

BANTI SAHU | 20GG20015

APPLIED GEOLOGY (M.Sc. 5Y)



EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2025	5 YRS M.SC	IIT Kharagpur	7.33 / 10
2019	Class 12 (Jharkhand Academic Council)	Govt. GHS Bariyatu , Ranchi	79.4%
2017	Class 10 (Jharkhand Academic Council)	JBC +2 High School, Jamtara (Jharkhand)	91.2%

PROJECTS

Assessing Risk Factor and Roadside Features using Computer Vision | Prof. Jhareswar Maiti may '23-july'23

- -- Conceived and executed a project to Assess Risk Factors and Analyze Roadside Features using Advanced Computer Vision Techniques.
- Trained the Model using yolov5 Model and Detected Roadside Features using Camera Vision and Remote Sensing.
- -- Hazard Serverity Prediction using the Predicted Roadside Features, Applied Risk Analysis to Determine Roadside Hazard Rating (RHR).
- -- Applied Machine Learning Algorithms and Image Processing Techniques to identify and quantify Roadside Features and Rated the Risk.

RP Hall Menu Election - API | Nodejs | Self Project

- -- Built an API in NodeJs to be used by mess or canteen services to decide food menu for the week as per the customers wish.
- -- Programmed Floyd Warshall algorithm in JavaScript and tweaked it accordingly to implement Schulze method of voting. --Used **Schulze method** to declare a single winner as well as rank list of food items using votes that express preferences.

Text Compression using Huffman Algorithm | Self Project

Jun '22

- -- Developed a text compression program using the Huffman algorithm for encoding and decoding the input text.
- -- Demonstrated Lossles's Compression and Variable Length Encoding techniques and their implementation.

COMPETITION/CONFERENCE

Open Soft | General Championship | IIT Kharagpur

- •Secured Gold for developing a microservice, empowering a fintech company to analyze financial statements of diverse users and banks Utilized data scraping on the NSE dataset to categorize companies for sector-wise financial analysis and personalized expenditure insights.
- Created an advanced Analyzer module for transaction preprocessing, delivering actionable insights and predicting future financial trends

COURSEWORK INFORMATION

Statistical: Probability and statistics | Advance calculus

Miscellaneous: Programming and Data Structures | Introduction to Financial Management | Economics

SKILLS AND EXPERTISE

- Programming Skills: Proficient: C/C++ Familiar: Python | JavaScript | HTML | CSS | ReactJS
 Libraries: TensorFlow | OPenCV | Pytorch | NumPy | Matplotlib
 Technologies: Node.js | Visual Studio Code | Jupyter Notebook | Colab

- •Interpersonal Skills: Team Work | Leadership | Time Management | Problem Solving | Responsibility

CERTIFICATIONS

Supervised Machine Learning: Regression and Classification (Coursera)

- •Completed 3-week course conducted by Dr.Andrew Ng (Founder of DeepLearning.AI).
- Developed a throughout understanding of Supervised Machine Learning, including Regression and Classification Algorithm.

Advanced Learning Algorithms (Coursera)

•Completed 4-week course covering techniques advanced machine learning algorithms, deep learning, reinforcement learning.

AWARDS AND ACHIEVEMENTS

- Got Sarvshreshth Chhatra Puraskar from Honorable chief minister of Jharkhand state for Excellence in Academics in year 2020.
- •Won Most loved fresher Award of Rajendra Prasad hall of residence (for being most active in Hall Activities) in the Year 2021-2022.

POSITIONS OF RESPONSIBILITY

Mess Auditor | R.P hall of Residence | IIT Kharagpur

- Maintained detailed records of all transactions and expenses, providing valuable data for future analysis and decision-making.
- •Built a democratic voting system to allow residents to have say in the weekly mess menu, increasing resident satisfaction and engagement.
- Contributed to the overall success of the RP Hall community by ensuring the provision of high-quality and nutritious meals for residents.

Secretary, Cricket and Atheletics | R.P Hall of Residence | IIT Kharagpur

- •Elected representative by an electorate of 830+ students to lead its effort to compete in the Inter Hall Cricket and athletics Championship.
- •Managed a budget of INR 300000 for improvement of the sports facilities &proper conduction of all inter and intra hall activities.
- •Successfully conducted more than 50 practice sessions which lead the Athletics team to secure 3rd position in the Inter Hall Competition.
- •Organized various events like **Cric-Mania** which is the biggest tournament for cricket open to all the students of IIT Kharagpur.

EXTRA CURRICULAR ACTIVITIES

- Part of the Gold wining cricket team of Rajendra Prasad Hall in the Inter Hall General Championship 2023
- Part of the Gold wining Athletics Team of Rajendra Prasad Hall in the Inter Hall General Championship 2023.
- Part of the Gold wining Choreography team of Rajendra Prasad Hall in the Inter Hall General Championship 2022
- Cadet at unit 3 BENGAL AIR (TECH) SQN, National Cadet Corps (NCC), Kharagpur Group, IIT Kharagpur 2020-2022.