ABRAR FAIAZ ADNAN

abrar.adnan01@gmail.com ✉
https://github.com/AbrarAdnan
+880-176-714-5838 📞
www.linkedin.com/in/abrar-faiaz/ in
https://leetcode.com/u/AbrarAdnan/

SUMMARY

Machine Learning & Data Engineer with 4+ years of experience designing, training, and deploying scalable data pipelines and computer vision models. Proven track record of automating workflows to reduce processing times from months to weeks, and achieving over 97% accuracy in object detection deployments. Expertise includes statistical analysis (GCP, BigQuery and Tableau), creating dynamic dashboards, and building Retrieval-Augmented Generation (RAG) applications.

TECHNICAL SKILLS

Data Analysis & Visualization: Python (Pandas, NumPy, Matplotlib, Seaborn), Tableau, Looker Studio, ETL, Data Mining, Statistical Analysis, Data Preprocessing, BigQuery.

Databases: MySQL, MongoDB, and MS SQL

Machine Learning & AI: LangChain, LangGraph, PyTorch, TensorFlow, FastAI, Hugging Face, ONNX, OpenVINO, OpenCV, Scikit-learn, Model Evaluation and Model Development

Development & Automation: Blender 3D, REST APIs, Selenium, PyAutoGUI, Git, Docker, Linux

Soft Skills: Presentation, Communication, Team Collaboration

PROFESSIONAL EXPERIENCE

Software Engineer (Research & Development)
Tiger IT Bangladesh Ltd. | June 2023 – Present

- Improved fingerprint authentication accuracy by refining fingerprint segmentation, denoising, and background removal, and applying innovative machine learning methods to streamline the identification process.
- Developed ML-based disease detection system for hip dysplasia using image analysis and visualization techniques, enhancing diagnostic precision. Incorporated advanced preprocessing methods to reduce errors and improve disease identification accuracy.
- Evaluated, optimized, and deployed a YOLOv8-based tracking and detection model, achieving over 97% accuracy in production and a 10% increase in processing speed to drive operational efficiency.
- Engineered and deployed a face recognition-based attendance system and built automated KPI dashboards for employees, streamlining the check-in process and improving tracking accuracy.

Automation Engineer
Endangered Labs | Jan 2022 – May 2023

- Designed and implemented a robust ETL automation pipeline to process metadata for thousands of unique digital assets, scaling production capabilities and reducing end-to-end processing time from several months to just a few weeks.
- Collaborated with a global team to design and modify initial characters, ensuring full compatibility across the end-to-end automated process.
- Designed and implemented automation process for exporting 3D models in various versions to support other platforms.

Intern (E-Nothi Department)
a2i programme | Feb 2020- Mar 2020

- Verified and appended data for 1000+ educational institutions in the national education database.
- Collaborated with the data integrity team to resolve mismatches, ensuring 100% data accuracy.
- Made dashboard with summary of the institutions of different metrics.

EDUCATION

M.Sc. in Information Systems Security – Bangladesh University of Professionals (Ongoing)

B.Sc. in Information and Communication Engineering – Bangladesh Army University of Engineering & Technology (Feb 2017 – Jul 2021, CGPA: 3.56)

PROJECTS

- **<u>Distributed Order Fulfillment Backend Project</u>** – Developed a production-grade backend architecture capable of handling concurrent bulk orders and mitigating race conditions, ensuring data consistency and system integrity.
- **<u>Metacritic Game Data Analysis</u>** – Performed a comprehensive data analysis by scraping and cleaning over 100,000 game records. Developed a Tableau dashboard for interactive analysis of genres, scores, and platforms of the scraped data.
- **<u>Multilabel Game Genre Classifier</u>** –BERT-based NLP model for 74 genres; achieved 96.4% accuracy using advanced text preprocessing and feature engineering.
- **<u>Geekbot</u>** – Created a secure, private Retrieval-Augmented Generation (RAG) AI document assistant that can run entirely on a laptop, providing fast, confidential Q&A from personal files without cloud services. This project serves as a key foundation for building intelligent chatbots that use external data.
- **<u>Speech Analyzer</u>** – Built a video-based speech analysis tool that generates five communication metrics. The tool applies NLP pipelines for sentiment evaluation, which aids in decision-making.

ADDITIONAL TECHNICAL CONTRIBUTIONS

- **<u>Open-Source Contributor – Blend_My_NFTs</u>** –(1k+ GitHub stars): Implemented error-checking automation for 3D NFT blending workflows, improving reliability and reducing failures

TRAINING & CERTIFICATIONS

<u>Preparing for Google Cloud Certification: Cloud Data Engr</u> – Coursera.org (November 2025)
- Identify the purpose and value of the key Big Data and Machine Learning products in Google Cloud.

<u>IBM RAG and Agentic AI: Build Next-Gen AI Systems</u> – Coursera.org (Oct 2025)
- Completed 8 course professional certificate with in depth knowledge about LLM and their advanced uses.

Skills : LangChain, LangGraph, RAG, Vector Databases, CrewAI, AG2, BeeAI

Dokkho Data Science Program – MasterCourse Bangladesh Ltd. (Nov 2022 – May 2023)
- Completed 4 capstone projects in NLP, computer vision, and analytics.

Skills : Tableau, PyTorch, Selenium, OpenCV, Flask, Huggingface, NLP, Model Deployment, FastAI, TensorFlow

PUBLICATIONS

<u>Violence Classification and Detection Using Regional Data of Bangladesh: An AI Approach : BAUET Journal</u>

Collected, annotated the dataset and fine tuned using InceptionNetV2 to make a classifier

ACHIEVEMENTS

2nd Runners-Up – **BAUET Intra University Programming Contest** (100+ teams)

Top 15 – **Sheikh Kamal Incubation Center Startup Contest** (150+ teams)

1st Place – **Skill Quiz 2.0 by Youth Development Factory** (University Category)

REFERENCES

Md. Rajib Hossain, Ph.D.

Principal Data Scientist
bKash Ltd.

Mail: rajib.hossain@bkash.com

Cell: (+88) 01720596038

Md. Shakil Ahmed

Assistant Vice President, Research & Development
TigerIT Bangladesh Ltd

Mail: shakil@tigerit.com

Cell:(+88) 01719158103