Nibedita Sahu

Data Scientist

Portfolio | GitHub | LinkedIn | Medium

PROFESSIONAL SUMMARY

Data Scientist focused on Python-first data analysis and Business Math and Statistics. I break problems down logically and use data to explain why patterns exist, not just what outputs show. Comfortable working across analysis, statistics, and SQL to support decision-making, with an emphasis on clarity, interpretability, and explainable reasoning.

SKILLS

- **Core Analytics & Programming:** Data analysis, data manipulation, statistical reasoning using Python (NumPy, Pandas, Scikit-learn, SciPy, StatsModels) and SQL (MySQL, PostgreSQL).
- **Business Math & Statistical Techniques:** Exploratory Data Analysis (EDA), probability & statistics, hypothesis testing, regression analysis, time-series analysis, with a focus on reasoning under uncertainty and explainable analysis.
- **Visualization & Analytical Communication:** Analytical storytelling and insight communication using Matplotlib, Seaborn, Power BI, and Tableau.

PROJECTS

End-to-End Time Series Analysis & Forecasting with Nutrition Data

Python: NumPy, Pandas, Matplotlib, StatsModels, Scikit-learn | Power BI, Tableau

- Designed a realistic nutrition time-series dataset from scratch and performed end-to-end temporal analysis, handling date granularity, trend, and seasonality to understand consumption behavior over time.
- Applied statistical forecasting techniques and communicated insights through BI reports and a detailed walkthrough, emphasizing interpretability, assumptions, and explainable reasoning.

Electric Vehicle Population Analysis

Python: NumPy, Pandas, Matplotlib, Seaborn | SQL | Power BI | Canva

- Analyzed large-scale electric vehicle population data using SQL and Python to study adoption trends, regional distribution, and growth patterns in a policy and decision-oriented context.
- Delivered insights through a multi-page Power BI report and a structured presentation, focusing on clear visual storytelling and explainable narratives for non-technical stakeholders.

Regression Framework for Systolic Blood Pressure Prediction

Python: NumPy, Pandas, Matplotlib, Seaborn, StatsModels, Scikit-learn, SciPy

- Built a regression analysis framework to explore simple and multiple linear regression settings, focusing on relationships, assumptions, and controlled experimentation.
- Examined regression mechanics through manual coefficient computation and library-based implementations to connect mathematical intuition with model behavior beyond predictive performance.

EDUCATION

Bachelor of Science in Mathematics

Kalahandi University, Bhawanipatna | Odisha, India | 2020 - 2023