Md. Hasibul Hasan

Phone: +8801729373218
Email: md.hasibul.hasan.code@gmail.com
Address: Middle Badda, Dhaka, Bangladesh
Linkedin: Md Hasibul Hasan
GitHub: DeepNeuralDog

SUMMARY

AI Engineer with 3+ years of experience building and deploying intelligent systems across computer vision, NLP, generative AI, and multi-agent architectures. Proven track record in both research—developing a high-performing violence detection model—and real-world impact through scalable, end-to-end ML solutions.

SKILLS

Languages
- Python, Javascript
- Go

Cloud Platform
- AWS
- GCP

Autonomous Agents & Multi-Agent Systems
- Autonomous Agents, LLM Agents, AI Agents
- Agent Orchestration, Multi-Agent Systems
- LangChain, LangGraph, Agent Development Kit
- RAG (Retrieval-Augmented Generation)
- Task Automation, Knowledge Retrieval
- MCP Servers, A2A Protocol
- API & Vector DB Integration (contextual)

Core AI/ML Engineering & MLOps
- Model Training, Evaluation & Optimization
- Scalable Inference, Real-time Inference
- Pipeline Automation, MLOps
- Production Deployment, AI Lifecycle
- API Integration, Application Deployment

Databases
- PostgreSQL, MySQL, MongoDB
- PGvector, ChromaDB, FAISS, Pinecone
- Redis, ElasticSearch

Data Engineering & Analysis
- Data Cleaning, Preprocessing, Transformation
- Feature Engineering, Outlier Detection
- Exploratory Data Analysis (EDA)
- Data Visualization (Matplotlib, Seaborn)
- pandas, numpy

PROJECTS

Hadeeth Verification Multi-agent System
- Designed a fact-checking system leveraging ADK(Agent Development Kit) to assess hadith authenticity using Quranic and Hadith knowledge.
- Each agent specialized in a domain (text retrieval, semantic matching, reasoning, verifying narrator chain) contributing to a final verdict with explainable evidence aggregation.
- Demonstrated advanced use of multi-agent orchestration, retrieval-augmented generation (RAG), and modular agent communication.

Multiagent RAG: Study-Focused Knowledge Assistant
- Built a multi-agent RAG system with LangChain + LangGraph to automate study-related tasks through agent collaboration.
- Agents handled retrieval validation, search, flashcard creation, quizzing, study plans, and summarization.
- Showcased skills in autonomous agent design and LLM-driven task orchestration.

Real-time Violence Detection System (Thesis)
- Developed a lightweight transformer-based model with Temporal Cross Attention Fusion and a memory-augmented module for detecting violence in CCTV footage.
- Outperformed state-of-the-art methods on the UCF Crime dataset, achieving high accuracy in both binary and multi-class settings.
- Optimized for real-time inference, showcasing skills in deep learning, video processing, and deployment.

AI-Powered Job Matching Platform

- Built a full-stack AI platform that matches job seekers and employers using vector similarity (KNN and cosine) over curated embeddings.
- Integrated PostgreSQL + PGVector with backend APIs and a responsive frontend for candidates and recruiters.
- Implemented smart filtering and transparent matching logic using contextual embeddings and scalable inference pipelines.

EDUCATION

Bachelor of Science in, Computer Science and Engineering
BRAC University, Dhaka, Bangladesh
CGPA: 3.45
Graduation Year: May, 2025

Higher Secondary Certificate (HSC)
Gopalpur Govt. College, Gopalpur, Tangail
GPA: 4.56
Year of Completion: 2020

Secondary School Certificate (SSC)
Suti V.M Pilot Model High School, Gopalpur, Tangail
GPA: 4.83
Year of Completion: 2017

REFERENCES

MD Ahsan Habib
Embedded System Engineer, Maple IT Solutions.
Connection : Personal
https://mapleitsolutions.net/