Akash Sharma

Summary

Data Science undergraduate skilled in Python, SQL, and machine learning. Experienced in building end-to-end ML pipelines including data preprocessing, model development, evaluation, and deployment. Proficient in predictive modeling, feature engineering, time series forecasting, and data visualization using Power BI, Matplotlib, and Seaborn. Research exposure in privacy-preserving ML with homomorphic encryption, with a focus on turning complex data into actionable insights.

Education

Bennett University, Greater Noida

August 2022 - Present

Bachelor of Technology in Computer Science & Engineering

Cumulative GPA: 7.5/10 12th Percentage: 88.4%

Technical Skills

• Programming Languages: Python, SQL, Java

• Data Analysis Visualization: Pandas, NumPy, Matplotlib, Seaborn, Excel, Power BI

• Databases: MySQL

- Artificial intelligence (AI) and Machine Learning (ML): Scikit-learn, TensorFlow, PyTorch, NLP, Deep Learning, Time Series Forecasting
- Core CS: Statistics, Probability, Hypothesis Testing, Feature Engineering
- Other Tools: Git, GitHub, Google colab, Vs Code, Streamlit

Projects

Ford Car Price Prediction

January 2025 - May 2025

(Python, Pandas, Scikit-learn, Seaborn, Linear Regression) • GitHub

- Developed an end-to-end predictive model for used Ford car prices, including data cleaning, preprocessing (missing value treatment, scaling), and feature encoding (One-Hot Encoding and Label Encoding).
- Built and evaluated Linear Regression models, demonstrating feature engineering impact and achieving high accuracy; conducted EDA with heatmaps, scatterplots, and boxplots to identify key price-driving factors.
- Translated raw data into actionable insights, showcasing proficiency in ML pipeline, statistical analysis, and data visualization.

Loan Status Prediction

March 2024 - May 2024

(Python, Pandas, Scikit-learn, Support Vector Machine, Streamlit/Flask) • GitHub

- Built a classification model for predicting loan approvals using demographic and financial data with preprocessing, imputation, and encoding.
- Engineered features like credit history and income percentile, performed EDA with correlation matrices and visualizations to identify key factors.
- Deployed the model as an interactive web application (Streamlit/Flask) enabling real-time predictions, demonstrating complete ML pipeline skills(data \rightarrow model \rightarrow deployment).

Personal Finance Dashboard

January 2024 - March 2024

(Power BI, SQL, Excel)

- Developed an interactive Power BI dashboard to analyze personal finances with year-wise and month-wise drill-downs.
- Applied SQL for data cleaning, transformation, and aggregation to prepare structured datasets for reporting.
- Designed custom DAX measures and KPIs (income, expenses, savings ratio), creating intuitive visualizations to convert raw data into actionable insights.

Research Experience

Privacy-Preserving CNN using Homomorphic Encryption

Presented to INDIACom 2025

- Developed privacy-preserving CNN model using homomorphic encryption (HE) for secure cloud-based ML.
- Optimized HE implementation to enable efficient encrypted classification while maintaining data privacy.