# SHAON SIKDER

AI Engineer — Generative AI & MLOps

Portfolio: shaon2221.github.io LinkedIn: linkedin.com/in/shaon2221

EDUCATION

East West University

Dhaka, Bangladesh BSc. in Information and Communication Engineering; GPA: 3.46 / 4.0

Graduated June 2020

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Dhaka - 1212, Bangladesh

Matibhanga Degree College

Higher Secondary Certificate; Result: A

Graduated 2015

# SKILLS SUMMARY

- Generative AI: LLM Dev & Fine-tuning (GRPO, DPO, LORA/PEFT, Quantization), Adv. RAG (ChromaDB, Milvus, Pinecone), AI Agents (LangChain, MCP, Pydantic AI, LlamaIndex, LangGraph, CrewAI, DSPy), Prompt Engineering, Multimodal AI (CLIP), Llama series, BERT, GPT APIs, Vector Databases, Knowledge Graphs
- AI/ML Core: ML & DL Algorithms (Supervised, Unsupervised, Transformers), NLP, Computer Vision
- Frameworks: Python, TensorFlow, PyTorch, Scikit-learn, NumPy, Pandas, OpenCV, Hugging Face, FastAPI, Flask, Django, PySpark, Pydantic, Streamlit, Celery
- MLOps & Cloud: MLOps Lifecycle, CI/CD (GitHub Actions, Jenkins, GitLab CI), Docker, Kubernetes, AWS (EC2, S3, SageMaker, Lambda, Beanstalk), Azure/GCP (Familiar), MLflow, DVC, Monitoring, Terraform (Basic), Deployment Strategies
- Databases & Tools: SQL, PostgreSQL, MongoDB, Redis, Linux, Git, ETL, Data Mining, Web Scraping (Beautiful Soup, Selenium), Power BI
- Core Competencies: Statistical Analysis, Problem-Solving, Critical Thinking, Leadership, Collaboration, Communication, Adaptability, Ethical AI, Content Creation

EXPERIENCE

**Short Circuit Science** 

Dhaka, Bangladesh July 2024 - Present

AI Engineer

- o Develop and fine-tune ML models (TensorFlow, PyTorch) for medical imaging and sports analytics using Transfer Learning.
- o Architect & build multi-agent LLM systems (Co-Pilot) using LangGraph/CrewAI for drug discovery; develop advanced RAG solutions (ChromaDB).
- Collaborate with international, cross-functional teams for AI integration.
- o Design scalable backend APIs (FastAPI, Flask, Django).
- Deploy applications using Docker/Kubernetes, manage CI/CD (GitHub Actions) on AWS, oversee  ${\bf Postgre SQL/Mongo DB\ databases.}$
- o Translate business requirements into technical specifications & AI insights.

## Actionboard.ai / Deep Data Lab

Remote

AI Engineer (Contractual)

Dec 2024 - Present

- o Developed specialized AI agents and orchestrated Model Context Protocol (MCP) servers for real-time intent detection, data retrieval, and automated knowledge graph updates.
- Implemented MLOps pipelines to streamline deployment, monitoring, and integration with APIs for scalable, reproducible workflows.
- $\circ \ \ \text{Built advanced action-loop workflows enhancing knowledge acquisition, organization, and amplification.}$

Delineate Remote

AI Engineer (Contractual)

Dec 2023 - Dec 2024

- Developed AI agents to distill millions of scientific papers and datasets into actionable insights, accelerating drug development.
- Automated literature mining and curated MBMA datasets from 400+ clinical trials for benchmarking.
- o Designed LLM-powered on-premises search engines for pharmacokinetics and PKPD data retrieval.

#### Easital Technologies

Dhaka, Bangladesh

June 2023 - April 2024 AI Engineer

- o Spearheaded AI chatbot for 'Beeda' mega-app using fine-tuned Llama, LangChain, LlamaIndex.
- $\circ\,$  Increased user engagement by 20% via intuitive chatbot interactions.
- Established MLOps workflows (Docker, CI/CD with Git/Jenkins) on AWS.
- $\circ\,$  Reduced business card scanning errors by 35% using AI-powered OCR.

Piana Pte Ltd Singapore (Remote) Lead Data Scientist Oct 2022 - June 2023

- Led team of 4 developing social network analysis models, reducing simulated risk by 20%.
- o Built dashboards (Power BI, Streamlit) on AWS/Heroku.
- Engineered ETL & scraping solutions, reducing data retrieval errors by 15%.
- o Implemented XAI (SHAP) and automated monitoring for fairness.

o Developed APIs (Flask/Django) deployed with Docker on AWS/Heroku with CI/CD.

### Opus Technology Ltd

 $AI\ Engineer$ 

Dhaka, Bangladesh July 2021 – Sep 2022

- Streamlined AI ops with CI/CD pipelines, boosting MLOps efficiency by 20% on AWS.
- $\circ$  Developed esports prediction model achieving 10% higher accuracy than betting odds.
- $\circ~$  Led and mentored a team of 4 AI professionals.

#### Research

- Bone Marrow Classification: Effectiveness of Transfer Learning: (Ongoing) Applying Transfer Learning to enhance bone marrow classification accuracy using medical imaging.
- Thermal Comfort Analysis: Machine Learning & Explainable AI: (Ongoing) Applying ML & XAI to understand thermal comfort across geographies.
- Federated Learning Review: Smart Building Context: (Ongoing) Reviewing Federated Learning applications for energy efficiency & comfort in smart buildings.

#### Teaching

**Horizon Solutions** 

Dhaka, Bangladesh

Course Instructor, Generative AI: Basic to Advance

July 2024

 Developed and delivered course on LLMs, Transformers, RAG, Vector DBs, Knowledge Graphs, Agent Architectures, End-to-End AI projects.

Skill Hunt

Dhaka, Bangladesh

Course Instructor, Fundamentals of AI

Aug 2021

o Developed and delivered foundational AI course.

#### Projects & Media

• Data Discovery (YouTube Channel): Creator and host, producing Generative AI tutorials, experiments, and research reviews. (Channel Link)