# SYEDA AUNANYA MAHMUD





+8801980467875 aunanya.official@gmail.com



github.com/syeda434am







in linkedin.com/in/syeda434 kaggle.com/aunanya875 🏟 Khilgaon, Dhaka, Bangladesh



### **SUMMARY**

Enthusiastic B.Sc graduate with strong Data Analysis & AI/ML research experience along with Cybersecurity knowledgebase. Eager to leverage analytical and problem-solving skills, coupled with a collaborative spirit, to contribute significantly.

IELTS Score (Overall): 7.0

### PROFESSIONAL EXPERIENCE

## Graduate AI/ML Research Engineer

Kounsel | San Francisco, California, US (Remote) 06/2024 - 01/2025

### Responsibilities:

- Contributed to API development & deployment, Synthetic Data generation, VectorDB management and system integration.
- Researched AI-trends, pre-trained LLMs (BERT, T5) and finetuned GenAI models for core project, optimizing model performance for business needs.
- Tested and enhanced system performance, integrated feedback, trained teams and effectively communicated technical concepts to non-technical teams and stakeholders.

Reward: 20% salary raise & offered after-internship position

### **EDUCATION**

## Master of Science in Information Technology

Jahangirnagar University | Savar Upazila, Dhaka 07/2023 - Present | | **CGPA**: Running (4.00/4.00, till 3rd semester)

**Bachelor of Science in Information Technology** University of Information Technology & Sciences | Baridhara, Dhaka 01/2019 - 02/2023 | **CGPA**: 3.87/4.00

#### SKILLS

- **Programming Language**: Python, C & C++.
- Web Development: HTML, CSS & JS.
- Development Fundamentals: Data Structure, OOP, Design Patterns, Agile Development, SDLC, Rest API, Streamlit, Fast API.
- AI/ML & Data: ML, DL, NLP/NLI, Generative AI, Stable Diffusion, Agentic AI, Federated Learning, Exploratory Data Analysis.
- AI/ML Frameworks: Tensorflow, PyTorch, Scikit-learn, Keras, LangChain, Hugging Face, Pandas & YOLO.
- Tools: Ollama API, OpenAI APIs, POE, GRok, GCP, Milvus, FAISS, Mongo, MySQL, Web Scraper, Docker, Jira, Confluence.
- Version Control: Github, Bitbucket.
- Soft Skills: Strong coding and analytical skills, creative and solution-driven mindset, proactive in tackling challenges & works well both in teams and independently.

#### REFERENCE

## Sk. Tanzir Mehedi

Ph.D. Researcher, Queensland University of Technology (QUT), Australia Relation: Supervisor | E-mail: s.tanzir@qut.edu.au

### **PROJECTS**

# AI Agent for Automated Job Application

02/2025 | Github

· Leveraged web automation, CV parsing, AI-based form filling and cover-letter writing to automate the job application process on job platforms

## Baymax: AI Chatbot for Medicare 01/2025 | Github

• Used MedLlama2 model with LangChain to create medical document retrieval and query assistant

## Artistic AI Studio: AI Photoshop & Design Tool 01/2024 - 04/2024 | Github

• Used neural style transfer, object detection, and image processing to transform photos and videos into stunning artistic pieces.

# **Unified DeepFake Detection System**

07/2023 - 10/2023 | Github

• Used a TensorFlow Xception model for image analysis and LSTM for temporal video processing.

## **PUBLICATION**

## Privacy-Preserving Federated Learning-**Based Intrusion Detection Technique for Cyber-Physical Systems**

**Mathematics 2024 (MDPI)** 

Mahmud, S.A.; Islam, N.; Islam, Z.; Rahman, Z.; Mehedi,

## 10/2024 | DOI: doi.org/10.3390/math12203194

• Developed a federated learning-based intrusion detection system for IoT networks by utilizing FedAvg algorithm & 5 deep learning architectures, ensuring data privacy and achieving over 90% accuracy.

### COMPETITIONS

#### AI/ML Competitions

Issuing Organization: Kaggle | Profile: aunanya875 Kaggle contributor solving AI vs actual image detection, NLI, NLP, and image classification challenges.

### **Cyber Drill Competitions**

Issuing Organization: BGD e-GOV CIRT

**Team**: UITS (2nd) | 08/2021

Team: UITS\_IT\_ROOTERS (5th) | 08/2022