



Ananya Dutta

Computer Science and Engineering student at American International University–Bangladesh

408/1, Kuratoli, Khilkhet, Dhaka 1229, Bangladesh



1 Objective

Profile

Final-year B.Sc. student in Computer Science and Engineering with strong foundations in programming, software engineering, and machine learning. Experienced in developing end-to-end academic and research projects, including a peer-reviewed international conference publication. Seeking a software engineering or research-focused internship where analytical thinking, problem-solving ability, and practical development skills can be applied to real-world systems. Open to learning, collaboration, and taking ownership of technical responsibilities. Additional information, project details, or code samples can be provided upon request.

2 Education

May 2022–Present

B.Sc. in Computer Science & Engineering,
American International University-Bangladesh
Dhaka, Bangladesh
CGPA: 3.60 / 4.00 (Ongoing)

Dec 2021

Higher Secondary Certificate (Science),
Kapasgola City Corporation Mohila College
Chittagong, Bangladesh
GPA: 5.00 / 5.00

June 2019

Secondary School Certificate (Science),
Kapasgola City Corporation Girls High School
Chittagong, Bangladesh
GPA: 4.89 / 5.00

3 Core Skills

Programming

C++, Java, C#, R, Python, JavaScript, PHP, HTML/CSS, SQL (MySQL)

AI Tools

NumPy, Pandas, Scikit-learn, TensorFlow, XGBoost

Development Tools

GitHub, Git Bash, VS Code, Visual Studio, RStudio, Google Colab

Networking

Network simulation using Cisco Packet Tracer

Office & Documentation

Microsoft Word, Excel, PowerPoint, Keynote, Mac Pages, Mac Numbers, LaTeX

Operating Systems

Windows, macOS, Linux

4 Technical Highlights

Key Strengths

Object-oriented programming, data structures and algorithms, database-driven application development, machine learning model building and evaluation, version-controlled collaborative development

Practical Experience

Hands-on experience with academic software projects, applied machine learning research, Agile-based development, and GitHub-hosted codebases.

5 Soft Skills

Professional Skills	Problem-solving, critical thinking, time management, quick learning, Communication
Personal Attributes	Teamwork, adaptability, analytical mindset, responsibility, attention to detail

6 Academic Projects

May 2025 - Sept 2025	Hand Gesture-Controlled Music Player — Human Computer Interaction Project Implemented a touchless music control system using ultrasonic sensors mapped via an Arduino UNO microcontroller. Enabled gesture-based play/pause, volume, and track navigation. <i>Tools:</i> Arduino UNO, HC-SR04 Ultrasonic Sensors, DF Player Mini GitHub Repository
Feb 2025 - April 2025	Stress Detection and Relief Recommendation — Machine Learning Research Built machine learning models using physiological, behavioral, and demographic data from 374 participants, achieving up to 96% accuracy with stacked ensembles. Developed a recommendation engine for stress relief strategies and a suicide-risk action plan for high-risk cases. <i>Tools:</i> Python, Scikit-learn, XGBoost, Pandas, NumPy GitHub Repository
Oct 2024 - Jan 2025	Plant Aid — Software Engineering Project Designed and developed an Agile-based software solution to diagnose plant diseases and provide care recommendations. Contributed to UI design, requirement analysis, testing, and feature implementation including plant scanning and weather data integration. <i>Methodology:</i> Agile (Scrum)
May 2024 – Sept 2024	Online Food Hub Portal — C# Desktop Application Developed a secure Windows Forms application for online food ordering with user authentication, menu management, and order processing. <i>Tools:</i> C#, .NET Framework, Microsoft SQL Server GitHub Repository

7 Certifications

Nov 2024	<i>Certificate of Participation</i> — Prime Bank Presents EWU National RoboFest 2024 Project Showcase Segment, East West University Robotics Club
Aug 2022	Cisco Certified Network Associate (CCNA), Cisco

8 Publications

June 2025	<i>Optimizing Big Data Pattern Search: Advanced String Manipulation Techniques in C++</i> . Proceedings of the 3rd International Conference on Computing Advancements, pp. 115–122. DOI: 10.1145/3723178.3723194
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9 References

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