

EDUCATION			
Degree/Certificate	Institute	CGPA / %	Year
M. Tech (Department of Management Sciences)	Indian Institute of Technology, Kanpur	-	2024- Present
PG Diploma (Educational Technology)	Indian Institute of Technology, Bombay	8.625 CPI	2023-2024
B. Tech (Man Made Fibre Technology)	Uttar Pradesh Textile Technology Institute Kanpur	8.63 CPI	2019-23
Higher Secondary Education (CBSE)	K.L.G Public School, Saharanpur	85.8%	2018
Secondary Education (CBSE)	K.L.G Public School, Saharanpur	10 CGPA	2016
PROJECTS			
FWI(Fire Weather Index) Prediction using Algerian Forest Fire data set Machine Learning Regression (Self Project)			
Objective	To predict FWI (Fire Weather Index) using Algerian Forest Fire data set using Machine Learning Algorithms.		
Approach	<ul style="list-style-type: none"> The dataset comprises of two regions having 10 independent features, and a dependent variable FWI with 122 observations in each region. Data Processing: Conducted EDA, feature engineering and handling missing values, Applied one hot encoding and feature scaling. Models Used: Employed Linear Regression with Lasso, Ridge and Elastic Net regularization. Hyperparameter Tuning: Utilize LassoCV, RidgeCV and Elastic NetCV to optimize model hyperparameters and enhance predictive performance. Toolset: Scikit-learn, NumPy, Pandas, Matplotlib, Seaborn 		
Result	Obtained MAE 0.5642 and R2 Score of 98.42% using Linear regression with Ridge regression		
Diabetes Prediction through Health Variable Analysis Machine Learning Classification (Self Project)			
Objective	To develop a binary classification model to accurately predict diabetes by analysing health-related variables.		
Approach	<ul style="list-style-type: none"> Variables are age, gender, BMI, hypertension, heart disease, smoking history, HbA1c level, and blood glucose level. Data Preprocessing: Conducted EDA, applied missing value and outliers' treatment, performed One-Hot Encoding, and feature scaling. Dealt with imbalanced data using class weight balancing, Oversampling, and SMOTE. Models Used: Employed Logistic Regression, Decision Tree Classifier, and Random Forest Classifier and optimized performance through hyperparameter tuning using GridSearchCV. 		
Result	Random Forest Classifier with Over Sampling gave balanced results: Recall = 0.79, Precision = 0.72, F1 Score = 0.75		
Mall Customer Segmentation Machine Learning Clustering (Self Project)			
Objective	To make clusters of customers in mall based on their Annual Income and Spending Score.		
Approach	<ul style="list-style-type: none"> Divided the customers into Five clusters for marketing and strategic planning purposes based on their Annual Income and Spending score. Performed data visualization and plotted elbow graph to identify the optimal parameter for K-Means clustering algorithm. Built final clusters using K-Prototype to address the categorical features also. 		
COURSEWORK & SKILLS *in progress			
Relevant Courses	Statistical Modelling for Business Analytics* Probability & Statistics * Operations Research for Management* Introduction to Computing*		
Skills	Python ML Libraries: NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn MySQL* Excel		
Soft Skills	Decision Making Adaptability Team Management Communication Skills Leadership Teamwork		
Certifications	<ul style="list-style-type: none"> Complete Machine Learning, NLP Bootcamp MLOPS & Deployment (Udemy)* 		
POSITION OF RESPONSIBILITY			
<ul style="list-style-type: none"> T4E 2023 Conference [Nov'23] <i>International conference on Technology 4 Education 2023 / 200+ participants</i> Assisted in facilitating multiple workshops, Tools Demo, and Best Teaching Practices Demo for 200+ attendees at the international conference on Technology for Education 2023. 			
ACHIEVEMENTS & EXTRACURRICULAR			
<ul style="list-style-type: none"> Achieved AIR 6 in GATE 2024 in Textile Engineering and Fibre Sciences conducted by Indian Institute of Science (IISc) Achieved AIR 56 in GATE 2023 in Textile Engineering and Fibre Sciences conducted by IIT Kanpur. Achieved AIR 182 in GATE 2022 in Textile Engineering and Fibre Sciences conducted by IIT Kharagpur. 			