



## EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2024	M.TECH	IIT Kharagpur	7.63 / 10
2022	Master of Science	NIT Durgapur	8.65 / 10
2020	Bachelor of Science	University of North Bengal	70.88%
2017	Higher Secondary Examination	West Bengal Council of Higher Secondary Education	83%
2015	Secondary Examination	West Bengal Board of Secondary Education	88%

## COURSEWORK INFORMATION

- **BSc Mathematics:** Mathematics, Computer Science, Physics.
- **MSc Mathematics:** Probability and Statistics, C- Programming Language Lab, Numerical Analysis, Automata theory, Computational fluid dynamics, Operations Research, Mathematics modeling, ODE and PDE, Graph Theory.
- **MTech:** Computational Method for Earth System Sciences, Statistical and Machine Learning Methods in Water Resources Engineering, Data analytics in Earth System Science, Global Climate Model, Satellite remote sensing.

## SKILLS AND EXPERTISE

**Programming Language:** C, Python, NCL, Fortran, C++, MATLAB | **Analytical:** MS Office ( Excel, Word, PowerPoint), Google Sheets, LaTeX | **Libraries & tools:** Numpy, Pandas, Matplotlib | **Expertise:** Data analysis, CFD, Numerical Methods for forecasting the weather, SQL, R | **Soft skills:** Supervised a group project team and talked with two advisers on a successful academic project, Time management, Creativity, Work ethic, Attention to detail.

## INTERNSHIPS

- Performance of the GFS model in capturing the monsoon depression over the Bay of Bengal | IITM Pune ( May'23-July'23 )
- We use GFST1534 model data to capture the monsoon depression over the Bay of Bengal.
  - Programming language: Python, NCL (NCAR Command Languages) | Data type: NetCDF, grd.

## PROJECTS

- A cloudburst prediction framework using selected meteorological parameters ( MTech design lab project ) ( Aug'22-Nov'22 )
- We have attempted to assess the parameters affecting the cloudburst and predict it using Python language.
- Heat Transfer Through Parallel Plates Channel Under Poiseuille Flow ( Master's project ) ( Oct'21-May'22 )
- In case of a rectangular channel, the movement of heat is from a higher gradient to a lower gradient over time.
- Predicting the Lone status using statistical machine learning model ( Self Project ) ( Dec'22-Jan'23 )
- Predict if a person will get the loan or not based on previous data and some well-known statistical model.
  - Model accuracy on tests are LogisticRegression ( 80.48% ), SVC ( 79.39% ), and RandomForestClassifier ( 78.67% ).
  - (Github link:[https://github.com/AmiteshRay/Loan\\_Predictions-](https://github.com/AmiteshRay/Loan_Predictions-))
- Predicting the income in the future year using Linear Regression ( Self Project ) ( Dec'22-Jan'23 )
- Predict the income in the year 2020 using the given past data and the Statistical Regression model.
  - (Github link:[https://github.com/AmiteshRay/Income\\_Prediction](https://github.com/AmiteshRay/Income_Prediction))
- Small object detection in Remote sensing images using modified CNN methods ( Self project ) ( May'23-Ongoing )
- Detect plastic, and other waste material and icebergs in the oceans by using the Satellite's Remote Sensing Images.

## CERTIFICATIONS

## Google Data Analytics

- Ask Questions, Prepare, Process, Visualize, Analyze, and Share data using SQL and R programming languages.

## Acmegrade Data Science Certification

- Linear Regression, Logistic Regression, Recommender Systems, Decision Trees, Probability And Statistics, Analysis.

## AWARDS AND ACHIEVEMENTS

**JAM 2020 ( Mathematics ), AIR-3636 | GATE 2022 ( Mathematics ), AIR-905**

## WORK EXPERIENCES

- Chegg subject matter expert (Feb'22-Ongoing)
- Solved more than 800+ and 200+ international questions for best practices in Calculus.

## EXTRA CURRICULAR ACTIVITIES

- **Hobbies:** Writing, Singing, Composing songs, Instrument player, Paintings.