

# Shakil Mosharrof

Microsoft Certified: AI Engineer (AI-102), Data Scientist (DP-100), Databricks Certified: Machine Learning Engineer Professional, NVIDIA-Certified Associate: AI Infrastructure and Operations | Machine Learning Engineer | MLOPs | Agent Engineering | System Design | Scholar

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Portfolio  
GitHub  
LinkedIn

## SKILLS ↗

Language

Python, R, C, C++, LATEX, C#, Bash, JavaScript, SQL

Backend

Flask, FastAPI, Redis, RQ, Celery, Django, Pydantic, Alembic, SQLAlchemy, Kafka

Database

MySQL, PostGRES, MongoDB, SQLite

Machine Learning

ML Metrics & evaluation, Supervised & Unsupervised learning, scikit-learn, XGboost, LightGBM, LLMs, PyTorch, NLP, Tensorflow, SpaCy, T5, BERT, OpenCV, Yolo, GANs, CNN, Transformers, Agentic & LLM Solutions Development, Langchain Ecosystem, RAG, HuggingFace, Fine-Tuning Datasets with LLM and traditional ML Models, Prompt Engineering, ETL pipeline, W&B, AirFlow, DVC, MCP, MLflow

DevOps

CI/CD Pipelines (Github, AZDO), Docker, AWS, Azure

Data. [Link]

- Automatic Literature Review Generation : An Improved LLM-RAG Based Solution Embedded With Regex and T5. [Link](#)[Thesis][ICISET-2024]

## EXPERIENCE ↗

Machine Learning Engineer

February 2025 - Now

Onsite

- Deliver recommendation system that boosted up lead collection and sales by 22%
- Build end to end On-prem and Azure MLOPs pipeline on metal servers in two different geolocations

Machine Learning Engineer December 2024 - March 2025

Culture Hint

Remote (Freelance) London, UK

- Improving and implementing machine learning and computer vision solutions with back-end API designing with AWS EC2, CI/CD Pipeline, YOLOv8, Labelstudio

AI Engineer

July 2024 - December 2024

Delineate Pro Inc. (YC'25)

Remote (Contract) Massachusetts,

USA

- Developed and delivered end to end LLM based RAG solutions for major pharmaceutical companies in the USA, enhancing their research workflows and decision-making processes.
- Implemented cloud-based Retrieval-Augmented Generation (RAG) agents to optimize data retrieval and processing, significantly improving research efficiency and accuracy for pharmaceutical applications.

Software Engineer (AI/ML)

March - August 2024

Gigalogic Inc.

Hybrid (BD), Tokyo, Japan

- Engineered scalable RESTful APIs using FastAPI, integrating SQLAlchemy, PyDantic, and Docker, while ensuring robust performance through Insomnia API testing.
- Designed and deployed a RAG LLM-based recommender system for a Japanese E-Commerce platform, significantly enhancing product recommendation accuracy and user engagement.

Software & Autonomous System Developer (Onsite) 2021 - 2023

Mars Society's University Rover Challenge (URC)

USA

Anatolian Rover Challenge (ARC)

UKET, Turkey

- Led the development of an autonomous rover system, securing 1st place at the University Rover Challenge (URC 2021) and 3rd place at the Anatolian Rover Challenge (ARC 2022), competing against teams from over 14 countries worldwide. [Link](#), [Link](#).
- Achieved over \$50,000 in funding from government and non-government sources, contributing to the success of projects in URC 2023 and ARC 2023, where my team placed 2nd in Asia and 5th globally.

## EDUCATION ↗

B.Sc in Computer Science and Engineering

Military Institute of Science and Technology

Higher Secondary School Certificate

Barishal Cadet College

## RESEARCH & PUBLICATIONS (7+) ↗ SCHOLAR ↗

- DeepTriNet: A Tri-Level Attention Based DeepLabv3+ Architecture for Semantic Segmentation of Satellite Images. [Link](#) [got the best paper award]
- Performance Analysis of Various EfficientNet Based U-Net++ Architecture for Automatic Building Extraction from High Resolution Satellite Images. [Link](#)
- CycleGAN-Based Data Augmentation with CNN and Vision Transformers (ViT) Models for Improved Maize Leaf Disease Classification. [Link](#)
- Biomolecular Analysis of Soil Samples and Rock Imagery for Tracing Evidence of Life Using a Mobile Robot [Link](#)
- Enhancing Mango Leaf Disease Classification: ViT, BiT, and CNN-Based Models Evaluated on CycleGAN-Augmented