Muhammad Shoaib

ML/AI Engineer

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Professional Summary

Experienced **ML/AI Engineer** with **1.2 year of experience**, specializing in Generative AI LLMs. Proficient in developing and deploying cutting-edge AI solutions within SaaS and PaaS environments.

Education

UNIVERSITY OF AGRICULTURE

Burewala, Pakistan

BS Information Technology - 4 years

Oct 2020 - May 2024

Professional Experience

OCTALOOP TECHNOLOGIES

Mar 2024 – present

A multi-faceted IT powerhouse offering a comprehensive suite of services that span AI, Blockchain, Web and software development, cloud computing, and strategic marketing.

Al Developer - Onsite

- Developed a scalable, Al-powered-white-label pay-per-minute-calling-platform from scratch, architecting the entire backend using FastAPI.
- Integrated Stripe for secure, real-time payment processing and Twilio for live voice/video communications, powering monetized user calls
- Engineered robust, production-ready APIs with modular architecture and authentication, supporting scalability, performance, and future extensibility

STECHAI Jul 2024 – Feb 2025

A service-based company delivering comprehensive data science, AI, and machine learning solutions.

Associate Machine Learning Engineer – Onsite

- Engineered high-performance Django and FastAPI backend services, increasing user traffic by 50%.
- Developed a Retrieval-Augmented Generation (RAG) chatbot using LangChain, Pinecone, and GPT-based models to provide precise legal assistance.
- Deployed the solution using Docker and AWS, ensuring high availability, scalability, and efficient resource utilization in a production environment.

NeuroOceans AI Mar 2024 – Jun 2024

A service-based company delivering comprehensive AI, and machine learning solutions through innovative, high-end projects.

Machine Learning Engineer Intern - Onsite

- Leveraged web scraping tools like Beautiful Soup to acquire data for the organization, resulting in a 50% increase in research efficiency with 8,000 company descriptions and quotes extracted.
- Built RAG-based machine learning solutions, setup end-end ml pipelines and used ml models.

Projects

Formulai - Worked as a Backend Engineer, implementing Al-driven health logic to determine the best supplements based on genetic patterns. This MVP enables users to receive personalized supplement recommendations by analyzing their genetic data and health history.

Legal Advisor RAG Chatbot - Developed a Retrieval-Augmented Generation (RAG) chatbot to provide accurate legal advice by combining retrieval-based knowledge with generative AI capabilities. The chatbot efficiently retrieves relevant legal documents, case laws, and regulations, enhancing responses with AI-driven insights to assist users in legal inquiries.

Technical Skills

- **Programming & Development:** Proficient in Python, Scikit-Learn, TensorFlow, Keras, PyTorch, NLTK, Transformers, EDA, ETL, Matplotlib, SQL, Vector Databases, Flask, Django, Docker, GitHub Actions, CI/CD pipelines, NoSQL, DSA, AI Agent, Stripe, Twilio.
- Data Science & AI: Expertise in Machine Learning, Deep Learning, Data Analysis, Predictive Modeling, Artificial Intelligence, Statistical Modeling, Data Visualization, Data Engineering, Model Deployment, Time Series Analysis, Cloud Machine Learning, Big Data Technologies, Natural Language Processing (NLP), Prompt Engineering, Generative AI, LangChain, Llama-Index, Retrieval-Augmented Generation (RAG) with both opensource and paid LLM models.
- Communication & Collaboration: Strong in Effective Communication, Collaboration and Team Building.
- Languages: Fluent in English and Urdu with full professional proficiency.

Certifications

Data Science Boot Camp Certificate - AtomCamp

Sept 2023 - Feb 2024

Gained expertise in data analysis, machine learning, data visualization, and AI essential skills for the field.