

Rafid Ahmed

✉ ahmedrafid023@gmail.com | [ahmedrafid023.github.io](https://github.com/ahmedrafid023) | [Google Scholar](#)
[LinkedIn](#) | [AhmedRafid023](#) | [Kaggle](#)

EDUCATION

• University of Dhaka

BSc in Computer Science & Engineering

◦ CGPA: 3.54/4.00

Jan 2019 - Jan 2024

Dhaka, Bangladesh

RESERACH INTEREST

NLP: Low Resource Language; LLM Reasoning & Concept in LLM; Cultural & Value Alignment in LLM

Multimodality: Modality Gap & Alignment; Multimodal Adapter; Multimodal Self-supervised Learning; Medical AI (Visual Question Answering, report generation, small object detection)

EXPERIENCE

• Penta Global Limited [\[Globe\]](#)

AI Engineer

April 2025 - Present

Dhaka, Bangladesh

◦ **Current Project:** Currently working on Time series forecasting, Small object detection, Medical VQA and Report generation, and Fine-tuning LLMs for Hate speech detection.

• Eximus Technologies [\[Globe\]](#)

Software Engineer

March 2024 - February 2025

Dhaka, Bangladesh

◦ **Working Project:** Built and optimized web applications using Laravel, Vue.js, React.js, and MySQL. Developed APIs, integrated payment and payroll modules, improved UI with Blade and Tailwind, and enhanced system efficiency.

UNDER REVIEW PAPERS

C=CONFERENCE, J=JOURNAL, W=WORKSHOP

- [C] **Rafid Ahmed**, Mir Sazzat Hossain, Intesar Tahmid, Tasnimul Hossain Tomal, Md Fahim, Md Farhad Alam - **Evaluating Vision Language Models on Bangla Medical Visual Question Answering: Dataset and Benchmarking** [\[Manuscript\]](#)
- [C] Tasnimul Hossain Tomal*, Intesar Tahmid*, **Rafid Ahmed***, Mir Sazzat Hossain, Md Fahim and Md Farhad Alam - **Decoupling Representation for Fine-tuning with Linear Probing and LoRA on Robust Downstream Adaptation** [\[Manuscript\]](#)
- [W] **Rafid Ahmed**, Intesar Tahmid, Mir Sazzat Hossain, Tasnimul Hossain Tomal, Md Fahim, Md Farhad Alam - **How Good LLMs Are at Answering Bangla Medical Visual Questions?Dataset and Benchmarking**[\[Manuscript\]](#)
- [W] Md Mahir Jawad*, **Rafid Ahmed***, Ishita Sur Apan*, Tasnimul Hossain Tomal, Fabiha Haider, Mir Sazzat Hossain, Md Farhad Alam Bhuiyan - **Benchmarking Large Language Models on Bangla Dialect Translation and Dialectal Sentiment Analysis** [\[Manuscript\]](#)
- [W] Intesar Tahmid*, **Rafid Ahmed***, Md Mahir Jawad, Anam Borhan Uddin, Md Fahim, Md Farhad Alam Bhuiyan- **PentaML @BLP Shared Task 1: Linear Probing of Pre-trained Transformer based Models for Bangla Hate Speech Detection** [\[Manuscript\]](#)

PROJECTS

• Medical VQA LoRA

Tools: [\[Pytorch, Python, Llamafactory\]](#)



◦ Collected and curated over 7,000 X-ray, CT, and MRI images, annotated by skilled doctors for normal and abnormal findings. LoRA fine-tuned state of the art VLMs and benchmarked their performance in general and specialized case.

• Book Recommender System

Tools: [\[Pytorch, Python, Hugging Face models, LangChain, and Gradio\]](#)



◦ Developed a book recommendation system using transformer-based embeddings and sentiment analysis using 7K book dataset in Kaggle.

TECHNICAL SKILLS

- **Programming Languages:** Python, C, C++ , JavaScript, Java, Kotlin, PHP
- **Deep Learning Tools:** Pytorch, Huggingface, Tensorflow, TIMM
- **Large Language Models:** RAG, GraphRAG, Multimodal RAG, LLM Agents, Web Agent
- **LLM Tools:** LangChain, LlamaIndex, Chroma, VLLM, OLLaMa, Faiss Vector Search
- **Other Tools:** Scikit-Learn, Numpy, SciPy, Pandas, NLTK, Plotly

MACHINE LEARNING ACHIEVEMENTS

- **Finalist in Robi Datathon 3.0** May 2024
In the top 20 teams among 3,500+ participants at Robi Datathon 3.0, Bangladesh's largest datathon
- **Finalist in Robi Datathon 2.0** July 2022
In the top 20 teams at Robi Datathon 2.0 among 384+ teams