Shazneen Tasnim Islam

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Research Interests

Bioinformatics, Proteomics, Transcriptomics, Cancer and Neuroinformatics

Education

Asian University for Women (AUW), Chittagong, Bangladesh

BSc in Bioinformatics and Biotechnology, Minor in Mathematics

CGPA: 3.61/4.00 Jan 2022 - Aug 2025

Viqarunnisa Noon School and College (VNSC), Dhaka, Bangladesh

SSC (2019), GPA: 5.00/5.00; HSC (2021), GPA: 5.00/5.00

Jan 2010 – Dec 2021

Research & Professional Experience

Research Assistant – Bioinformatics Lab, AUW

- Worked under the guidance of Professor Dr. Ayan Roy, also with a team of research students
- Generated and organized data using servers and software
- Retrieved data from genome sequences using Perl codes
- Generated results and fine-tuned analyses for publication

Senior Thesis: Analyzing Codon Usage Patterns and Host Adaptation Strategies of Human Norovirus

Manuscript under process: Development of a multi-epitope vaccine candidate against Sindbis virus through integrated immunoinformatics approaches and molecular dynamics simulations

- Currently working on another Bulk RNA-seq project

Jan 2023 – Aug 2025

Internship - CVASU, Chittagong, Bangladesh

- Received training and increased proficiency on Linux
- Analyzed data using interfaces like Linux and Conda

Jul 2024 – Dec 2024

Internship - Inquest Biotechnology Startup, Chittagong, Bangladesh

- Joined as a trainee intern

Jul 2025 – Present

Teaching Experience

Teaching Assistant – Organic Chemistry, AUW

- Worked under the guidance of Professor Dr. Mossae Selvakumar
- Invigilated examinations on behalf of the professor
- Assisted students with understanding various topics throughout the semester
- Helped organize grade records and evaluated some assignments

Feb 2024 – Aug 2025

Teaching Assistant – General Chemistry, AUW

- Worked under the guidance of Professor Dr. Mossae Selvakumar

Feb 2024 – Jun 2024

Teaching Assistant – Computational Drug Discovery, AUW

- Worked under the guidance of Professor Dr. Ayan Roy
- Voluntarily tutored students and peers in Physics and Calculus-I

Jan 2025 – Apr 2025

Technical Skills

- Programming Languages: Python, R, Bash, SPSS
- Bioinformatics Tools: PSIPRED, WGCNA, Genome Assembly, Pymol, Yasra, BLAST, Modeller, SwissProt, Protox

- Data Analysis: Machine Learning algorithms, Basics of AI
- Operating Systems: Linux, Windows
- Other Skills: Data retrieval and processing from genome sequences, Perl scripting

Leadership & Volunteering

AUW Bioinformatics Club – General Secretary

Encouraging students to become enthusiastic about bioinformatics

Contributed on the AUW Science Fest at 2022

Assisting with organizing scientific workshops on behalf of the club

Sep 2023 - Sep 2024

AUW Anthology Club – Editor

Assisting with writing different contents for the club Hosting events, booths and working for clubs publicity

Jul 2023 - Sep 2024

AUW Boxing Club – Secretary

Started working on generating ideas to make the club more engaging among AUW May 2024 – Aug 2025 community

Wellness Ambassador at AUW

Jan 2025 – Mar 2025

AUW Pre-UG Math Center – Communication Manager

Assisted with various event coordinations

Oct 2024 - May 2025

Overseas Experience

Summer Exchange Program, University of Tokyo, Japan

- Attended workshops and class lectures presented by UTokyo
- Learned about body, environment, and sustainability, performed various activities
- Presented learning outcomes at the symposium

Jul 2024 - Aug 2024

Achievements

- Selected as team representative and finalist, Digital Khichuri Challenge, AUW Cohort, Sep
- Winner, AUW Anthology Club Writing Competition, Mar 2022
- Published artwork in the magazine *Unspoken* from AUW Art Club
- Arranged and contributed an art therapy session on suicide prevention at AUW, Sep 2022
- Worked as Theme Artist at the event 'AUWIV 2023', Aug 2023
- Contributed as an Usher on 10th AUW Commencement 2023
- Completed a three-month session at 'AUW Writing for Friendship Group', Mar 2023

English Proficiency

IELTS: 8.00

Reference

Dr. Avan Roy

Assistant Professor of Bioinformatics, Joint Programme Director for Biological Sciences

Asian University for Women Email: ayan.roy@auw.edu.bd