Haniya Akhtar

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Professional Summary:

Data Science and AI specialist with applied expertise in Python, SQL, TensorFlow, and NLP. Experienced in building scalable, data-driven solutions across finance, energy, and automation. Strong foundation in predictive analytics, full-cycle model development, and background in research with ongoing Scopus publications and certifications from Google, AWS, and NVIDIA.

Education:

Computer Science (AI-ML) Engineering, University of Mumbai (CGPA – 8.96) **(June 2022 – June 2026)**
Relevant Coursework: ML, Deep Learning, AI, Statistics, Big Data Analytics, Data Analytics & Visualization, DBMS

Skills:

Languages & Tools: Python, R, SQL, Pandas, NumPy, Excel
Frameworks & Libraries: Streamlit, Shiny, Flask, LangChain, Gradio, scikit-learn, CatBoost, Prophet, SHAP, FAISS
Platforms & DevOps: SQLite, GitHub Actions, AWS, Azure, Power BI, Tableau

Projects:

- **Spatiotemporal Analysis of Bike Rental Trends using Environmental Data**

Forecasts city-wide bike demand using weather and calendar signals to uncover peak usage patterns, helping urban planners optimize station placement and fleet distribution.
Tools: R, Shiny, OpenWeather API, Tidyverse, Posit Cloud *View GitHub*

- **Deep Learning-Powered Multi-Asset Forecasting Engine** *(Research Paper in process for Scopus Publication)*

Real-time platform forecasting equities, crypto, and mutual fund trends to help individual investors identify market patterns and adjust portfolios with confidence.
Tools: Python, TensorFlow, Streamlit, yfinance, ta-lib, NewsAPI *View GitHub*

- **Adaptive Semantic Extraction System for Web-Scale Unstructured Data** *(Ongoing)*

Scalable web crawler using LLMs to extract high-relevance domain-specific content, supporting enterprise-grade document retrieval and contextual analytics.
Tools: Python, Crawl4AI, DeepSeek, LangChain, Pydantic

- **LLM-Powered Book Discovery Engine with Contextual User Modeling**

Conversational engine that personalizes book discovery by interpreting user sentiment and retrieving titles through semantic search, enhancing engagement for content platforms.
Tools: FAISS, LangChain,HuggingFace Transformers, Gradio, Python, Pandas *View GitHub*

- **Maintenance Monitoring Platform for Industrial Safety Automation** *(Research Paper in process for Scopus Publication)*

Cloud-deployed ML pipeline that models how student behavior influences performance, supporting continuous academic risk prediction and automated updates.
Tools: Python, Scikit-learn, Streamlit, SHAP, SQL *View GitHub*

- **CI/CD-Enabled ML System for Student Behavior Impact Analysis** *(Ongoing)*

Cloud-deployed ML pipeline that models how student behavior influences performance, supporting continuous academic risk prediction and automated updates.
Tools: Python, CatBoost, GitHub Actions, Azure, AWS

- **Havenly – Your AI-Powered Health Insurance Advisor**

AI-based advisory tool that simplifies policy search and selection by offering natural language responses tailored to individual healthcare needs and constraints.
Tools: Python, Streamlit, Gemini AI *View GitHub*

- **Self-Optimizing Power Grid AI for Real-Time Energy Fraud Detect on and Load Balancing** *(Ongoing)*

Smart grid system that balances load, forecasts demand, and detects anomalies using real-time Kafka streams, reducing losses due to theft and outages in urban zones.
Tools: Python, Kafka, GANs, RL (Stable Baselines), Prophet, SHAP, Streamlit

Leadership & Responsibilities:

Google Developers' Groups on Campus, Operations' Head **(October 2024 – May 2025)**

- Led a team of 20+ volunteers to execute developer-focused events, workshops, and speaker sessions.
- Oversaw event logistics, speaker coordination, & community outreach, driving participation and engagement across campus.

Research/Thesis, Courses & Certifications:

IBM Data Science Professional Certificate, CS50's Introduction to Databases with SQL *(Ongoing)*, Oracle DBMS Foundations, NVIDIA Generative AI with Diffusion Models, NVIDIA Building RAG Agents with LLMs *(Ongoing)*, DeepLearning.AI Supervised ML: Regression and Classification, AWS Academy Cloud Foundations, AWS Academy Cloud Architecture, Celonis Academic Process Mining Fundamentals