Noor Fatima

Data Scientist/Machine Learning Engineer

📞 +92-3278734825 ✉ noorfatimaafzalbutt@gmail.com in linkedin.com/noor-fatima-afzal ⌂ github.com/NoorFatimaAfzal

Professional Summary

Data Scientist and Machine Learning Engineer with over 1 year of experience in developing and deploying machine learning models. Skilled in Python, scikit-learn, and data visualization tools, with expertise in data pre-processing, feature engineering, and model optimization. Proven ability to apply AI techniques to solve real-world business problems and deliver actionable insights.

Experience

Machine Learning Fellow   **June 2024 – Sep 2024**
Bytewise   *Lahore, Pakistan*
- Applied Natural Language Processing (NLP) techniques using NLTK for text pre-processing, tokenization, and sentiment analysis.
- Conducted data pre-processing, feature engineering, and exploratory data analysis (EDA) to prepare datasets for machine learning models.
- Developed and optimized machine learning models, improving performance through hyperparameter tuning and validation techniques.

Machine Learning Intern   **April 2024 – Present**
DataLabb   *Lahore, Pakistan*
- Assisted in developing and testing machine learning models, focusing on data pre-processing, feature engineering, and model evaluation.
- Implemented data cleaning and transformation pipelines to ensure high-quality input for model training.
- Collaborated with senior ML Engineers to fine-tune models and optimize performance through hyperparameter tuning and cross-validation techniques.

Frontend Developer   **April 2024 – Present**
DataLabb   *Lahore, Pakistan*
- Developed and maintained responsive user interfaces using React, integrating front-end components with Flask and Streamlit for seamless functionality.
- Collaborated on building interactive web applications, handling API integration, state management, and data visualization for a smooth user experience.

Education

Bachelor of Science in Computer Engineering   **Oct. 2023 – May 2027**
University of Engineering and Technology, Lahore   *Lahore, Pakistan*

Projects

A Whats App Chat Analyzer
- Developed a Streamlit app for WhatsApp chat analysis, featuring message statistics, activity timelines, word clouds, and emoji usage insights.

- Implemented interactive visualizations, including heatmaps and activity maps, to highlight user behaviour and messaging patterns.

Olympic Analysis Web App

- Developed a web application to analyze Olympic data, providing insights into medal tallies, country performance, and athlete statistics with interactive visualizations.

- Implemented features for detailed analysis, including overall trends, country-wise performance, and athlete-specific insights, enhancing data exploration.

Accord -Ask Anything About Islam

- Developed "Accord," a Python-based GUI application for scholarly discussions on religious topics, featuring user authentication, topic-specific channels, private messaging with scholars, and Namaz reminders.

- Implemented additional functionalities including a calendar for tracking important dates, options to listen to the Quran, read translations, and an engaging interface for enhanced user interaction and knowledge sharing.

Relevant Coursework

- Calculus
- Object Oriented Programming
- Ordinary Differential Equations
- Database Management
- Multivariate Calculus
- Machine Learning
- Functional English
- Deep Learning
- Programming Fundamentals
- Communication Skills
- Mathematics

Professional Affiliation

Co-Lead @ Cybersecurity Society   **July 2023**

- Led and coordinated cybersecurity initiatives, including organizing workshops, seminars, and events to enhance members' knowledge and skills.
- Collaborated with team members to develop and implement cybersecurity awareness programs and practical training sessions.
- Acted as a liaison between the society and external organizations, fostering partnerships and securing guest speakers for informative sessions.

Technical Skills

Programming Languages: Python, HTML/CSS, Java JavaScript, SQL
Developer Tools: Git, GitHub, Jupyter Notebook, Vs Code, PyCharm, Google Colab
Frameworks: TensorFlow, Pytorch, Keras, React, Streamlit
Tools: Pandas, NumPy, Seaborn, Matplotlib, Plotly, Scipy, TorchEEG, MNE
Technologies and Platforms: NLTK, Flask, Selenium, MongoDB, RESTful APIs
Pipelines, Hugging Face, OpenAI, ChatGPT
Methodologies: Exploratory Data Analysis, Machine Learning Engineering, Deep Learning, Natural Language Processing, Artificial Intelligence, Time Series Analysis, Databases, Data Analysis, Data Analytics, Text Classification, Data Visualization, Feature Engineering, Data Engineering
Fields/Solutions: Generative AI, Image Processing, Conversational AI, Chatbots, AI Solutions, Predictive Modelling, Quantitative Analysis/Quantitative Analytics, Text Classification, Sentiment Analysis, BERT (Language Model), GPT-3, Large Language Models
Soft Skills: Problem-solving, Critical thinking, Collaboration, Adaptability, Communication, Self-motivation, Attention to detail, Teamwork, Skill Development, Learning

Certificates and Achievements

- Beginner Guide to Git & Github (Microsoft) (Hands-on Practice)
- Introduction to Python programming (Microsoft) (Hands-on Practice)
- Fundamentals of Machine Learning (Microsoft) (Hands-on Practice)
- Neural Networks (Analytics Vidhya) (Core Concepts)
- Intro to Deep Learning (Kaggle) (Basic Concepts)
- Computer Vision (Kaggle) (Basic Concepts)
- Deep Learning with PyTorch (Coursera) (Image Segmentation)
- Frontend Development: Code with HTML, CSS, and JavaScript (Ustadam) (Front-End Development Fundamentals)