PERSONAL INFORMATION

Shuvo Islam Khan

📍 Noakhali, Chittagong, Bangladesh

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Gender Male | Date of birth 10 May 2000 | Nationality Bangladeshi

PERSONAL STATEMENT

When I was a kid, I enjoyed being around computers and, as I grew up, I kept developing my relationship with them. During my time in college, I started exploring computer programming, but it was only later that I found my passion: the ***Mathematics***. Today, I'm a Mathematics graduate and a lifelong learner.

CAREER OBJECTIVE

Applied Mathematics graduate with a strong foundation in quantitative and reasoning methods seeking admission to an M.Sc. program in Mathematics. Aspiring to master advanced theoretical concepts, engage in challenging research, and specialize in data science, with the long-term goal of contributing to the field or pursuing doctoral studies.

WORK EXPERIENCE

2025–Present **Guest Lecturer**, Mathematics Department, Shaheed Aman Ullah Public High School

03/2024 – 07/2025 **Research Assistant**, Department of Applied Mathematics, Noakhali Science and Technology University

– Worked under the supervision of **Dr. Md. Jamal Hossain, Professor,** and assisted in developing and typesetting course materials and project documents using LaTeX...

EDUCATION

2020–2025 *Bachelor of Science* in ***Applied Mathematics***, Faculty of Science, Noakhali Science and Technology University

– Result: ***3.35 (in a scale of 4.00)***
– Coursework included Calculus, Differential Equations, Numerical Analysis, Optimization, Neural Networks, Mechanics, Relativity, Cosmology, and Programming languages.
– Completed 13 credits in lab work using `C/C++`, `Fortran 90`, `Python`, and `Mathematica`.

2016–2018 Higher Secondary Certificate (Science), Noakhali Government College

– Result: ***4.63 (in a scale of 5.00)***

2014–2016 Secondary School Certificate (Science), Noakhali Zilla School

– Result: ***5.00 (in a scale of 5.00)***

B.SC. PROJECT

2025 **Threshold-Based Flood Risk Alert System in Flood-Prone Regions of Bangladesh Using SARIMAX, XGBoost, and Decision Tree Classification Methods**

– Developed rainfall prediction models using *SARIMAX*, *XGBoost*, and *Decision Tree Classification* Methods for hydrometeorological analysis in flood-prone regions of Bangladesh.
– Implemented a threshold-based flood risk alert system to enhance early warning capabilities using data-driven classification methods.
– Skills utilized - Analytical and quantitative problem solving: Flood risk modeling using SARIMAX, XGBoost, and Decision Tree Classification Methods.
– Link: Project PDF.

PERSONAL SKILLS AND COMPETENCES

Mother tongue Bengali

Other languages

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
English C1	B2	B2	B2	B2

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills Excellent communication skills gained through teaching assistant and research presentations in the Mathematics Department, NSTU.

Personal Strengths Leadership and Teamwork | Time and Project Management | Critical Thinking | Interpersonal Relationship | Emotional Intelligence...

COMPUTATIONAL AND RESEARCH COMPETENCES

Coding C | C++ | Python | R | Fortran | LATEX,...

Technical MATLAB | Wolfram Mathematica | Microsoft Office Suite (Word, Excel, PowerPoint)...

Digital skills WordPress Development (theme customization, plugin management, site optimization)...

Misc. Academic research | Teaching | Training | LATEX typesetting and publishing...

TRAININGS AND WORKSHOPS

02/2023–06/2023 Introduction to Research Methodology, organized by NSTU Research Society

2023 Crafting an Impactful Scientific Research Paper for Peer Review, organized by NSTU

EXTRACURRICULAR ACTIVITIES

2022–23 Organizing Secretary, NSTU Math Club.

– Spearheaded the planning and execution of International Mathematics Day 2023 celebrations, programming contests, and quiz competitions, fostering student engagement and academic collaboration.
– Leadership and teamwork: organized events and programming contests as Organizing Secretary of NSTU Math Club; managed small project teams for academic purposes.

2021–22 Member, Cholo Paltai Foundation, NSTU

– Provided financial assistance and essential goods to almost 200 people who suffered from the economic consequences of the post-COVID era in their struggle to get back on their feet and fight financial difficulties.
– Organized and led winter clothing drives, collecting donations from local communities and students to provide warm clothing to homeless individuals across different regions.

AWARDS AND ACHIEVEMENTS

2016 & 2017 Regional Medal Winner, Bangladesh Mathematics Olympiad

2016 & 2017 Regional Medal Winner, Bangladesh Informatics Olympiad

2016 & 2017 Regional Medal Winner, Bangladesh Physics Olympiad

2010, 2014 & 2016 Achieved 3rd position in Junior School Certificate exam in Noakhali district, and multiple government school scholarships.

REFERENCES

– **Dr. Md. Jamal Hossain, Ph.D.**
  Chairman & Professor, Dept. of Applied Mathematics
  Noakhali Science and Technology University, Noakhali-3814, Bangladesh
  ✉ mdjamal@nstu.edu.bd
– **Jamal Uddin, M.Phil. (BUET)**
  Assistant Professor, Dept. of Applied Mathematics
  Noakhali Science and Technology University, Noakhali-3814, Bangladesh
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