Pragya Jatav

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Education

Indian Institute of Technology, Kanpur

Bachelors of Technology in Materials Science and Engineering,
Minor in English Literature
2016 – 2020

Skills

Programming Languages
Python • R • SQL • Spark

Technologies and frameworks
• Pyspark • StreamLit • Advanced Excel • Google Cloud • Tensorflow • Matlab • GIT • Tableau • Hive • MLFlow • AWS • Advanced Excel • Hadoop • node JS

Libraries
OpenCV • pandas • numpy • sklearn • nltk

Courses

Probability and Statistics
Deep learning
Natural language processing
Introduction to data engineering
Data Structures Algorithms
Deep learning

Data Visualization

Distribution of minerals ores in India

Used India GIS Data to visualize distribution of mineral ores in India.

Campaign metrics visualization

Created a Tableau Dashboard depicting customer segmentation and campaign metrics for a fashion retailer

Extra-curricula and Volunteering

Taught Mathematics to 15 underprivileged children at Prayas, student run initiative at IIT Kanpur

AI/ML mentor at Masai school.

Executive, Design for Games and Sports council ,IITK

Secretary, Films and Media, IIT Kanpur

Work Experience

Blend 360
Data Scientist | Jul'22 – Present
- Explored various methods for developing a recommendation engine tailored for a home improvement company. Implemented three probabilistic models alongside one deep learning solution.
- Used RFM, behavioral and demographic data to create customer segments for a fashion retailer. Developed a DBSCAN clustering model.
- Created a demand elasticity model using ridge regression. Optimsed discounts by the predicted demand using genetic algorithm for a retailer.

ICICI Lombard GIC
Manager, Business Intelligence | Sep'20 – Nov'21

- Worked in the Business Intelligence team to develop and deploy solutions using data analysis, machine learning and deep learning techniques coupled with Natural Language Processing and Computer Vision.
- Analysed website data from Google Analytics for Lead prioritization
- Evaluated (using CSI and PSI) , retrained and monitored the previous classification model,deployed the same using Azure data factory.
- Developed an end to end solution for profiling and risk assessment of intermediaries
- Preprocessed images, developed a transfer learning model for image classification
- Streamlined the process to convert audio file types using python.
- Received accolade from Senior data scientists for analysing multiple speech to text transcription services in a short duration.

Projects

Predicting water level of a Lake | Time Series Forecasting
- Forecasting the water level of a lake, using data from the Acea Smart Water Analytics challenge
- Pre-processed dataset by handling missing values and resampling
- used ADF test to check for stationarity, performed feature engineering and autocorrelation analysis,generated predictions by using ARIMA model with MSE 2.5

Customer Churn Prediction | Data Analytics
- To identify customers likely to churn balances below a certain amount.
- Reduced imbalance from 90/10 to 60/40 using Near Miss Algorithm
- Analyzed correlation matrix and visualized dataset using boxplot to remove outliers of correlated features
- Developed a Logistic Regression Classifier; f1-score of 0.94 and Area under ROC 0.97 with cross-validation set

Academic Projects

Prepration of Molybdenum disulphide Quantum Dots
Prof. Krishanu Biswas, MSE IITK | May'19 - Jul'19
- Objective: To prepare MoS_2 Quantum Dots by liquid phase exfoliation method
- Prepared nanoparticles of Molybdenum disulphide by cryomilling using liquid nitrogen,Formed quantum dots through ultrasonication
- Verified the formation of nanoparticles and quantum dots through X-ray diffraction, SEM, FeSEM, Raman spectroscopy, UV Visible Spectroscopy and TEM.
- Impact: Successfully prepared Molybdenum disulphide Quantum Dots with size varying from 18 nm to 50 nm.

Image captioning using tensorflow
- Developed an encoder(CNN) and decoder(RNN) model with attention to generate captions on images.