MOHAMMAD HUSSAM UL ISLAM

📞 (+91) 8767872521

mohammadhussam.ai@gmail.com huggingface.co/mhussam-ai

github.com/mhussam-ai

x.com/mhussam_ai

SUMMARY

Agentic AI Specialist and Voice Agent Developer skilled in designing and deploying LLM, LMM based multi-agent systems, RAG pipelines, and voice interfaces using LangChain, Crew AI, and Pydantic, etc Always Learning New Skills and Latest Tech (eg: AI Agent Development, RAG, MCP Servers) Experienced in Mentoring and Teaching students, delivering webinars, and participating in hackathons.

SKILLS

Programming and Data: Python (OOP), Pandas, NumPy, SQL, Git, Jupyter, Flask, FastAPI, Supabase AI and Machine Learning: Supervised/Unsupervised Learning, Neural Networks, NLP, Computer Vision Libraries and Frameworks: TensorFlow, PyTorch, Hugging Face Transformers, Scikit-learn, LangChain Prompt Engineering, Agent Frameworks and SDKs: PydanticAI, Agno, Crew AI, Lang Chain, AutoGen, Google Agent Development Kit (ADK), OpenAI Python SDK, Salesforce Agentforce.

Automation and Orchestration: N8N, Make.com, Relevance AI, Zapier, Langflow, AutoGPT.

Voice and Audio AI: ElevenLabs (TTS, STT, Voice Cloning), Google Realtime API, Open AI Realtime API (STS).

LLMs Local Deployment: GPT, Gemini, Claude, LLaMA, Deepseek, Custom LLM Locally (Ollama, LM Studio).

API's: Open AI Platform (Playground), Google (Vertex AI, AI Studio), Azure Openai, Azure AI Foundry.

Soft Skills: Collaboration, Agile methodologies, Technical, communication, Research interpretation.

EXPERIENCE

Data Science Trainee Intern - Bompix Mori IT Solutions Pvt. Ltd, Bangalore (Aug 2023 - Feb 2024)

• Involved in design of TensorFlow forecasting pipeline for logistics, reducing error and improving efficiency.

Machine Learning Research Intern - Spartificial Innovations, Remote

(Jan 2023 - May 2023)

- Supervised a team of 5 to build ML models using U-Net Architecture (from scratch) and ResNet-50 (Transfer Learning) for satellite imagery analysis achieving 91% accuracy in building and shadow detection (F1 Score).
- Designed scalable image data pipelines (10K+ images).
- Built data pipelines, improved machine learning workflows and evaluated model performance with key metrics.

PROJECTS

Multiple New Projects created using Open AI SDK, Google ADK, Eleven Labs, Relevance AI, etc (2025)

- Developed a Voice AI Agent for Customer Support using Eleven Labs SDK
- Architected and Developed a lead research and generation agent using Relevance AI
- Developed replica of OpenAl's Operator, leveraging <u>BrowserUse</u> and custom chain-of-thought prompts to enable autonomous task agent and research agent. Used PLAYWRIGHT (for reliable web interaction)
- GrainSight AI Grain Quality Prediction using Google ADK and gemini model (Improved prediction accuracy)
 - It is a Extension of <u>Grain Quality Predictor</u> (logistic regression models and label encoders trained on a grain quality dataset) developed as an Academic Project.

Predicting CVD - RNN for cardiovascular disease risk assessment

(May 2024 - Sep 2024)

Developed an RNN-based predictive model, enhancing healthcare decision-making.

Organic-Food-Traceability-Using-Blockchain - Academic Project

(Mar 2024 - May 2024)

StimulerVoiceX - AI-powered noise cancellation tool

(Jun 2023 - Aug 2023)

• Designed real-time noise reduction algorithm using TensorFlow/Keras

<u>CollegeBot</u> - Chatbot for College-Related Queries

(Jun 2022 - Sep 2022)

• Developed a chatbot using the Rasa framework to answer college-related queries efficiently.

EDUCATION

B.Tech in Artificial Intelligence

(Jun 2020 - May 2024)

G. H. Raisoni Institute of Engineering and Business Management

• **Key Coursework:** Python, Machine Learning, Deep Learning, Cloud Computing, NLP, Computer Vision, TensorFlow, PyTorch, Keras, Neural Network