

Afsana Hena

BCSE 23 • ID: 2252421109

📞 +8801872708825 ✉ afsanahena24@gmail.com

📍 Pallabi, Mirpur-12, Dhaka-1216

🌐 [linkedin.com/in/afsana-hena](https://www.linkedin.com/in/afsana-hena) 🌐 github.com/Afsana2020 🌐 afsana2020.github.io

EDUCATION

Bachelor of Science (B.Sc.) in Computer Science and Engineering

Bangladesh University of Professionals (BUP) 🌐

July 2023 – Present

Dhaka, Bangladesh

- **CGPA:** 3.99 / 4.00 (up to 5th semester)

Higher Secondary Certificate (HSC)

Dr. Mahbubur Rahman Mollah College 🌐

2019 – 2021

Dhaka, Bangladesh

- **GPA:** 5.00 / 5.00 **Group:** Science

Secondary School Certificate (SSC)

Barnamala Adarsha High School & College 🌐

2017 – 2019

Dhaka, Bangladesh

- **GPA:** 5.00 / 5.00 **Group:** Science

TECHNICAL SKILLS

Programming Languages

Python, C, C++, Java, PHP, JavaScript, TypeScript

Databases & Query Languages

SQL, MySQL, PostgreSQL

Web Development

HTML, CSS, React.js, NestJS, Node.js, Express.js, Django, Bootstrap, Render, Vercel

AI & Machine Learning

Machine Learning, Deep Learning, Large Language Model (LLM), Agentic AI, Natural Language Processing (NLP), Text Mining, Prompt Engineering, Generative AI

Tools & Platforms

Git, GitHub, VS Code, Docker, Linux, Microsoft Azure, Excel, Power BI, Streamlit, LangChain, ChromaDB, Figma, AutoCAD, Antigravity

PROJECTS

BUPverse: Campus Services Platform | [🌐 Source](#)

Python — Django — MySQL

- Web application for students to find tutors, compatible roommates, and manage event schedules, which is implemented using preference matching, recommendation engine, and conflict detection concepts.

DNCC Municipal Management System | [🌐 Source](#)

HTML — CSS — JavaScript — PHP — MySQL

- A platform for DNCC admin to manage projects, assets, maintenance, employee, and citizen reports, while allowing citizens to submit and track complaints in real-time.

Cold Email Generation Tool | [🌐 Source](#)

Python — LangChain — Llama LLM — Streamlit

- AI-powered tool that generates personalized cold emails for job applications by analyzing company portfolios and job URLs.

Code Clone Detector | [🌐 Source](#)

Python — PyTorch — Flask — Hugging Face — Docker

- A deep learning and NLP-based web application for semantic code clone detection, including model design, training, and deployment through a web interface.

Airline Reservation System | [🌐 Source](#)

Java — Java Swing

- A Java application to book plane tickets (Purchase, Modify, Booking History, Payment system, Confirmation Email etc).

E-Commerce Gadget Store | [🌐 Source](#)

HTML — CSS — JavaScript — PHP — MySQL

- An e-commerce website to showcase Gadgets with a system to place orders and track records of order placement.

Utility Bill Calculator | [🌐 Source](#)

React — NestJS — PostgreSQL

- Full-stack web app for electricity bill calculation with admin-configurable rates, real-time updates, and PDF export.

- Developed C-based console app for product management, employee handling, billing, and invoice generation with file handling for persistent data storage.

ACHIEVEMENTS & CERTIFICATIONS

Research Publication — TCCE-2025 ([LINK](#))

- Research paper on "An Attention-Based CNN Framework with Hybrid Annotation for Multiclass Screening of Postpartum Depression", accepted at TCCE-2025.

Microsoft Azure AI Fundamentals — Microsoft ([LINK](#))

- Certified in Azure AI fundamentals and cloud concepts.

AI Programming with Python Nanodegree — Udacity ([LINK](#))

- Achieved the Next Generation Tech Booster Scholarship, worth \$999 USD.

Gemini API by Google — Udacity ([LINK](#))

- Specialization in Gemini API integration and prompt engineering.

Aspire Leadership Program 2024 — Aspire Institute ([LINK](#))

- Completed prestigious leadership program founded at Harvard University.

Programming and other Competitions

- Top 15 poster at Responsible AI Summit 2026, MIST.
- 3rd place in Quiz Competition and Top 9 research abstract at JURIS Research Summit 2025.
- Finalist at NEOFETCH Hackathon (Inventious 4.1).
- ICPC Asia Dhaka Regional Preliminary Contest 2023 participant.
- Solved 140+ [LeetCode](#) problems.

CO-CURRICULAR ACTIVITIES

BDApps, Robi Axiata PLC | *Campus Ambassador*

January 2026 – Present

- Representing and promoting BDApps activities at university level, engaged in teamwork and collaboration to drive brand awareness.

BUP Computer Programming Club | *Vice President (Technology)*

January 2026 – Present

- Supporting management and technical aspects of club events and competitions and fostering teamwork and collaboration club members.

IEEE Computer Society BUP Chapter | *Assistant General Secretary*

October 2025 – Present

- Leading and arranging event logistics and promotions through content writing, graphic designing, and creative collaboration for regular or huge events such as IEEE Branch fest.

Research Assistant | *Under Lecturer Nazneen Akhter (BUP)*

November 2024 – Present

- Ongoing research on multiple topics in AI, Machine Learning, Deep Learning, and Natural Language Processing

Aspire Institute | *Technology Domain Leader*

February 2025 – February 2026

- Completed one year as [Domain Leader](#); organized and hosted virtual events for global participants and industry experts, coordinated guest speakers, designed promotional materials, and managed social media content.

REFERENCES

Iyolita Islam

Lecturer

Department of Computer Science & Engineering
Bangladesh University of Professionals

✉ iyolitaislam@bup.edu.bd

Rumana Yasmin

Lecturer

Department of Computer Science & Engineering
Bangladesh University of Professionals

✉ rumana.yasmin@bup.edu.bd