CHAITANYA RAI

Department of Chemical Engineering|17CH10058
C-409, Azad Hall of Residence, IIT Kharagpur
chaitanyarai21@iitkgp.ac.in | (+91)9933660003

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, MySQL, 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

INTERNSHIPS

Cignex Datamatics, Bangalore | Data Analyst **December 2018**

- Analyzed different parameters like discount, base price, outlet type etc. - possibly affecting the sales of a product of big mart
- Prepared various predictive sales models using polynomial, logistic and exponential regression on every type of product
- Predicted and analyzed the sales of each product at a particular store for different spans of time and total profit of retailer
- Formulated optimum discount combinations on products and brand level for maximum revenue with minimum net discount
- Built 3 models for discount optimization of top selling products, all products of a category and top selling brands of a category
- Demonstrated that target revenue per day can be achieved with 3-4% less net discount with calculated discount combination

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

ACHIEVEMENTS/AWARDS

2018 Finalists 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
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