UMER AHSAN

Islamabad · mumer.yk@gmail.com · +92 334 578 0572 · https://www.linkedin.com/in/umerahsan1/

EDUCATION

FAST - National University of Computing and Emerging Sciences — Islamabad ,Pakistan
BS Computer Science CGPA : 3.23 — Aug 2019 - Jun 2023

WORK EXPERIENCE

The Skyline — Islamabad ,Pakistan
ML Engineer — Aug 2023 - Present

- I specialized in utilizing Large Language Models (LLMs), including open-source and OpenAI models, for downstream tasks. My expertise lies in fine-tuning, evaluating these models. I utilized Langchain for orchestration, enabling the development of LLM-based applications and the creation of intelligent LLM agents, contributing to innovative solutions.

TechnoColabs Software — (Remotely) , India
AI Intern — Aug 2022 - Sept 2022

- As an AI developer intern, I gained experience in various aspects of data science and machine learning, including data cleaning, visualization, pre-processing, and feature engineering. These skills have equipped me to effectively analyze and model complex data sets, and develop innovative solutions to real-world problems.

FAST - National University of Computing and Emerging Sciences — Islamabad ,Pakistan
Teaching Assistant — Jan 2023 - Jun 2023

- As a teacher assistant for a computer networking course, I was responsible for creating and grading quizzes and assignments, which involved gaining a understanding of networking concepts and principles. Through this experience, I developed strong communication and organizational skills, under the supervision of senior lecturer and managed a whole class

SKILLS

Hard Skills:	Machine Learning, Data Mining, Deep Learning, Natural Language Processing, LLMs
Tools and Languages:	C, C++, Python, Sql, Aws, Docker, Pytorch, Scikit-learn, Transformers, LangChain
Llms related techniques::	FineTuning, Peft, Prompt Engineering, RAG, LlmOps, Agents, OpenAI, HuggingFace

PROJECTS

Anigen *Python, Pytorch*
As part of my final year project, I developed urdu talking avatar that utilized Natural Language Processing (NLP) and Text-to-Speech (TTS) technologies to create a 3D avatar of the user in real-time. The application allowed users to enter Urdu text, which was then converted to audio and synced with the avatar's lips movements for a seamless user experience.It's a web application and it gives the Ai generated video in real time

ChatPDF *Python, Langchain, OpenAI*
I created a project by integrating OpenAI's Language Models with Langchain to build a conversational bot. This bot enables users to upload PDFs and effortlessly extract answers from the documents, thanks to the implementation of retrieval-augmented generation techniques, significantly improving the user's information retrieval experience.

Text Classification with Deep Learning using BERT *Python, Pytorch, Transformers*
Successfully completed a project focused on Text Classification using PyTorch BERT model. Adapted the model architecture for multi-class classification, optimized training with adjusted optimizer and scheduler settings. Developed a robust training and evaluation loop to monitor and enhance model performance, encompassing model persistence.

Text Summarization with Flan-T5 *Python, Pytorch, Transformers*
I created a project in text summarization using Flan T5, an open-source model from Hugging Face. My role involved fine-tuning the model and conducting thorough evaluations, ultimately improving and optimizing text summarization on our dataset.

Text Generation with Gpt-2 *Python, Pytorch, Transformers*
I created a project in text summarization using Gpt-2, an open-source model from Hugging Face. My role involved fine-tuning the model and conducting thorough evaluations, ultimately improving and optimizing text generation on our dataset.

Torcs

In this project, I developed an AI controller for a car that participated in a race with other cars. This involved gathering and analyzing data on various features such as fuel, speed, gear, steer, position, curve angle, and brake. I then used this data to train an AI model on independent features and obtain target values, demonstrating my proficiency in machine learning and programming.

CERTIFICATIONS

Generative AI with Large Language Models - DeepLearning.AI

Azure Cloud Fundamentals - Microsoft

Intro to Machine Learning - Kaggle

Data Visualization - Kaggle

Data Cleaning - Kaggle