FAIZA IQBAL

Contact: faiza.iqbal@admin.muet.edu.pk

A highly skilled Data Scientist with strong proficiency in Python programming and extensive experience in Natural Language Processing (NLP), Machine Learning, AI models, and SQL. I have a solid academic foundation with a Master's in Data Science and a track record of contributing to advanced research projects. Adept at managing and analyzing complex datasets, I am passionate about leveraging AI and data-driven insights to drive innovation.

EDUCATION

Master of Science (M.Sc.) in Data Science   Feb 2023 - Present
Mehran University of Engineering and Technology   *Jamshoro, Pakistan*
CGPA: 3.94/4.00
Thesis: An Explainable AI Approach to Speech-Based Alzheimer's Dementia Screening
Posgraduate First Position Holder
Skills: Explainable Artificial Intelligence, Machine Learning, Handcrafted features

Bachelor of Engineering (B.E) in Telecommunication   Oct 2018 - Dec 2022
Mehran University of Engineering and Technology   *Jamshoro, Pakistan*
CGPA: 3.82/4.00
Thesis: Evaluating feasibility of implementing Homomorphic Encryption
Annual Scholarship Holder, Top 10 Student in Bachelors
Skills: Data Security, Computer Networking, Machine Learning

WORK EXPERIENCE

Research Assistant - RADAR (Record Access and DAta Retrieval Center   Nov 2023 - Present
Mehran University of Engineering and Technology   *Jamshoro, Pakistan*

- Manage and analyze large datasets, focusing on university publications and rankings data. Conduct complex database queries to extract insights and trends, directly contributing to data driven decision making processes within the university.
- I am deeply involved in managing and analyzing data collection from diverse university sources, ensuring data integrity and consistency for accurate analysis and reporting. Play a key role in managing data that influences university rankings.
- Developed a user friendly web portal using PHP, HTML, and CSS, enhancing the accessibility of critical data at the RADAR Center. This portal streamlines data retrieval processes, allowing stakeholders to efficiently access and utilize information.

Research Assistant - Examination Department   Nov 2023 - Present
Mehran University of Engineering and Technology   *Jamshoro, Pakistan*

- Utilized my IT skills in the university's examination department, including database administration, management of website, web portals, and server. I also managed the QOBE software, ensuring its efficient operation for exam processes.
- Developed databases using SQL Server and utilized data analytics tools to gain insights from the examination data.
- Lead an innovative project to transform grading systems and bring about positive change.

PROJECTS

An Explainable AI Approach to Speech-Based Alzheimer's Dementia Screening

- Developed and deployed a machine learning model using Explainable AI techniques to detect Alzheimer's from speech data.
  Tools: Python, SpaCy, SHAP, LIME.

NLP-Based Classification and Severity Assessment of Anxiety and Mental Health Conditions

- Developed and deployed a machine learning model to detect Anxiety from speech data.
  Tools: Python, Machine Learning, Topic Modeling, Word Clouds.

Sentiment Classification using Advanced Data Analytics for ChatGPT

- Conducted sentiment analysis on ChatGPT related discussions on Twitter, utilizing advanced data visualization techniques to analyze public perceptions.
  Tools: Python, Sentiment Analysis, Word Clouds.

University Grading System Enhancement

- Contributed to the development of a novel relative grading system at the university, enhancing precision and fairness through data-driven methodologies.
  Tools: Python, SQL.

LANGUAGES

- English (CEFR C1)

SKILLS

Programming Languages: Python, MATLAB, C++, SQL
Libraries: Numpy, Pandas, Matplotlib, NLTK, SpaCy, Scikit-Learn, LIME, SHAP
Tools and Technologies: Data Science, Weka, SQL Server, Cisco Packet Tracer, eNSP, Linux, Latex, MS Office, PowerBI

PUBLICATIONS

Aslam, A. B, et al. (2024). Artificial intelligence-enabled 6G mobile systems. In A. Bourdena et al. (Eds.), *Intelligent technologies for healthcare business applications*, pp. 49-79, Springer. https://doi.org/10.1007/978-3-031-58527-2_3

CERTIFICATIONS

- Databases and SQL for Data Science with Python

- Python for Everybody

- Huawei ICT Competition (Outstanding Performance)

- PCAP: Programming Essentials in Python

- What is Data Science