



## EDUCATION

| Year | Degree/Exam           | Institute                   | CGPA/Marks |
|------|-----------------------|-----------------------------|------------|
| 2021 | M.TECH Dual Degree 5Y | IIT Kharagpur               | 7.06 / 10  |
| 2015 | AISSE, CBSE Board     | Satyam International, Patna | 83.8%      |
| 2013 | AISSE, CBSE Board     | B.D Public School, Patna    | 10 / 10    |

## INTERNSHIPS

|  |                              |
|--|------------------------------|
| <b>Data Science   Landryt</b>  | <b>(Apr 2020 - Jun 2020)</b> |
| <ul style="list-style-type: none"><li>•Built a Custom trained <b>NER Model</b> to correctly identify the key entities like property address, in the land records for the Karnataka state</li><li>•Worked on <b>image classification, image processing</b>, extracted text data from images using OCR, OpenCV and analysed using NLP</li><li>•Scraped the Data from PDS portal, <b>annotated</b> the data to optimize the performance of NER Model, used this data as input to NER Model</li><li>•Achieved <b>F1-score</b> of 0.721, <b>Precision</b> of 0.728 and <b>Recall</b> of 0.714 for custom trained Model with just 60% of available training data</li><li>•Compared performance of trained Model &amp; blank <b>SpaCy</b>, our Model outperforms F1-score of blank SpaCy model with 90% training data</li></ul> |                              |
| <b>Business Intelligence Analyst   FabHotels</b>   | <b>(May 2019 - Jun 2019)</b> |
| <ul style="list-style-type: none"><li>•<b>Automated</b> marketing cost report from various channel of FabHotels using <b>Selenium</b>, also implemented live update of report on server</li><li>•<b>Scrape data</b> of FabHotel's properties across various OTAs, also pre-processed and analyzed the data so as to provide the useful insights</li><li>•Managed to saved the valuable time of company by <b>8 to 10 hours per week</b> that sums up to 30+ hrs per month</li></ul>  |                              |

## PROJECTS

|   |                              |
|---|------------------------------|
| <b>IOT's based Smart Personal Protective Equipment   Prof. J. Maiti   BTP</b>   | <b>(Jul 2019 - Nov 2019)</b> |
| <ul style="list-style-type: none"><li>•Built a sensor embedded <b>IOT's based Smart Personal Protective Equipment</b> i.e. <b>Safety Jacket</b> for the safety of mining workers</li><li>•GPS Module alongwith IOT's is used to track the live location of workers. Heart-Rate sensor is used to measure the fatigue level of workers</li><li>•Used MQ-9 to detect the harmful gas like methane, also DHT22 is used to measure the body temperature and surrounding temperature</li><li>•An alarming system is set to get an alert if any parameter crossed the set threshold value, thus it ensures safety against upcoming danger</li></ul> |                              |
| <b>Decision tree based classification   Dr. Debasis Samanta   Term Project</b>  | <b>(Oct 2019 - Nov 2019)</b> |
| <ul style="list-style-type: none"><li>•Built a <b>decision tree classifier model</b> based on <b>c4.5 algorithm</b>. Divided the dataset in 2:1 ratio using <b>random sampling method</b></li><li>•Reported performance measures classifier in terms of <b>confusion matrix, predictive accuracy, F1-Score, Precision and Recall</b></li><li>•Used <b>k-fold cross validation</b> technique with different value of k, also obtained <b>ROC curve</b> with different value of k</li></ul>   |                              |
| <b>Demand Forecasting of Tea Price   Prof. S.P. Sarmah   Term Project</b>   | <b>(Aug 2018 - Oct 2018)</b> |
| <ul style="list-style-type: none"><li>•Collected <b>Time series data</b> of tea price of 5 years from 2010 to 2014, Cleaned and manipulated to bring data in correct format</li><li>•Identified and observed the <b>trend in data</b> and removed the trend. <b>Forecasting</b> is done for next 6 months using <b>ARIMA model</b></li><li>•Calculated the forecast error like <b>RMSE, MAE, MAPE</b> to validate the forecasting</li></ul>   |                              |
| <b>Simulation of Kharagpur Railway station   Dr. Goutam Sen   Term Project</b>  | <b>(Jan 2018 - Apr 2018)</b> |
| <ul style="list-style-type: none"><li>•Created a simulation model of Kharagpur Junction multi track Layout in ARENA software</li><li>•Collected arrival and departure timetable of train at Kharagpur Junction and understood the track layout system of Kharagpur junction</li><li>•Determined the average waiting time of train at platform and cross verified the distribution followed by average waiting time of train</li><li>•Reduced the waiting time of train and analysed the mental workload on operator under various level of stress</li></ul>   |                              |

## POSITIONS OF RESPONSIBILITY

|  |                              |
|--|------------------------------|
| <b>Hockey Team Captain   Lal Bahadur Shastri Hall Of Residence</b>   | <b>(Apr 2019 - Mar 2020)</b> |
| <ul style="list-style-type: none"><li>•In my tenure Lal Bhadur Shastri Hall of Residence represented 2 teams that participated in Inter Hall Hockey General Championship 2020</li><li>•Led Hockey team of Lal Bahadur Shastri Hall of Residence to victory for the first time by our LBS Hall in General Championship in 2019.</li><li>•Responsible for the daily physical training of 40+ members of Hockey team of Lal Bahadur Shastri Hall of Residence</li></ul> |                              |

## COURSEWORK INFORMATION

|  |  |   |                 |
|--|--|---|-----------------|
| <b>Data Analytics:</b>                     | •Programming and Data Structures       | •Machine Learning Foundation and Applications | •Linear Algebra |
| •Data Analytics                            | •Probability and Statistics            | •Recommender System in E-Business             |                 |
| <b>Industrial Engineering:</b>             |  |   |                 |
| •Operations Research and Heuristic Methods | •Game Theory and Application           | •Information Systems                          | •Simulations    |
|  | •Logistics and Supply Chain Management |   | •Optimization   |

## SKILLS AND EXPERTISE

**Programming Languages:** C++ | Python | R | SQL | MATLAB  
**Softwares:** MySQL | IBM CPLEX | ARENA | Arduino  
**Tools and Techniques:** OpenCV-Python | Natural Language Processing | Regression

## AWARDS AND ACHIEVEMENTS

- Selected within Top 30 students by clearing the **SUPER-30** examination conducted nationwide in which more than 10k students appeared
- Secured State rank of 75 in International Informatics Olympiad, a programming competition for secondary school students

## EXTRA CURRICULAR ACTIVITIES

- Won **Gold medal** in the Interhall Hockey General Championship among 11 other Halls of IIT Kharagpur in the academic year 2019
- Participated in Awareness program on Disaster Management covering the basics of Rescue Techniques, First Aid, Fire Fighting
- Member of National Sports Organisation, Health and Fitness for the academic Session 2016 to 2018 at IIT Kharagpur