

# 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

Data structures mentor for students  
at Navgurukul (a non profit working to  
democratise college education)

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

- 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.