Shakil Ahamed Riaz

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Summary

AI Engineer specializing in Generative AI, Agentic AI, RAG, and production-grade LLM systems, with expertise in LangChain, LangGraph, MCP, and modern LLMs. Published researcher with 1,000+ competitive programming problems solved, combining strong software engineering and AI expertise to build scalable, reliable solutions.

Skills

Languages	Python, C/C++, JavaScript, SQL
GenAI & LLMs	LangChain, LangGraph, AI Suite, LangSmith, RAG, Prompt Engineering, LLM Fine-Tuning, Agentic AI, Multi-Agent Systems, Hugging Face Transformers, OpenAI API
ML & NLP	PyTorch, Scikit-learn, NumPy, Pandas, Deep Learning, NLP, Vector Embeddings
Backend & Web	FastAPI, Django, Django REST Framework, React.js, REST APIs, JWT Auth
Databases	PostgreSQL, MySQL, SQLite, Pinecone, ChromaDB (Vector DBs)
Cloud & DevOps	Google Cloud Platform, Docker, Git, GitHub, CI/CD

Work Experience

AI Engineer – Codixel **Jan 2026 – Present**
Dhaka, Bangladesh | On-site | Full-time

- Architect Agentic AI systems using LangGraph, LangChain, and MCP, powering 15+ multi-step LLM workflows with automated tool use.
- Build production Generative AI applications with RAG pipelines and vector databases, serving 5,000+ requests/day with 92% retrieval accuracy; integrate LangSmith for evaluation and observability.
- Optimize model selection, inference cost, and latency across AI features, cutting response latency by 35% and inference cost by 25% through cross-functional collaboration.

AI Engineer Trainee – Codixel **Oct 2025 – Jan 2026**

- Completed training in ML, deep learning, and AI engineering; delivered 2 hands-on NLP/LLM projects, earning promotion to AI Engineer within four months.

Research Assistant – Data Science Lab, DIU **Apr 2025 – Present**

- Conduct applied research in NLP, Generative AI, and ML; co-authored two peer-reviewed papers (Springer Nature LNNS accepted; one under review) achieving 97% model accuracy.
- Mentor 30+ students in Python, research methodology, and ML experimentation.

Projects

FluentBD AI – Real-Time Voice Agent for Spoken-English Practice
- Cascaded STT→LLM→TTS voice agent (Deepgram Nova-3, Gemini 2.5 Flash, Kokoro-82M TTS) via LiveKit/Pipecat, with RAG-based contextual feedback and an animated avatar. Tech: Python, LiveKit, Pipecat, RAG.

AI Performative – SEO Product Description Generator at Scale
- Generative AI engine producing SEO-optimized descriptions and structured data (JSON-LD) for 10,000+ products with rate limiting and quality validation. Tech: Python, FastAPI, LangChain, LangGraph.

LeadForge – AI Sales & Lead Generation Chatbot
- AI chatbot for B2B lead qualification with intent detection, dynamic prompts, and CRM-ready data capture. Tech: LangChain, FastAPI.

GreenCart – Carbon-Aware Online Marketplace
- Full-stack AI e-commerce platform with carbon tracking, AI recommendations, and admin analytics. Tech: Django, React, LangChain, Pinecone.

AIpply – AI Mock Interview & Recruitment Platform
- AI mock interview platform with real-time voice (STT/TTS) and role-specific questioning. Tech: Django, LLaMA-4.

Publications & Research

- **Protecting User Privacy in Mental Health NLP through Contextual LLMs** *Accepted, 2025*
  Arman, M.S.; **Riaz, S.A.**; Asaduzzaman, M.; Bhuiyan, T. – *TEHI 2025*, Springer Nature LNNS. Privacy-preserving NLP framework combining LSTM and LLMs with differential privacy; 93.36% accuracy.
- **An Interpretable ML Framework for Predicting Structural Heart Disease from ECG Using LLM-Powered Insights**
  Under Review
  Riaz, S.A.; Hasan, F.; Khalid, S.R.; Arman, M.S. – Submitted to *Informatics in Medicine Unlocked*. Explainable ML framework augmented with LLM-powered clinical insights for cardiac decision support.

Education

B.Sc. in Software Engineering (Major in Data Science) – Daffodil International University **Jan 2022 – Dec 2025**
CGPA: 3.46 / 4.00 | *Thesis: Hybrid ML & Generative AI Approach for Carbon Footprint Forecasting & Sustainable Policy Recommendations*

Problem Solving

- **Competitive Programming:** 1000+ problems solved across LeetCode (150+) | Codeforces (200+) | Beecrowd (Top 1%) | vJudge (110+) | CodeChef (120+).
- **ICPC** participant – team-based algorithmic problem-solving under time constraints, applying advanced data structures and algorithms.

Leadership & Extracurricular

- **Deputy, ACM Chapter | DIU SE Club** – Co-organized 7+ contests and workshops for 150+ participants, driving 35% growth in active membership.
- **Programming Contest Organizer | DIU SE Club** – Managed logistics for 5 intra-university contests (300+ participants avg.); contributed 10+ problems and judged.

Certifications

- **Claude Code 101** – Anthropic, Jun 2026
- **Generative AI Architecture and Application Development** – Coursera, Aug 2025
- **AWS Academy Machine Learning for Natural Language Processing** – AWS Academy, Aug 2025
- **AWS Academy Machine Learning Foundations** – AWS Academy, Jul 2025
- **AI+ Prompt Engineer Level 1** – Microsoft, Jun 2025
- **Full Stack Web Development with Python, Django & React** – Ostad
- **Master Git and GitHub – Beginner to Expert** – Udemy, May 2025

Declaration & Verification

I certify that all information provided in this document is accurate and subject to verification upon request. Scan the QR code for supporting documents.

Reference

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