Anas Jafri

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SUMMARY

Data-driven, analytical Data Scientist with extensive experience in Artificial Intelligence (AI). Builds, trains, and deploys machine learning models. Provides in-depth analysis, discovers root causes, and designs long-term solutions. Expertise in terabyte-size datasets, examining large amounts of data to discover hidden patterns, using data visualization tools. Proven track record of dealing with ambiguity, prioritizing needs, and delivering results in a dynamic environment.

EDUCATION

Bachelors of Computer Information Systems Engineering | NEDUET | Minor in Science | Karachi, Pk | 2023 | 3.1

EXPERIENCE

Associate Software Engineer | Kodexolabs | Karachi | October 2023 - Present

· Led the development and implementation of an AI-driven fashion image generation system, significantly enhancing the visual appeal and variety of products showcased in the e-commerce store.

· Design a try-on application specifically for outfits and hairstyles. Utilize Stable diffusion inpainting models and img2img generation technique along with controlnet to achieve the desired results. Fine-tune Lora models for specific hairstyles and outfits to achieve exact inpainting hence the high accuracy

· Implement Image pre-processing techniques and design functions for image segmentation, face detection, hair masking, and face orientation, and use YOLOv8 for hair & face detection and masking .Use k-mean for hair length detection to control short and long-contrast hair.

· Actively involved in the entire project lifecycle – from conceptualization and data collection to model training, validation, and deployment.

· Design a medical chatbot for doctors and patients . The project scope was to answer any medical-related query, diagnose patient disease, and record patient history

· Use llama-parse for chunking and hugging-face model for creating embeddings. Use Chromadb as a vector database to store embeddings and MongoDB for storing user conversation details . Implement advanced RAG techniques to improve LLM performance and avoid hallucinations. Use open-AI LLM and utilize the Langchain framework and its libraries to implement multiple RAG methods

· Use AWS as a cloud platform for project deployment

Machine Learning Engineer | Softech Worldwide | Karachi | December 2022 - February 2023

· Spearheaded a pivotal project, developing a redaction tool by collecting and annotating images using YOLO for object detection. Expertly pre-processed images and applied multiple image processing techniques, demonstrating proficiency in Python programming.

· Train the Computer vision model on collected and processed data for a specific toddler class and analyze model performance

· Collaborated seamlessly with cross-functional teams to achieve project milestones, showcasing flexibility and adaptability. Acquired valuable skills in image segmentation, convolutional neural networks (CNN), and recurrent neural networks (RNN).

Intend | Data Analyst | London | April 2024 - August 2021

· Utilized PowerBI, Tableau, and Python for effective data visualization and financial analysis, aiding in the formulation of efficient income management strategies. Collected, processed, and analyzed financial data to provide actionable insights, contributing to enhanced decision-making processes. Mastered various Python libraries, including Seaborn, to craft comprehensive data visualizations. Developed proficiency in data interpretation, manipulation, and report generation.

PROJECTS

Dynamic Chatbot | Final Year Project | August 2022 - August 2023

· Developed an NLP-based chatbot, integrating text processing techniques, ANN, and LSTM models. Utilized FastAPI and web sockets for seamless front-end and back-end integration, showcasing API design skills.

· Designed a custom bot without using any pre-trained LLM, and designed our own language model using ANN.

· Use standard NLP techniques for text-splitting , stemming,stop-words, and a bag of words for storing embeddings.

· The project scope is to provide custom chatbots to multiple businesses so that customer support becomes fast, cheap, and 24/7.

· The bot can be trained on any business dataset and answers according to that business needs

Emotion Detection | Personel | January 2023 - February 2023

· Leveraged sequential models and image preprocessing techniques to accurately detect emotions from images.

· It takes a user image or live camera image as input and detects the face, and its expressions, and based on pre-defined expression classes it classifies emotion.

· Collect multiple images with a variety of face expressions, label images, pre-process them, and train the model

Color Detection Tool | Personel | June 2023 - July 2023

· Designed a tool utilizing computer vision techniques to identify colors within images.

CERTIFICATIONS

Google Advanced Data analytics | Gooogle-Coursera | 2022

· This certification has been instrumental in helping me master data visualization and enhance my analytical abilities.

INVOLVEMENT

Member | Professional Association for SQL Server | September 2015 - January 2021

· Attended PASS Summit in 2017, 2018, and 2019 and participated in seminars on Columnstore Indexes, Windowing Functions, Data and Analytic Solutions in Azure and Virtual SQL Server Performance.

SKILLS

Python, SQL, Machine Learning, Deep learning, NLP, Computer vision, LLM, RAG, Langchain, AI agents, CNN, RNN, Image Classification, Image segmentation, Image masking, object detection, Generative AI (Stable Diffusion), Deployment, Web Services, AWS, Render, Data Analysis, PowerBI, Tableau, Pandas, Seaborn, Microsoft Excel, GitHub, FastAPI, Web Sockets