Syed Muhammad Asif Shah

Islamabad, Pakistan | +923485970602 | asif02et@gmail.com

ABOUT ME

A highly motivated individual with a Bachelor's in Mathematics, I possess a strong analytical mind complemented by a solid foundation in programming and Artificial Intelligence. I am proficient in Python and SQL, with hands-on experience gained from an AI virtual internship where I actively trained Machine Learning and Deep Learning models. My skills are further strengthened by the comprehensive NAVTTC AI course, which provided practical exposure to NLP, LLM, LangChain, LangGraph, and experience with the Frappe framework. I am eager to apply these technical skills, learn new technologies, and contribute to innovative software development projects.

PROFESSIONAL EXPERIENCE

Artificial Intelligence Intern   **(15/July/2025 to 02/September/2025)**
Digital Empowerment Network   **Virtual Internship**

- Implemented comprehensive machine learning workflows, covering data preprocessing, EDA, feature engineering, model training, and evaluation for both supervised and unsupervised learning tasks on diverse real-world datasets.
- Developed specialized AI applications, including image classification with transfer learning using pre-trained CNNs and advanced Natural Language Processing for text classification, sentiment analysis, and fake news detection.
- Focused on practical deployment and optimization by applying feature selection techniques to enhance model performance and efficiency, and by deploying machine learning models as interactive web applications using Streamlit.

TECHNICAL AND SOFT SKILLS

- **Languages & Framework:** Python, C/C++, SQL, NLP, Langchain, LangGraph, TensorFlow
- **Data Visualization:** Matplotlib, Seaborn, Scikit-learn, Jupyter Notebook

TECHNICAL PROJECTS

Fake News Detector:
- Developed a Fake News Detector using NLP techniques and Logistic Regression, achieving strong classification performance.
- Implemented a robust data pipeline, including text preprocessing (tokenization, lemmatization, stopword removal) and TF-IDF vectorization.
- Trained and evaluated the model using accuracy, precision, recall, F1-score, and confusion matrix, demonstrating its effectiveness in flagging fake or real news.

Travel Planner (Multi-Agent System):
- Engineered a multi-agent travel planner system using LangGraph, FastAPI, and Streamlit, orchestrating three specialized agents.
- Designed and integrated a Budget Calculator, Destination Research, and Itinerary Creator agent for comprehensive travel planning.
- Developed a full-stack application with a FastAPI backend and a Streamlit frontend, enabling seamless user interaction and agent collaboration.

EDUCATION

BS Mathematics (Sep, 2020 - Feb, 2025)   **International Islamic University Islamabad (IIUI)**

Relevant Coursework: Linear Algebra, Operational Research, Programming Language, Programming Fundamentals, Software Tools

CERTIFICATION

- Python Essentials 1 (CISCO Networking Academy)   (Sep. 2025)
- Python Practice: Real-World Coding Challenges (Linked In Learning)   (Apr. 2025)
- Learning SQL Programming (Linked In Learning)   (Mar.2025)
- Artificial Intelligence Intern (Digital Empowerment Network)   (Sep. 2025)
- CERTIFICATE OF PARTICIPATION "Exploring the Future of Data Science & AI" (DEN)   (Aug. 2025)