

# A. S. M. SAMIUL ISLAM

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LinkedIn | GitHub

## **RESEARCH INTERESTS**

Human-Computer Interaction (HCI) • User Experience Research • AI-Powered Software • Embedded Machine Learning • Deep Learning • Mental Health Technology

## **EDUCATION**

**Master of Science in Management of Technology (MOT)** October 2024 – Present

Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh

- CGPA: 3.80/4.00 (Up to 2nd Semester)

**Bachelor of Science in Computer Science and Engineering** 2019 – 2023

North South University, Dhaka, Bangladesh

- CGPA: 3.59/4.00 | 50% Merit Scholarship | Distinction: **CUM LAUDE**

**Higher Secondary Certificate (HSC), Science** July 2016 – June 2018

Govt. Azizul Haque College, Bogura, Bangladesh | GPA: 5.00/5.00

**Secondary School Certificate (SSC), Science** February 2011 – June 2016

Bogra Zilla School, Bogura, Bangladesh | GPA: 5.00/5.00

## **PROFESSIONAL APPOINTMENTS**

**Postgraduate Research Fellow** November 2024 – Present

Institute of Appropriate Technology, BUET, Dhaka, Bangladesh

- Developing IoT-based assistive communication framework for blind, deaf, and mute individuals
- Building gesture vocalizer using NLP and ML for real-time gesture-to-speech/text translation
- Developing embedded ML gesture-recognizing gloves for multimodal communication

**UI/UX Designer and Researcher** August 2023 – April 2024

Seed of Intelligence, Mirpur DOHS, Dhaka (Korea-operated)

- Designed AI-powered CCTV-based Video Software as a Service (VSaaS) platform
- Created user flows, schema diagrams, and game UI integrated with VSaaS system
- Designed user diagrams for connected online chat software

## **ACHIEVEMENTS**

• **UIHP Pre-seed Grant**, Team Arora, Cohort IC5, University Innovation Hub Program at BUET (2024)

• **CUM LAUDE Distinction**, North South University (2022)

• **50% Merit Scholarship**, North South University (2019–2022)

• **17th Position**, 3rd Bangladesh Physics Olympiad

• **Divisional 2nd Runner Up**, 9th and 10th Bangladesh Math Olympiad

• **Two-time Champion**, Fast Cubing Competition, Math Olympiad

• **Best Organizer Award**, 2nd NDF BD Rajshahi Devotional Debate Festival

• **National Champion**, NCTF Team, Annual Debate Competition by World Vision

• **Second Runner Up**, Epitome Competition, NSU HR Club

• **First Position (Team)**, Acting Competition, BTV Subarna Jayanti

## **TEACHING EXPERIENCE**

**Teaching Assistant**, Department of Mathematics and Physics June 2021 – January 2022

North South University, Dhaka, Bangladesh

- Assisted five professors in course delivery and student assessment

- Provided academic consultation to undergraduate students

## **RESEARCH EXPERIENCE**

## **BD Pedestrian and Overtaking Action Recognition for Driver Assistance**

*Undergraduate Research Project*, North South University

- Collected and annotated 10+ hours of video dataset for deep learning models
- Developed computer vision algorithms for real-time action recognition
- Improved recognition accuracy for driver assistance systems in Bangladesh

## **Hakuna Matata – Mental Health Social Network Platform**

*Undergraduate Research Project*, North South University

- Designed user-centered interfaces using HTML, CSS, and JavaScript
- Conducted user research on mental health community engagement
- Applied HCI principles to create accessible digital environment

## **SERVICE**

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### **University Service**

**Vice President**, NSU HR Club, North South University

March 2022 – October 2023

- Organized “HR SPEAKS OUT 4.0” seminar with 700+ attendees
- Led IT, promotional, and strategic planning activities
- Managed recruitment of 300+ members

*Sub-Executive* (November 2020 – March 2022) | *Senior Member* (March 2020 – November 2020)

### **Community Service**

**Panel Deputy Speaker**, Child Parliament of NCTF, Bangladesh

May 2016 – June 2018

- Prepared speakers for presentations to government ministers
- Facilitated pitches to Education Minister and Deputy Speaker of National Parliament

**Trainer and UDRT Member**, Bangladesh Red Crescent Society, Bogra Unit    March 2015 – August 2016

- Completed disaster management training by Canadian Red Cross
- Led disaster relief operations in Sariakandi, Bogura

**Unit Leader**, Bogra Zilla School Red Crescent Unit

October 2013 – October 2015

- Led team of 100+ active and 300 regular members
- Coordinated relief aid to 100+ flood-affected families

## **LANGUAGES AND SKILLS**

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### **Languages**

**Bengali:** Native | **English:** Professional Proficiency

### **Technical Skills**

**Programming:** Python, C/C++, Java, JavaScript, Swift

**Web Technologies:** HTML, CSS, Bootstrap, SQL

**Mobile Development:** iOS (Swift, Xcode)

**Design:** UI/UX Design, AutoCAD (2D/3D)

**Embedded Systems:** Arduino Uno, NodeMCU

**Data Science:** Google Colab, NumPy, Pandas

**Tools:** Git, MS Office Suite, Google Workspace, LaTeX

## **PROFESSIONAL DEVELOPMENT**

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**Supervised Machine Learning: Regression and Classification**

August 2025

DeepLearning.AI & Stanford University, Coursera

Credential: [coursera.org/verify/6I4AZ2IH4ANS](https://coursera.org/verify/6I4AZ2IH4ANS)

**Google UX Design Professional Certificate**

Google, Coursera

7-course specialization: UX foundations, wireframing, prototyping, Figma

Credential: [lnkd.in/dDCmw4MP](https://lnkd.in/dDCmw4MP)**The Complete 2021 Web Development Bootcamp**

Udemy, September 2021

Credential: [UC-31cf125-f6cb-405c-9432-e008b56b7f0f](https://UC-31cf125-f6cb-405c-9432-e008b56b7f0f)**REFERENCES****Tahsina Farah Sanam, Ph.D.**

Professor

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