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, machine learning and deep learning frameworks (TensorFlow). 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. *Tools:* 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. *Tools:* 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. *Methodology:* 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. *Tools:* C#, .NET Framework, Microsoft SQL Server GitHub Repository

7 Certifications

Nov 2024	*Certificate of Participation* — 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	*Optimizing Big Data Pattern Search: Advanced String Manipulation Techniques in C++.* Proceedings of the 3rd International Conference on Computing Advancements, pp. 115–122. DOI: 10.1145/3723178.3723194

9 References

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