Akshat Rastogi

akshatrastogi6704@gmail.com | +91 9044092142 | linkedin | github

Education

VIT Bhopal University, BTech in Computer Science — Sept 2022 – Ongoing
- GPA: 9.08/10.0 (link)

Delhi Public School, 12th Standard — Apr 2021 – May 2022
- Percentage: 95.4% (link)

Delhi Public School, 10th Standard — Apr 2019 – Mar 2020
- Percentage: 93.8% (link)

Experience

Data Analyst Intern, Preprod Corp — Sept 2024 – Dec 2024
- Built ensemble models and clustering algorithms (DBSCAN, K-means) for pattern recognition, optimized data pipelines for 1M+ records using SQL, NoSQL, and graph databases, integrated MLFlow for lifecycle management, and collaborated in Agile sprints to improve delivery by 25%.
- Developed a synthetic data pipeline for churn prediction, simulating telecom customer data to improve model training and improve churn analysis efficiency by 30%.
- Integrated a tagging and analysis module for a large-scale product review tagging system using FastAPI and Streamlit, achieving 92% tagging accuracy and improving categorization efficiency by 40% with spaCy, rule-based detection, and transformer models.

Projects

Accurate AutoML tool | *Python, JavaScript, HTML5, CSS, MySQL, Docker*
- Built Accurate, an AutoML platform that simplifies machine learning by eliminating the need to code and improving efficiency by 60%.
- Enabling users to upload datasets and customize workflows through an intuitive form-based interface.
- Achieved a 40% reduction in development time while enhancing accessibility and efficiency for nontechnical users.

HVAC Improvement System (HIS) | *Python, JavaScript, HTML5, CSS, PostgreSQL, GenAI*
- Designed a machine learning model using LGBM Regressor to predict heating/cooling loads and appliance energy consumption for HVAC optimization
- Analyzed factors like temperature, humidity, and pressure and leveraged generative AI to suggest improvements for optimizing HVAC efficiency and energy savings
- Achieved an R^2 score of 61%, improving accuracy by 25%, and contributed to smarter HVAC engineering and reduced energy consumption.

Achievements

- **Winner, Buildathon Hackathon 2024** (40+ finalist teams), awarded an internship at Preprod Corp.
- **Published research on Glass Transition Temperature Prediction** at RTASCE 2023, improving predictive accuracy by 15%.
- **Top 10 in Kaggle competition** (3000+ participants), demonstrating expertise in data science and machine learning.

Certifications

- **Applied Machine Learning in Python (Coursera)** – Dec 2023
- **Privacy Security in Online Social Media (NPTEL)** – Apr 2024

Technologies

Languages: Python, C++, Java, Php
Libraries/Frameworks: NumPy, Pandas, Scikit-learn, Matplotlib, TensorFlow, PyTorch, Streamlit, React, Flask
Tools / Platforms: Tableau, Git, VS Code, Matlab, Docker
Databases: SQL, PostGre SQL, MongoDB