HAFSA KHANUM

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Analytical and driven Data Science student (BSc, 7th Semester) with a deep curiosity for turning complex datasets into actionable insights. Passionate about using data for ethical innovation in real-world systems—especially at the intersection of human behaviour, social equity, and AI. Actively building a portfolio that reflects initiative, technical rigour, and creative problem-solving.

EDUCATION

BS in Data Science – University of Engineering and Technology, Peshawar

2022 - Expected 2026

- Current CGPA: 3.84/4.00
- Dean's Honour List (4 consecutive semesters)
- Coursework Highlights: Machine Learning, Statistical Inference, Data Engineering, Ethics in AI

PROJECTS

1. XGBoost Model for Resource Allocation

Tools: Python, XGBoost, pandas, scikit-learn, SHAP

• Built and optimised an XGBoost model (92% accuracy) to predict resource needs in public health; used SHAP for interpretability and created stakeholder-friendly visualisations.

2. Breast Cancer Prediction Classifier

Tools: Python, scikit-learn, NumPy, seaborn, Matplotlib

• Developed a supervised ML model (Random Forest, 96% precision) for early breast cancer detection; performed EDA, feature engineering, and bias analysis.

TECHNICAL SKILLS

Languages: Python, R, SQL, Bash

Libraries/Tools: pandas, NumPy, scikit-learn, seaborn, Plotly, TensorFlow (beginner), Tableau,

Power BI, Git

Concepts: Supervised/Unsupervised Learning, Time Series, Model Evaluation, Data Cleaning,

Feature Engineering, NLP (Tokenisation, Lemmatisation), Data Ethics **Soft Skills:** Research, Technical Writing, Public Speaking, Peer Mentoring

CERTIFICATIONS

- IBM Data Science Professional Certificate Coursera
- Google Advanced Data Analytics Coursera
- HarvardX: Data Science edX
- SQL for Data Science University of California, Davis (Coursera)
- Introduction to Responsible AI Microsoft Learn

LEADERSHIP & INITIATIVES

Founder & President - Women in Data Science, UET Chapter

- Launched the university's first data science club with 40+ members
- Organised 6 workshops on ML, Git, and ethical AI for beginners

Volunteer Data Analyst – Local NGO (EduPower)

• Built a simple dashboard to track the attendance and progress of underprivileged school kids

PORTFOLIO

• Selected Blogs: "Ethics in Predictive Policing," "What Lyrics Say About Us"