



## Shikha Singh

Roll No.: 20200048

Bachelor of Technology

Production and Industrial Engineering

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GitHub Profile

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## EDUCATION

- Motilal Nehru National Institute of Technology** 2020-Current  
*B.Tech. Production and Industrial Engineering* CGPA: 8.78
- Central Academy, Jhansi** 2019  
*Central Board of Secondary Education, Class 12* Percentage: 96.2
- Central Academy, Jhansi** 2017  
*Central Board of Secondary Education, Class 10* CGPA: 10

## PERSONAL PROJECTS

- Customer Segmentation in Online Retail** Nov. 2022 - Feb. 2023  
*Used unsupervised learning to generate customer insight*
  - Tools & technologies used:** Python, Jupyter Notebook, Pandas, Unsupervised Learning, Data Analysis
  - Aim:** Analyze customers as per their spending habits and thereby group them in appropriate no. of clusters. Prescribe business action for each segment. **Data Source:** The UCI Machine Learning Repository
  - Description:** Cleaned nulls and duplicates followed by feature exploration.
  - Conducted **Recency, Frequency, Monetary Analysis (RFM)**. Removed skewness using **log transform**. Used **Standard scalar** before K-Means Clustering.
  - Results:** Used **K-means clustering** and **Silhouette Score** to obtain three distinct segments of customers, namely **Major, Average, and Churn**. Proposed actionable insights for each segment.
- Adidas Business Case** Aug 2022-Oct 2022  
*Analyzed Adidas sales data to propose business action*
  - Tools & technologies used:** Python, Jupyter Notebook, Pandas, ANOVA, Data Analysis
  - Aim:** Generate insight into Adidas sales across the USA and suggest business sectors to target for maximizing profits on sales. **Data Source:** Kaggle.
  - Description:** Removed outliers using **z-score** and **interquartile range** methods in Python pandas. Generated visualizations for top products, retailers etc.
  - Results:** Increase online sales, target South USA and female footwear as it generated max profit per unit sales.
  - Validation:** Conducted **ANOVA** to ensure that the operating margin is a function of product, region, and sales method. Thus, the proposed suggestions were generalizable to the wider population outside the sample.

## TECHNICAL SKILLS AND INTERESTS

**Languages:** C++, Python, SQL

**IDE's:** Jupyter Notebook, VSCode

**Soft Skills:** Creative Thinking, Communication, Curiosity, Collaboration

**Areas of Interest:** Business Analytics, Machine Learning

## CERTIFICATION

- SQL Certification, Hackerrank** 2023

## POSITIONS OF RESPONSIBILITY

- Girls Manager, Girls Kabaddi Team MNNIT, Inter NIT Sports Meet** 2023
- Content Writer, MNNIT Times (Reporting Club)** 2021-present

## EXTRACURRICULAR

- MUN, Eloquence, Participated in MUN, Eloquence (Culrav 22)**
- Member, Skating Club, MNNIT**
- Member, MNNIT Times Reporting Club, MNNIT**
- Member, Girls Kabaddi Team MNNIT**

## ACHIEVEMENTS

- Semi Finals- Inter NIT Sports Meet:** Qualified for Girl's Kabaddi Semi-Finals, at NIT Surathkal 2023
- Quarter Final- Spardha IIT(BHU)** Qualified for Girl's Kabaddi Quarter-Finals 2022
- District Rank 3- Class 12** 3rd highest score in PCM in Prayagraj 2019