

SAUMYADIP DAS

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 Saumyadip Das |  saumyadip-das-2003 |  Saumyadip Das

Kuril Chowrasta, Dhaka - 1329, Bangladesh

OBJECTIVE

Dedicated Computer Science undergraduate with a strong foundation in AI-driven research and IoT development, evidenced by multiple peer-reviewed publications. Seeking to apply expertise in Machine Learning, Data Science, and data-centric solutions. Committed to bridging the gap between theoretical academic research and practical, scalable problem-solving.

EDUCATION

- **American International University-Bangladesh** January 2023 - December 2026 (Expected)
Dhaka, Bangladesh
Bachelor of Science in Computer Science and Engineering
 - CGPA: 3.99/4.00 (Up to 10th Semester)
- **Birshreshtha Munshi Abdur Rouf Public College** 2021
Dhaka, Bangladesh
Higher Secondary Certificate (Science)
 - GPA: 5.00/5.00
- **Moulvibazar Government High School** 2019
Moulvibazar, Bangladesh
Secondary School Certificate (Science)
 - GPA: 5.00/5.00

SKILLS

- **Programming Languages:** C, C++, JAVA, C#, Python, R
- **Web Technologies:** HTML5, CSS, JavaScript, PHP
- **Database Systems:** Oracle SQL Database, MS SQL, MySQL
- **Data Science & Machine Learning:** Google Colab, R Studio, Microsoft Power BI, Python, R, NumPy, Panda, Matplotlib, Seaborn, PyTorch, TensorFlow, Joblib
- **Cloud Technologies:** Microsoft Azure
- **DevOps & Version Control:** GitHub
- **Specialized Area:** Skill 1, Skill 2, Skill 3, Skill 4
- **Mathematical & Statistical Tools:** MatLab, SPSS
- **Other Tools & Technologies:** Autodesk AutoCAD, Microsoft Office Apps, Microsoft Project
- **Research Skills:** Critical thinking, Attention to detail, Problem-solving, Collaboration, Time management, Communication

PATENTS AND PUBLICATIONS

C=CONFERENCE, J=JOURNAL, P=PATENT, S=IN SUBMISSION, T=THESIS

- [C.1] Nur-E Sarjina Khan, Md. Ahsan Habib Alif, Raiyan Bin Alam, Mahima Afroz, Niloy Paul, Md Sajid Hossain (2025). **SoilSense: An IoT-Based Soil Health Monitoring System for Smallholder Farmers in Bangladesh to Support Sustainable Agriculture**. In *7th International Conference on Electrical Information and Communication Technology*, IEEE. 18-20 December 2025, Khulna, Bangladesh. DOI: 10.1109/EICT68394.2025.11355612
- [S.1] Nur-E Sarjina Khan, **Saumyadip Das**, Sazia Sharmin, Kamruddin Nur (2026). **A Comparison of State-Space Model and CNN Baselines: MambaOut-tiny vs ResNet-50 and MobileNetV2 for Rice Leaf Disease Classification**. Manuscript submitted for acceptance in *2026 IEEE 2nd International Conference on Quantum Photonics, Artificial Intelligence & Networking*.
- [S.2] Ranak Debnath, Ariful Islam, Nur-E Sarjina Khan, **Saumyadip Das**, Anik Kumar Saha, Firoz Ahmed (2026). **LLM-Driven Cardiovascular Disease Risk Prediction and the Predominant Influence of Smoking**. Manuscript submitted for publication in *IET Information Security*.
- [S.3] Samin Yasir, Nur-E Sarjina Khan, **Saumyadip Das**, Md. Nafi Al Tahosin Khan, Munif Shahrier Niloy, Anika Tahmina Chowdhury, Anik Kumar Saha (2026). **Reasoning Drift in Compressed Transformers: An Explainability Analysis of BERT, DistilBERT, and TinyBERT**. Manuscript submitted for publication in *International Journal of Modern Education and Computer Science (IJMECS)*.
- [C.2] Nur-E Sarjina Khan, **Saumyadip Das**, Md. Mahtab Habib, Md. Sadman Sanim, Md. Mahbubor Rahman, Dr. Jannatul Fardus (2025). **The Future of Textile Waste: Sustainable Solutions through Eco-Friendly Products and Renewable Energy from Post-Consumer Textiles**. In *3rd International Conference on Textile Science and Engineering*. 24 May 2025, BUTEX, Dhaka, Bangladesh.

- [C.3] Nur-E Sarjina Khan, **Saumyadip Das**, Raiyan Bin Alam, Abtahi Islam, Md. Mahbubor Rahman, Jannatul Fardus (2025). **Artificial Intelligence in Textile Waste Management: Exploring Predictive Modelling, Recycling Innovations, and Sustainable Solutions**. In *3rd International Conference on Textile Science and Engineering*. 24 May 2025, BUTEX, Dhaka, Bangladesh.
- [C.4] Nur-E Sarjina Khan, **Saumyadip Das**, Arpon Paul Amit, Jannatul Fardus, Md. Mahbubor Rahman (2025). **AI-Driven Transformations in Textile Waste Management: Challenges and Opportunities**. In *1st International Conference on Engineering and Technology for Sustainable Development (ICETSD 2025)*. 22-23 February 2025, JUST, Jashore, Bangladesh.

PROJECTS

- **SafePath-Community Safety Extremism Monitoring System** August 2025 - September 2025
Tools: [HTML5, CSS, JavaScript, PHP, MySQL] [Q]
- Developed a web based system for citizens to register incidents happening near them, and giving vote to their nearing incidents. An authority body is also created to manage the incidents and resolve them. An admin system to control and manage the whole systems. This project helped to strengthen the basics of Web development.
- **SoilSense: An IoT Based Soil Health Monitoring System** August 2025 - September 2025
Tools: [Microcontroller, Wireless System, ESP32, Sensors] [Q]
- A ESP32 based IoT project with machine learning integrated system for sensing soil health from environmental factors like temp, humidity, rain and soil moisture. From these environmental factors the NPK values of the soild is predicted via machine learning. This project is further accepted at an IEEE conference and added at IEEE Xplore.
- **Bank Management System** August 2025 - September 2025
Tools: [C#, Dot Net Framework, MSSql] [Q]
- A bank management system for "Global Trust Bank" using dot net framework and MSSql. From registering new customer to making transactions via customer alongside different designated bank employees. This projects demonstrates a hands on experience on a real life software.
- **University Resource Management System** August 2025 - September 2025
Tools: [UML] [Q]
- This is an Unified Model Language (UML) based project, to showcase different techniques of software development via diagrams like Use Case, Activity, Class diagrams etc.
- **University Resource Management System** August 2025 - September 2025
Tools: [Oracle 10G Express Edition] [Q]
- This is a Sql database project based on Oracle 10G Express Edition. Showing relationships and applications of different entities of the system.
- **University Resource Management System** August 2025 - September 2025
Tools: [JAVA, JAVA Swing Framework] [Q]
- This is a JAVA Swing based project for university students and faculties to manage and book the resources like class rooms, playgrounds etc conveniently.

HONORS AND AWARDS

- **Dean's List Honors** Month Year
American International University-Bangladesh [Q]
◦ For Academic Excellence in Fall 2024-25 Semester
- **Dean's List Honors** Month Year
American International University-Bangladesh [Q]
◦ For Academic Excellence in Spring 2024-25 Semester

EXPERIENCE

- **Freelance .NET Developer** 2024 – Present
Self-Employed Remote
◦ Developed various small-scale .NET framework applications for diverse clients, focusing on functional requirements and user-centered design.
- **Private Educator (Class 8-12)** 2019 – 2024
Freelance Dhaka, Bangladesh
◦ Developed and delivered customized lesson plans in Physics, Chemistry, and Mathematics, simplifying advanced scientific principles to improve student comprehension and academic performance.

VOLUNTEER EXPERIENCE

• Peer Academic & Technical Mentor

2023 - 2026

At University

- Mentored fellow undergraduates by explaining advanced CS topics and providing technical oversight during the development and troubleshooting of course projects.
- Soft Skills developed and applied during this experience

PROFESSIONAL MEMBERSHIPS

• General Member, AIUB Community of Engineering Students (ACES)

January 2023 - Present

ADDITIONAL INFORMATION

Languages: Bengali (Native), English (Duolingo Score 130)

Interests: Talking to Madam, Watching Movies, Playing Video Games, Solving Math and Puzzle