Anas Jafri

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SUMMARY

Experienced Data Scientist skilled in AI, machine learning, and analyzing large datasets to uncover actionable insights. Proven track record of delivering results and driving data-driven decision-making.

EDUCATION

Bachelors of Computer Information Systems Engineering | NEDUET | Karachi-PAK | 2023 | GPA-3.1

EXPERIENCE

Associate Software Engineer | Kodexolabs | Karachi | October 2023 - Present
- Design a try-on application for outfits and hairstyles using Stable Diffusion inpainting, img2img generation, and ControlNet. Fine-tune LoRA models for specific styles to achieve high accuracy.
- Implement image preprocessing techniques for segmentation, face detection, hair masking, and orientation using YOLOv8 and k-means for hair length detection. Oversee the entire project lifecycle from conceptualization to deployment.
- Design a medical chatbot for doctors and patients, focusing on answering queries, diagnosing diseases, and recording patient history.
- Use llama-parse for chunking and Hugging Face models for embeddings, Chromadb for vector storage, and MongoDB for conversation details. Implement advanced RAG techniques with OpenAI LLM using the Langchain framework. Deploy the project on AWS.

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 2022 - August 2022
- 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 a chatbot using the ANN model.
- Utilized FastAPI and web sockets for seamless front-end and back-end integration, demonstrating API design skills.
- Designed a custom bot without pre-trained LLMs. Employed standard NLP techniques: text-splitting, stemming, stop-word removal, and a bag of words for embeddings.
- Implemented machine learning algorithms, generating a 40% increase in accurate responses, and utilized continuous learning to adapt to real-time data refinements.

Color Detection Tool | Personel | June 2023 - July 2023
- Developed an advanced machine learning algorithm to enhance color detection accuracy, achieving a 95% success rate.
- Implemented real-time color recognition, reducing processing time by 40%.
- Conducted extensive testing and validation against a diverse dataset, verifying the tool's robustness across various lighting conditions and image qualities.

Emotion Detection | Personel | January 2023 - February 2023
- Leveraged sequential models and image preprocessing techniques to accurately detect emotions from images.
- Achieved an accuracy rate of 85% in emotion detection by training deep learning models on a diverse dataset of facial expressions, utilizing TensorFlow and Keras for model development and performance optimization.
- Implemented a real-time emotion detection system using webcam feeds, resulting in a 10% improvement in user engagement for interactive applications, and reduced latency to under 2 seconds.

CERTIFICATIONS

Google Advanced Data analytics | Gooogle-Coursera | 2022
- This certification has been instrumental in helping me master data visualization and enhance my analytical abilities.

SKILLS

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