Humayan Kabir

Contact

Address: Dhaka, Bangladesh

Phone: +880-1689961673

Email: humayan.kabir.official@gmail.com

LinkedIn: linkedin.com/in/humayan-kabir-linked

GitHub: github.com/HumayanKabir-re

Skills

- **Machine Learning & AI:**
  - Deep learning, CNN, and Transformers development.
  - Symbolic Regression model development.
  - LLM & GenAI integration, cloud-based inference tools, agentic automation (LangChain, MCP)
  - Image processing, object detection, and model evaluation.
  - Data preprocessing, Augmentation, Feature engineering.
- **Big Data Pipelines and Workflow Orchestration:**
  - Apache Spark, Apache Airflow, ETL Design.
  - HDFS, Distributed Processing.
- **Database and Backend:**
  - SQL: MySQL, PostgreSQL administration.
  - NoSQL: MongoDB administration.
  - API & middleware development (Python/Django REST).
- **Web and Mobile Development:**
  - Full-stack and multi-platform apps (Angular, Django REST).
  - CMS and custom backend solutions for SaaS applications.
- **Real Time Monitoring and Visualization:**
  - End-to-end real-time monitoring (Zabbix, Grafana).
  - High-availability and parallel-processing architecture.
- **DevOps and Engineering Practices**:
  - Version Control (Git), Containerization (Docker).
  - Agile Methodologies, DevOps, Containerization.
  - Unix Administration, Shell Scripting, Automation.
- **Soft Skills:**
  - Fluent in English with collaboration experience with teams across Asia, Europe, and North America.
  - Skilled in mentoring peers and junior engineers, fostering cooperative teams.
  - Adaptable to multicultural environments with a focus on continuous learning and reliability.

Education

- **B.Sc in Computer Science and Engineering (Machine Learning) - 2022**
  - North South University

Language

- English – Fluent
- Bengali (Bangla) – Native

Profile

B.Sc. in Computer Science & Engineering (Machine Learning major) with 3+ years of experience in software development, DevOps, and real-time monitoring solutions. Skilled in building deep learning models, LLM, GenAI, Cloud tools, Agentic systems, developing end-to-end data pipelines, containerized deployments, monitoring and visualization tools, and mentoring team members. Passionate about creating scalable, secure, and data-driven solutions. Open to opportunities that bridge AI research and real-world applications, especially in global and culturally diverse teams.

Professional Experience

Independent AI Projects – LLM Tools, Cloud tools, Security, and Education
Dhaka, Bangladesh (Jul 2024 – Present)

- Researched ML/AI-based approaches to enhance cybersecurity, prototyping on anomaly detection and encryption integrity tools (PyTorch, TensorFlow).
- Explored symbolic regression using CNN and transformer models on real and synthetic datasets, inspired by the AI-Feynman research project (PyTorch).
- Designed modular cloud automation pipelines with LLM integration to support analytics and data workflows (LangChain).
- Prototyped an AI-driven educational assistant to enhance learning outcomes and foster constructive feedback between teachers and students (CNN).

Specialist OSS Developer (Associate) – Banglalink Digital Communication Ltd
Dhaka, Bangladesh (Jan 2023 – June 2024)

- Functionally led the full-stack development and deployment of high-availability monitoring systems, enhancing incident response and ensuring zero downtime through parallel processing nodes (Zabbix, Grafana).
- Automated maintenance and optimized monitoring stack resource allocation, contributing to significant system load reduction and improved infrastructure efficiency (CPU: 20–40%, storage: 50%, alert processing: 15%).
- Guided 3+ new hires through hands-on onboarding support, fostering team integration and enabling smooth transition into independent responsibilities.
- Collaborated with global and internal teams to implement tools that enhanced team productivity and supported operational alignment.

Big Data Analyst (Associate) – Banglalink Digital Communication Ltd
Dhaka, Bangladesh (Oct 2022 – Dec 2022)

- Collaborated on scalable CDR data pipelines to support real-time KPI monitoring and feature engineering for internal ML analysis (Apache Spark, Airflow).
- Explored and tested distributed and parallel Big Data/ETL tools in a collaborative environment, fostering shared learning and strengthening data-driven development practices (HDFS, Spark, Airflow, PostgreSQL, Java, Python).
- Shared workflow knowledge and guided 2+ colleagues in skill development, promoting team sustainability and collective technical growth.

Python DevOps Engineer – Shurjomukhi Solutions Ltd
Dhaka, Bangladesh (Jan 2022 – Sep 2022)

- Worked closely with business teams to build and deploy a containerized Django REST platform in Agile sprints, aligning with investor engagement goals (MySQL, Docker).
- Collaborated cross-functionally with the ML team to design and deploy image recognition models in alignment with internal product goals.
- Supported the growth of 4+ junior developers and non-technical staff through hands-on mentorship, facilitating tool adoption, shared learning, and a culture of ongoing improvement.

Academic Research Project:
Real-Time Sign Language Detection using AI Use Case and Analysis (May 2021 - Jan 2022)

- Designed Deep Learning models (CNN, RNN, ResNet), created a Bangla Sign Language dataset.
- Implemented live sign-to-text translation and got user feedback on the most convenient Sign Language.