

HAMIM SAAD AL RAJI

Mohammadpur, Dhaka, Bangladesh

+8801317663416

✉ hamimsaad.raji@gmail.com

🌐 [linkedin.com](#)

🐙 [github.com](#)

🌐 [website](#)

SUMMARY

AI/GenAI Engineer with a B.Sc. in Software Engineering from IUT (CGPA 3.60/4.00) and an accepted **IEEE QPAIN 2026** publication on deep learning for medical imaging. Built several LLM-powered apps using LangChain, RAG with full-stack production experience serving **10,000+ users**.

TECHNICAL SKILLS

Languages: Python, TypeScript, SQL

AI / GenAI: LangChain, RAG Systems(Pinecone)

Deep Learning & Data: PyTorch, NumPy, scikit-learn

Cloud Platform: Azure (App Service)

Technologies/Frameworks: Express.js, FastAPI

Tool Environment: Git, Docker, Linux

EXPERIENCE

Full Stack Developer Intern

Oct 2025 – Feb 2026

Trust Innovation Limited — **ICT Company of Bangladesh Army**

Dhaka, Bangladesh

- Contributed in development of the **TIL Education Management System (TIL-EMS)** serving **10,000+ student records**, building end-to-end features with React, TypeScript, Node.js, Express, and Prisma.
- Designed a **financial automation system** with a hierarchical Chart of Accounts, double-entry vouchers, and a cron-based fee engine that auto-generated and validated thousands of transactions monthly.
- Refactored a **2,300+ line monolithic module** into a modular architecture, adding engines for routine conflict detection, automated result processing, and secure payment gateway integration.

RESEARCH & PUBLICATIONS

Evaluating CoAtNet for Multiclass Lung Cancer Classification on CT Images:

2026

A Benchmark Study on the IQ-OTH/NCCD Dataset | IEEE QPAIN 2026 | [IEEE Link](#)

- Benchmarked the **CoAtNet hybrid Convolution-Transformer architecture** for multiclass lung cancer classification on the IQ-OTH/NCCD CT dataset with an end-to-end DL pipeline, evaluated vs. baseline CNN/ViT models; accepted at **IEEE QPAIN 2026**.

PROJECTS

AI Interviewer | Next.js, Firebase, VAPI Voice Agents, Google Gemini

[LINK](#) | [DEMO](#)

- Built an **AI-driven voice interview platform** with VAPI voice agents, LLM-based dynamic question generation, and adaptive prompts that adjust difficulty in real time, with speech-to-text transcription.
- Built a Firebase-backed evaluation pipeline scoring candidates via **LLM-as-a-Judge** on technical accuracy, communication, and problem-solving; deployed on Vercel with serverless API routes.

Campus Haat | Next.js, MongoDB, Docker, Gemini Vision, Groq, Leaflet

[LINK](#) | [GitHub](#)

- Built a multimodal AI marketplace for university students where **Gemini Vision auto-generates product titles and descriptions** from image uploads, with **Groq-hosted speech-to-text** for English and Bangla voice listings.
- Implemented Leaflet-based meetup pinning with university geofencing as a default safety zone; containerized the stack with Docker and deployed on Vercel.

YouTube-Buddy: AI Chrome Extension | LangChain, Python, Google Gemini, Azure, JavaScript

[DEMO](#)

- Built a Chrome extension with a **Retrieval-Augmented Generation (RAG) pipeline** that answers context-aware questions about any YouTube video using its transcript as a knowledge base.
- Built the retrieval layer with **LangChain text splitters and vector embeddings**, using Gemini as the generation LLM; deployed the Python backend on **Azure** with response caching.

MarketPulse | Python, PyTorch, Hugging Face, FastAPI, Docker

[Hugging Face](#) | [GitHub](#)

- Fine-tuned a **DistilBERT transformer** on financial datasets to classify market sentiment, outperforming traditional ML baselines with an **0.84 Weighted F1 score**.
- Engineered a high-performance **FastAPI** service with **14.8ms latency**, enforcing reliability through strict data validation, **pytest** coverage, and secure **Docker** containerization.

EDUCATION

Islamic University of Technology — B.Sc. in Software Engineering | CGPA: 3.60/4.00

Gazipur, Bangladesh

Dhaka College — Higher Secondary School Certificate | GPA: 5.00/5.00

Dhaka, Bangladesh

ACHIEVEMENTS & RECOGNITION

Finalist, Bangladesh Blockchain Olympiad 2025 (Aug 2025). • **Runners Up**, Techathon National Robotics Fest Hackathon (July 2026). • **IELTS Academic Band 8.0** (C1 Advanced).