Arman Tiwari

B.Tech in Computer Science and Engineering (Data Science)
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Linkedin | **GitHub**

Education

Ramdeobaba College of Engineering and Management (RCOEM) — Nagpur, India
B.Tech CSE(DATA SCIENCE) — July 2023 - Present
CGPA: 8.88

Namo Rims Junior College — Pune, India
INTERMEDIATE/+2, HSC — 2022 - 2023
Percentage: 68.17%

Spicer Higher Secondary School — Pune, India
Matriculation, ICSE — 2020 - 2021
Percentage: 83.5%

Skills

Programming Languages:	Python, JAVA, C Programming
Libraries/Frameworks:	Flask, React JS, HTML, CSS, JS
Tools / Platforms:	Git, Power BI
Databases:	SQL

Projects / Open-Source

NewsLens AI-Powered Personalized News Aggregator & Bias Analyzer | Link *TypeScript.js, Flask*

- Built a full-stack intelligent platform that delivers real-time, user-specific news updates and analyzes news bias across sources.
- Implemented sentiment analysis using Hugging Face Transformers, VADER, and TextBlob.
- Developed a credibility scoring system for news using ML models trained on media bias datasets.
  Features: Real-time notifications, multi-source comparison, pop-up summaries, personalized domains.

SQL Saturday Madrid ML Challenge | Link *Python, SQL*

- Participated in the SQL Saturday Madrid Machine Learning Competition hosted by PASS Espaa.
- Task: Classify data points as "Benign" or "Malignant" using binary classification models.
- Evaluation Metric: F1 Score, optimized using precision-recall tradeoffs.
  Techniques Used: Feature Engineering, Logistic Regression, Random Forest, SVM.
  Submission Format: CSV with predictions.

Advancing Customer Segmentation: A Hybrid HDBSCAN-FCM Approach with Comprehensive Algorithmic Analysis | Link *Research Work (Under Submission)*

- Developed a hybrid clustering framework integrating HDBSCAN and Fuzzy C-Means (FCM) with PCA-based dimensionality reduction to enhance customer segmentation.
- Conducted an extensive performance comparison across 14 clustering algorithms using evaluation metrics such as Silhouette Score, Davies-Bouldin Index, and Calinski-Harabasz Score.
- The proposed model demonstrated superior ability to identify nuanced and high-value customer segments, enabling more targeted and personalized marketing strategies.

Certifications

- Machine Learning with Python | IIT Kanpur
- Leadership Skills | IIM Ahmedabad
- Prompt Engineering| Vanderbilt University