

# 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 • Java • JavaScript

### Technologies and frameworks

MATLAB • MongoDB • Flask • GIT •  
Tensorflow • Tableau • Hive • Azure  
Data Factory • Azure Cognitive  
services • AWS • Advanced Excel  
• Hadoop • node JS • Linux OS

### Libraries

OpenCV • pandas • numpy • sklearn • nltk

## Courses

### MOOC

Machine learning  
Deep learning  
Natural language processing  
Introduction to data engineering

### Undergraduate

Probability and Statistics  
Introduction to Economics  
Fundamentals of computing  
Data Structures Algorithms  
Linear algebra and Ordinary  
Differential Equations  
Partial Differential Equations

## Extra-curricula and

### Volunteering

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

Executive, Design for Games and  
Sports council, IITK

Secretary, Films and Media, IIT  
Kanpur

## Experience

### 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 in coming times
- Pre-processed dataset to reduce 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

### Preparation of Molybdenum disulphide Quantum Dots

Prof. Krishanu Biswas, MSE IITK | May'19 - Jul'19

- Objective: To prepare MoS<sub>2</sub> 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.

### Distribution of minerals ores in India

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