MD. HASAN IMON

ASPIRING AI/ML ENGINEER

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SUMMARY

Generative AI & Agentic AI Specialist with expertise in fine-tuning, multi-agent systems, RAG pipelines, and tool-augmented AI applications using LangGraph and modern orchestration frameworks. Skilled in delivering production-ready AI solutions with advanced reasoning, planning, and intelligent tool usage. Also experienced in Machine Learning and Deep Learning, including classification, regression, clustering, MLOps, NLP, transformers, and neural networks for scalable real-world applications.

EXPERIENCE

XYZ

Senior Data XYZ

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Praesent molestie orci ac nulla dapibus, eget suscipit felis porta.

Suspendisse fringilla et libero nec commodo. In hac habitasse platea dictumst.

EDUCATION

Bachelor of Computer Science & Engineering

City University, Bangladesh (2022 - Present)

CERTIFICATION

- Machine Learning Specialization by Stanford University (Coursera)
- Programming for Everybody by University of Michigan (Coursera)

SKILLS

- Generative AI & Agentic AI: Multi-Agent, Fine-Tuning(PEFT, LoRA, QLoRA), AgentOps, RAG Pipelines, HITL, Tool-Augmented AI, Memory-Augmented, Prompt Engineering
- Machine Learning & Deep Learning: Classification, Regression, Clustering, NLP, LLMs, Neural Networks (CNN, RNN, LSTM, GRU), Attention Mechanisms
- Frameworks & Libraries: LangChain, LangGraph, LlamaIndex, CrewAI, PyTorch, TensorFlow, Keras, Scikit-learn, Hugging Face, NLTK, spaCy, Transformers
- Databases: MySQL, MongoDB, ChromaDB, Pinecone, Vector Databases
- Frameworks & Libraries: LangChain, LangGraph, LlamaIndex, CrewAI, PyTorch, TensorFlow, Keras, Scikit-learn, Hugging Face, NLTK, spaCy, Transformers
- Other Tools & Technologies: DVC, Docker, CI/CD, FastAPI, FlaskPython, Git, GitHub, API Integration, Pandas, NumPy, Matplotlib, Seaborn

PROJECTS

TrueWealth AI: Your AI-powered financial strategist – GitHub

Multi-agent financial advisor with query breakdown & multi-stage planning.

- Developed a LangGraph-orchestrated multi-agent AI to provide professional, **context-aware financial insights from multiple sources** including PDFs and live news.
- Leveraged dynamic Tool Router and multi-source reasoning for accurate and adaptive investment guidance.
- Designed a user interface with seamless interaction to assist users in real-time financial decision-making.

InformaTruth: AI-Driven News Authenticity Analyzer – GitHub

Build a real-time fake news detection AI using fine-tuned models.

- Developed a multi-agent system leveraging fine-tuned Roberta (classification) and Flan-T5 (explanation) to detect misinformation from text, PDFs, and URLs.
- context-aware predictions, ensuring higher accuracy and reliability. Dynamic Tool Router and fallback agents to retrieve verified sources from DuckDuckGo and Wikipedia.
- Designed explainable outputs for users, improving trust and transparency in news evaluation.

AutoDocThinker: Intelligent Agentic Search Engine – <u>GitHub</u>

Build an intelligent document QA system using Agentic RAG

- Developed a multi-format AI system to ingest PDFs, DOCX, TXT, and URLs, leveraging Agentic RAG for structured, context-aware answers.
- Implemented dynamic tool routing and fallback strategies to ensure reliable information delivery.
- Designed a user interface enabling seamless interaction with documents of any format.

Translatica: English to Spanish Translation – <u>GitHub</u>

Developed a Fine tuned(with PEFT + LoRA) for high-fidelity AI literary translator

- Designed a modular system separating tokenizer and model layers for optimized translation and evaluation. Fine-tuning for preserving tone and context.
- Built a user-friendly Flask interface to provide smooth, real-time literary translations.

MediGenius: Medical AI Assistant – GitHub

Build an AI-driven medical assistant with multi-agent communication control.

- Developed a multi-agent AI assistant using RAG to deliver doctor-like, empathetic responses from medical PDFs and fallback web sources.
- Integrated **short-term memory** and state-based reasoning for context-aware, multi-turn consultations.
- Designed an accessible interface to reduce response time and improve medical guidance accuracy.