Sumaya Islam

+8801522111460 | sumayaislam688@gmail.com | LinkedIn | GitHub | Portfolio
Uttara, Dhaka, Bangladesh

Summary

Motivated Computer Science graduate with internship experience in Data Science and a strong foundation in software development, data analytics, and quality assurance. Seeking an opportunity to apply my technical skills, problem-solving abilities, and adaptability to contribute to innovative technology solutions while growing as a professional.

Technical Skills

Programming Languages: Python, JavaScript, SQL, PHP, C#, C++, MATLAB

Data Science & ML: Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, Statistics & Probability, Feature Engineering, EDA, Model Evaluation, Handling Imbalanced & Noisy Data

Deep Learning & AI: TensorFlow, PyTorch, LLMs, RAG Pipelines, LangChain, LangGraph

Backend & Databases: FastAPI, PostgreSQL, MySQL, Redis, REST APIs

DevOps & Tools: Docker, Git, Linux (Ubuntu), Miniconda, Azure

Frontend & Design: React, Vite, HTML5, CSS3, Tailwind CSS

Projects

Advergo: Custom Apparel Manufacturing Platform Live Site
Full-Stack Development - Client Project *Django REST Framework, Next.js, PostgreSQL, Celery, Docker*

- Built an end-to-end B2B apparel platform with product catalog, custom quote intake backed by a live price estimation engine, and quote-to-order conversion, replacing a fully manual workflow.
- Implemented JWT authentication with role-based order access and serializer-level financial redaction, plus asynchronous PDF invoicing and email delivery via Celery for non-blocking API responses.
- Developed a Next.js storefront using a backend-for-frontend proxy with httpOnly cookie sessions, eliminating client-side token exposure, and shipped both services on Docker with GitHub Actions CI.

Finkart: Financial AI Advisory Platform Live Site
AI & Data Engineering - Professional Project *Python, FastAPI, LangChain, PostgreSQL, RAG*

- Built a financial advisory platform using RAG and LangGraph, enabling structured, context-aware product recommendations with measurable improvement in response relevance.
- Engineered an automated data ingestion and retrieval pipeline using FastAPI and PostgreSQL, processing financial documents at scale with high query precision.
- Improved retrieval accuracy by implementing advanced chunking strategies and vector embeddings, reducing irrelevant responses in real-time query resolution.

Artisanal Tea Marketplace GitHub
Web Application - Personal Project *PHP, MySQL, JavaScript, HTML5*

- Built a full-featured e-commerce platform with product listings, user authentication, and cart system using PHP and MySQL.
- Designed a relational database schema to handle product inventory, user accounts, and transaction records securely.
- Implemented responsive UI using Bootstrap ensuring consistent experience across mobile and desktop devices.

AIUB Student Portal GitHub
Web Application - Personal Project *ASP.NET, C#, MySQL*

- Designed a centralized student portal with authentication, course registration, academic results, and finance modules serving multiple user roles.
- Implemented secure role-based access control and real-world database schema to manage academic records and student credentials across departments.

Solar Irradiance Prediction: DIFCON International Conference, Malaysia
Research *Python, Scikit-learn, Pandas, Matplotlib, Seaborn*

• Authored and presented research on GHI-based seasonal solar irradiance forecasting for Bangladesh, accepted for publication and presentation at the DIFCON Conference, Malaysia.

• Performed end-to-end ML pipeline: data preprocessing on NSRDB climate datasets, seasonal pattern analysis, feature engineering, and predictive modeling using supervised learning.

• Applied time-series forecasting and EDA techniques on real-world environmental data, visualizing seasonal trends and model outputs using Matplotlib and Seaborn.

Education

American International University-Bangladesh (AIUB) — Dhaka, Bangladesh
Bachelor of Science in Computer Science & Engineering — *May 2022 – Jan 2026*
CGPA: 3.65 / 4.00, **Major:** Information Systems

RAJUK Uttara Model College — Dhaka, Bangladesh
Higher Secondary School Certificate (HSC) — *Jun 2018 – Dec 2020*
GPA: 5.00 / 5.00

M.E.H. Arif College — Konabari, Gazipur
Secondary School Certificate (SSC) — *Jan 2016 – Apr 2018*
GPA: 5.00 / 5.00

Certifications & Achievements

Claude Code in Action — 2026
Anthropic — *View Certificate*

Claude 101 — 2026
Anthropic — *View Certificate*

Computer Vision — 2026
Kaggle — *View Certificate*

Winner of AIUB SPARK Spring — 2025
An Idea Pitching Competition for Young Innovators — *View Certificate*

Python (Basic) Certificate — 2024
HackerRank — *View Certificate*