



# CHAITANYA RAI

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## EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2021	B. Tech Chemical Engineering	Indian Institute of Technology, Kharagpur	8.8/10
2016	XII(CBSE)	Maheshwari Public School, Jaipur	91.4%
2014	X(CBSE)	Maheshwari Public School, Jaipur	9.2/10

## TECHNICAL SKILLS

**Programming Languages:** C/C++, R programming, Python, MATLAB, OCTAVE, JAVA, Lingo

**Software:** MySQL, MS Visio, MiniTab, MS-Excel, MS-PowerPoint

## UNDERGRADUATE AND ONLINE COURSES

**Undergraduate:**

Probability and Statistics | Programming and Data Structures | Basic Economics | Transform Calculus

**Online:**

Machine Learning by Andrew NG(Coursera) | Analytics Edge (edX) | Python for Data Science (edX) | C++ | Deep Learning

## MAJOR PROJECTS

**Multi-objective optimization-based machine learning approach in prediction of occupational risk | IIT Kharagpur |**

**Research Project | August 2018 - Present**

- Employed SVM and Random Forest after processing the data to predict the class of risk and compared their accuracy
- Used NSGA-II and MOPSO for tuning and optimizing parameters of the algorithm to improve the performance of classifier
- Analysed best classifier by taking use of Global Criterion Method (GCM) among many algorithms for injury risk prediction

**An integrated fuzzy multi-criteria decision-making approach for green supplier selection with order allocation | IIT Kharagpur**

**Research Project | August 2018 – January 2019**

- Applied Z-Number Best Worst Method (ZBWM) as a Multi Criteria Decision Making (MCDM) method to weight green criteria
- Employed Fuzzy-PROMETHEE and F-TOPSIS method to rank suppliers 14 evaluation criteria and analyzed important criteria
- Employed FMOLP as a Multiple Objective Optimal Order Allocation to allocate orders to many suppliers to maximize benefit

**Open IIT Data Analytics | IIT Kharagpur**

**September 2018**

- Employed ARIMA Time Series Model to the given data of sales of medicine to predict the sales pattern in coming years
- Deduce interpretation from analyzed data to device Inventory Management Strategy to maximize profit and increase sales
- Platform used: Python and MS-Excel

**NetApp Data Challenge | Kshitij, IIT Kharagpur**

**January 2019**

- Performed Text Classification on the given data of news Headlines and description by using Natural Language Processing tools
- Used TF-IDF features and Topic Modelling for feature extraction and trained model using SVM and Neural Network
- Used Model Ensembling to improve the accuracy by using predictions from multiple machine learning algorithms

## POSITIONS OF RESPONSIBILITY

**Senior Reporter | Awaaz, IIT Kharagpur**

- Designed posters for several events and monthly newsletter, reaching over entire institute community
- Sponsorship collection from local and online sponsors to raise fund for monthly publication
- Analysed the problems pertaining in the campus and took initiatives to reach out to the administration for solution
- Developed and published insights regarding several issues like mess problems, elections, placements and internships
- Currently heading and managing a team of 16 members and mentoring them.

**Sub-Head Design Team | Kshitij, IIT Kharagpur**

- Asia's largest techno management fest.
- Designed creative posters for several events of the fest resulting in significant increase in the reach of event.
- Involved in on campus and online publicity of fest, increasing the number of participants

## ACHIEVEMENTS/AWARDS

**2018** Bronze in Netapp Data Challenge, Kshitij- the largest techno-management fest in Asia, IIT Kharagpur

**2018** Bronze in Open IIT Data Analytics, IIT Kharagpur, problem statement given by INS Analytics, Kolkata

**2018** Bronze in Biz Quiz in Kshitij, IIT Kharagpur

**2017** Joint Entrance Examination (Advanced): 98.2 percentile in 200,000 candidates

**2017** Joint Entrance Examination (Mains): 99.77 percentile in 1,100,000 candidates