Prinom Mojumder

Date of birth: 11 Apr 2001 | **Nationality:** Bangladeshi | **Gender:** Male | **Phone number:** (+880) 1610982021 (Mobile) | **Email address:** prinommojumder@gmail.com | **LinkedIn:** Prinom Mojumder | **Github:** Prinom2000 | **Address:** Aftabnagar, Dhaka, 1212, Bangladesh (Home)

ABOUT ME

I hold a strong academic background in **Computer Science and Engineering**, with a deep interest in advanced areas such as **Artificial Intelligence and Machine Learning**. My goal is to enhance my knowledge through cutting-edge academic research and practical application. I am also passionate about Software engineering and Android development. With a continuous drive to learn and solve real-world problems, I aim to contribute to the advancement of technology and grow as an enthusiastic lifelong learner in the field of engineering.

WORK EXPERIENCE

SOFTVENCE AGENCY – MOHAKHALI, BANGLADESH
Website https://softvence.agency/

AI DEVELOPER – SEP 2025 – CURRENT

- R&D
- Model Development, Evaluation & Optimization
- Integration & Deployment
- Collaboration, Maintenance, Documentation & Monitoring

EAST WEST UNIVERSITY – DHAKA, BANGLADESH
UNIVERSITY TEACHING ASSISTANT – JUN 2023 – MAY 2025

- Helping student during lab and office hour to understanding the concept
- Taking lab of CSE courses like: OOP(CSE-110), Data Structure(CSE-207), Algorithm(CSE-246)
- Technologies: C, Cpp, Java

EDUCATION AND TRAINING

JUN 2021 – MAY 2025 Dhaka, Bangladesh
BSC IN COMPUTER SCIENCE AND ENGINEERING East West University

Final grade 3.63 out of 4.00 | **Thesis** Machine learning clustering frameworks for RDF (Resource Description Framework) data

PROJECTS

SEP 2025 – NOV 2025
VidhMe: Image, Wearables & Reports to Health Guidance

- **Integrated Wearable & Health Data:** Synced real-time vitals (sleep, heart rate, steps) from Apple HealthKit, Google Fit, and other devices for holistic health tracking.
- **Smart Nutrition & Lab Insights:** Built AI modules for food photo recognition and **OCR**-based lab report analysis to deliver personalized nutrition and lifestyle insights.
- **AI Wellness Coach Platform:** Developed and deployed an **LLM + RAG**-powered chatbot on Hostinger with **CI/CD** pipelines, offering context-aware health guidance, tailored wellness plans, and secure, timely wellness nudges.

Link github.com/Prinom2000/Wellness-Rag-App

SEP 2025 – OCT 2025
AI-Powered Task Management Agent

- **AI Task Generation** - Automatically creates tasks and subtasks with deadlines from project goals using intelligent analysis.
- **Natural Language Editing** - Edit tasks using plain English, like "extend deadline 3 days" or "add subtask call supplier".
- **Conversational Assistant (OLLIE)** - Chat naturally about your project to get help and intelligent suggestions.
- **Smart Question System** - AI asks relevant questions to understand your project and generate better tasks.

Link github.com/Prinom2000/Project-Helper-Ai-Agent

SEP 2025 – OCT 2025
Party Plane Generator: AI-Powered Celebration Creator (GEN-AI)

- **Smart Invitation & Design** - Instantly create personalized birthday cards and t-shirt designs using AI-generated text and images.
- **AI Party Planner** - Get complete party plans with decorations, food ideas, fun activities, and gift suggestions based on age, theme, and budget, then give product recommendations.
- **Cloud + Backend Integration** - Built with **FastAPI** and powered by **Gemini 2.5 (Nano Banana)**, featuring seamless **Cloudinary** uploads for smooth sharing and hosting.

Link github.com/Prinom2000/PartyPlaneGenerator

JUN 2024 – MAY 2025
RDF Data Clustering Framework.

This project is a deliverable product of my final year **capstone project** that focuses on an applying clustering algorithm for information of entities extracted from **RDF** data. The system enhances entity search by retrieving detailed information from DBpedia and recommending related entities using clustering-based techniques.
This project involved extensive research, including:
- **Manual Knowledge Graphs vs. DBpedia-based Knowledge Graphs**
- **Embedding techniques (BERT, Word2Vec, etc.)**
- **Clustering methodologies for entity recommendations**

BERT based Bangla text Classifier with XIA.

- A Bangla sentence dataset is used to classify sentences as Simple, Compound, or Complex
- Models like BanglaBERT, DistilBERT, and Multilingual BERT are trained for the classification task
- SHAP and LIME are used to explain how the models make predictions
- Among all, BanglaBERT shows the highest accuracy for Bangla sentence classification

Book Recommendation System. (Collaborative Filtering model, Content base, Hybrid, Streamlit)

- This system recommends books using collaborative filtering based on user-book rating patterns
- Baseline estimates with user and book bias are applied to handle sparse rating data
- Nearest Neighbors algorithm is used to find similar books for a given input title
- The model's performance is evaluated using precision, recall, MAP, MRR, and Spearman correlation

Nitrogen Deficiency Detection in Plants.

- Built a deep learning model to detect nitrogen deficiency in plant leaves
- Preprocessed and augmented images to improve model performance
- Trained and evaluated multiple CNN models for accurate classification
- Used Grad-CAM to visualize and explain model predictions

Big data processing for course advising. (Apache spark, Py)

- Used Apache Spark & Hadoop with Python to process large-scale student course datasets efficiently

Mobile App: EWU Alunmi Association

- Using JAVA and android studio I am developing this app
- Features: SingUp-Login, Update and edit information, Student can find & contact with alumni

SKILLS

Data Science | Machine Learning | ML Ops | Prompt Engineering | Deep Learning | Image Processing | Object-Oriented Programming | Android App Development | Oracle | Microcontroller | DSA

Programming Language

Python | Java | C | C++ | SQL | HTML | CSS | PHP

Tools

Fast API | LangGraph | LangChain | Chroma DB | Pinecone | MongoDB | MySQL | PyTorch | Scikit-Learn | TensorFlow | Numpy | Pandas | Neo4j | Apache spark | Android | Postman | Git | MS Power Bi | AWS | Hostinger | DigitalOcean

HONOURS AND AWARDS

Dean's List Scholarships – East West University

- This scholarship is awarded for achieving a CGPA of more than 3.75 for three consecutive semesters.