPy under OpenAstronomy
	<ul style="list-style-type: none"><li>- Wrote a full-fledged high-level JSOC Client, using drms package as its backend, to download astronomical data from JSOC servers.</li><li>- Wrote a full test-suite to cover the drms package, using pytest and different mock testing packages.</li></ul>	
MAY 2017	Deep Learning Intern	Dewinter Opticals, New Delhi
	<ul style="list-style-type: none"><li>- Was solely responsible for building a Convolutional Neural Networks model, to identify between 5 different types of graphite flakes present in grey cast iron.</li><li>- Worked on integrating automatic detection of graphite flakes in MaterialPlus and WeldCheck.</li><li>- Used both Tensorflow and Torch as independent platforms to implement the neural network problem.</li><li>- Used OpenCV algorithms for image segmentation and stitching microscopic images.</li></ul>	
JAN 2017 Ongoing	Software Developer Head	Kharagpur Open Source Society
	<ul style="list-style-type: none"><li>- Conducted Kharagpur Winter of Code (KWOC), to promote open-source development in and around campus, which brought over 900+ registrations, across more than 25 colleges.</li><li>- Worked as a full stack developer in building the website of KWOC, using Flask as backend, and Jekyll as the frontend.</li><li>- Mentored over 50 students, in projects varying in Python and Android.</li></ul>	

## ACADEMIC PROJECTS

FEB - APR 2017	GPA Predictor using Machine Learning models and neural networks	Guide: Prof. S. K. Barai
	<ul style="list-style-type: none"><li>- Created an institute-level GPA predictor for a student, which would take his previous GPA's as input, and predict his GPA's in the upcoming semesters</li><li>- Used last 10 years of grades for over 50 students in each department as training data, so as to identify the difficulty level of each semester.</li><li>- Used k- Nearest Neighbour alongwith SVM to increase the acceptability of the prediction of outliers.</li></ul>	
AUG 2017 Ongoing	Utilising Social Media for Disaster relief managment	Guide: Prof. Saptarshi Ghosh
	<ul style="list-style-type: none"><li>- Treating people as social sensors and utlizing their social intelligence at a disaster site, by extracting the tweets and facebook posts made, in relation to a particular disaster.</li><li>- Create a post disaster management system, that would show the need and avalaibility tweets on a map based interface, so as to easily connect NGOs, volunteers and the victims to appropriate places, in real time.</li><li>- Use Information Retrieval algorithms to extract only the related tweets and then apply a deep learning model to classify between the 'need' tweets and the 'availability' tweets.</li></ul>	

## POSITIONS OF RESPONSIBILITY

CURRENT	Executive Head, Kharagpur Open Source Society
	<ul style="list-style-type: none"><li>- Conducted Kharagpur Winter of Code, a program to introduce people to open-source development, which brought over 900+ registrations.</li><li>- Conducted Linux-install fest in the campus, to promote use of Linux as the preferred operating system.</li><li>- Conducted Python Classes and Git workshop, to teach students the process of contributing to an open-source project.</li><li>- Was the full stack developer of the website of Kharagpur Winter of Code, using Flask as backend, and Jekyll as frontend.</li></ul>
CURRENT	Web Secretary, Mathematics Colloquium, IIT Kharagpur
	<ul style="list-style-type: none"><li>- Managing the official website of the Department of Mathematics.</li><li>- Managing the development of the student portal, which gives access to all study materials and question papers related to course subjects.</li></ul>

## SCHOLASTIC ACHIEVEMENTS

CURRENT	Recipient of Innovation of Science Pursuit for Inspire Research (INSPIRE) Scholarship
2011	Secured All India Rank 2, in National Cyber Olympiad in high school
2015	Secured 99.11 percentile in JEE Advanced 2015
2015	Secured 99.33 percentile in JEE Mains 2015