

ACADEMIC DETAILS			
YEAR	QUALIFICATION	EDUCATIONAL INSTITUTION	CPI/%
Cont.	M. Tech, Industrial & Management Engineering	Indian Institute of Technology, Kanpur	8.3 CPI
2012-16	B. E., Mechanical Engineering	M.B.M Engineering College, Jodhpur, Rajasthan	69.5%
2011	Class XII CBSE Board	Demonstration School, Ajmer, Rajasthan	86.2%
2009	Class X CBSE Board	Samrat Public School, Ajmer, Rajasthan	84.0%

INTERNSHIP	
Machine Learning, JVR Automating hiring process using ML and AI <ul style="list-style-type: none"> Automating the process of hiring by developing a multimodal approach to explore the Big 5 personality traits (OCEAN) of a jobseeker based on their facial expressions (Depth-wise Convolutional Neural Network), audio emotions (LSTM) and textual sentiments (NLP-Natural Language Processing) through video resumes and audio interviews using the concept of ML and AI. Built Chatbot using Dialog-flow and python	(Apr'20- Jun'20)
Graduate engineer trainee, Wonder cement, Chittorgarh, Rajasthan <ul style="list-style-type: none"> Maintenance and troubleshooting of Crusher section: Maintain high equipment reliability, Man management and Inventory management. 	(Aug'16-Aug'17)

ACADEMIC PROJECTS	
Amazon Fine Food Review Classification (NLP) – Data Mining and Knowledge Discovery <ul style="list-style-type: none"> Classified Sentiment of the review: Performed data cleaning and done text pre-processing by stemming, stop-word removal and Lemmatization. Class imbalanced problem handled by under sampling and for train-test splitting, time-based sampling was used. Applied Feature Extraction Techniques – Bag of Words, TF-IDF, Average Word2Vec, TF-IDF Word2Vec; Models Applied– Logistic Regression, Random Forest Classification, GBDT, Support Vector Machine and Naïve Bayes with Hyperparameter tuning. Used Accuracy, Precision, Recall & F1-Score as metrics for comparison, which gave Logistic Regression with TF-IDF as winner with 0.93 accuracy. 	(Aug'19-Sep'19)

Customer Segmentation to define marketing strategy –Data Mining and Knowledge Discovery <ul style="list-style-type: none"> Data Visualization & Exploration: Check missing data, data duplication, plot KDE (Kernel Density Estimate) & heatmap of correlation metrics. Model Applied: K-mean clustering (Unsupervised learning). Optimal numbers of clusters are found by Elbow method. Visualization of clusters is done using Principal Component Analysis (PCA). Dimensionality reduction is done using Autoencoders & the same process is applied on reduced features. 	(Oct'19-Nov'19)
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Car Price prediction –Statistical Modelling for Business Analytics <ul style="list-style-type: none"> Carried out multivariate statistical regression analysis to study which variables are significant in predicting the price of a car. Performed EDA, Calculated correlation matrix, measure of fit, performed Breusch-Pagan Test for heteroskedasticity, checked for multicollinearity using VIF (Variance Inflation factor) and looked for omitted variable bias. Feature elimination is done using RFE (Recursive Feature Elimination) based on p-value and finalized model with R² and Adjusted R² -0.918 & 0.915. 	(Jan'20-Feb'20)
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Store Item Demand Forecasting – Statistical Modeling for Business Analytics <ul style="list-style-type: none"> Predicted 3 months of sales for 50 different items in 10 different stores from past 5-year sales data using time series techniques. Checked for stationarity, trend and seasonality using ADF-test (Augmented Dickey-Fuller), KPSS-test & Decompose Plot. Models Applied AR, MA, ARMA, ARIMA. For ARIMA (p,d,q) parameters p and q, PACF-test (Partial Autocorrelation function) and ACF-test (Autocorrelation function) used. Time series made stationary by Differencing (d). RMSE and MAPE used for evaluation metric. 	(Mar'20-May'20)
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Automate the process of detecting and classifying chest disease (Covid-19 & Pneumonia) –Applied Machine Learning (Jan'20-May'20) <ul style="list-style-type: none"> Implemented Convolutional Neural Network to extract features from the given images. Used Transfer Learning and implemented RESNET (Residual Network) as a starting point. Divided data into train, test & validation (use early stopping to exit training). Build deep learning model with AveragePooling2D, Flatten, Dense & Dropout layers. Done Data Augmentation and Batch Normalization to prevent over-fitting of model. Tuned hyperparameters and finalized model with an accuracy of 0.825. Evaluated model using metrics such as Accuracy score, Classification report and confusion matrix. 	
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Analyzing loyalty of the viewers towards a Tv channel –Marketing Research (Jan'20-May'20) <ul style="list-style-type: none"> Designed cross-sectional one-shot case study dynamic survey form using Scaling techniques, pretesting to control internal & external validity of Research Design. Data collected using online survey, Focus groups and Personal Interview Conducted Exploratory, Descriptive Research in SPSS using primary data obtained by convenience random sampling Analyzed sampled data using statistical test (One Sample t-test, one-way ANOVA, independent t-test) to test our hypothesis. 	
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COURSEWORK AND SKILLS	
Relevant Courses	Data mining Statistical Modeling for Business Analytics Applied Machine learning Marketing research Probability & Statistics Accounting & Finance Security Analysis & Portfolio Management Operations Research Introduction to computing-JAVA
Skills	PYTHON (NumPy, Pandas, SciPy, Sci-kit Learn, Seaborn, Matplotlib, Statsmodels) R JAVA SQL MS Office SPSS Machine Learning Natural Language Processing Statistical Analysis.

POSITION OF RESPONSIBILITY	
<ul style="list-style-type: none"> Student Nominee to Department Postgraduate Committee (DPGC), IME, IIT Kanpur (Oct'19-Aug'20) PG Senator at Student's Senate, IIT Kanpur (Aug'19-May'20) Department Placement Coordinator at Students Placement Office (SPO), IIT Kanpur (Aug'20-Present) Student Nominee to Council of Student Hostel Affairs (COSHA), IIT Kanpur (Oct'19-May'20) Member of training & placement office in B.E. (Aug'15-May'16) 	

CERTIFICATIONS	
<ul style="list-style-type: none"> Machine Learning: Hands-On Python & R in Data Science Deep Learning: Hands-On Artificial Neural Networks SQL - MySQL for Data Analytics and Business Intelligence 	