SHOAIB AHMED DIPU

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EDUCATION

Bachelor of Science in Computer Science and Engineering

January 2017 - January 2021 Brac University, Dhaka, Bangladesh

CGPA: 3.91 / 4.00

RESEARCH

Undergraduate Thesis

• An Active-Learning based Training-Schedule for Biomedical Image Segmentation on Deep Neural Networks January 2020 - January 2021

Supervisors: Mahbubul Alam Majumdar, Sowmitra Das, Shahnewaz Ahmed

Journal Publication

- Azim, R., Wang, S., & Dipu, S. A. (2022). CDSImpute: An Ensemble Similarity Imputation method for single-cell RNA sequence dropouts. Computers in Biology and Medicine, 146, 105658. [IF: 6.698]
- Azim, R., Wang, S., **Dipu, S. A.**, Islam, N., Muid, M. R. A., Elahe, M. F., & Li, M. (2023). **A patient-specific functional module and path identification technique from RNA-seq data**. Computers in Biology and Medicine, 158, 106871. [IF: 6.698]

APPOINTMENT

Lecturer June 2022 - Present

Department of Computer Science and Engineering, Brac University

Dhaka, Bangladesh

- Courses Currently Teaching : Programming Language II (Object Oriented Programming), Algorithms, Database Systems
- Responsibilities: Conducting Theory & Lab Classes (Course Load: 12.-15.0 Credits) of each sections having 38-40 students. Grading Scripts, Setting Up Questions & Invigilating for Exams. Coordinating Lab Courses Conducting Administrative Tasks.

Lecturer May 2021 - May 2022

Department of Computer Science and Engineering, Northern University Bangladesh

Dhaka, Bangladesh

- Courses Taught : Object Oriented Programming, Theory of Computation, Compiler Design, Introduction to Computer, Web Programming, Database Programming
- Responsibilities: Conducted Theory & Lab Classes (Course Load: 15.0-18.0 Credits) of each sections having 40-45 students. Graded Scripts, Set Up Questions & Invigilated for Exams. Supervised Thesis / Projects of Undergraduate Students. Designed & Coordinated Outcome Based Education (OBE) Curriculum Conducted Administrative Tasks.

Student Tutor (Undergraduate Teaching Assistant)

September 2019 - December 2020

Department of Computer Science and Engineering, Brac University

Dhaka, Bangladesh

- Courses Taught : Programming Language I (Structured Programming), Programming Language II (Object Oriented Programming)
- Responsibilities : Attended Lab Classes & assisted the Faculty Members. Graded Quiz & Assignment scripts. Provided 15 Hours / Week as Consultation Hours & selected Learning Materials to Facilitate Tutoring & Helped Students to develop Good Study Skills & Habits.

Student Tutor (Undergraduate Teaching Assistant)

July 2020 - September 2020

Department of Mathematics and Natural Sciences, Brac University

Dhaka, Bangladesh

- Course Assisted: Linear Algebra and Fourier Analysis
- Responsibilities: Typeset Lecture Notes, Assignment Problem Sets & Examination Problem Sets in LaTeX. Prepared Problem Sets for Assignments & Examinations from Question Pools. Prepared Short Instruction Tutorials for students to make their transition easier from Regular Semester to Online Semester & buX.

Student Mentor of First Year Advising Team (FYAT)

January 2019 - December 2019

Office of Academic Advising, Brac University

Dhaka, Bangladesh

• Responsibilities : o Mentored a group of 60 students throughout their First Year at University. o Informed them about Rules & Regulations of the University & the Department. o Helped them to avail all Opportunities & Facilities of the University.

TECHNICAL SKILLS

Programming Languages: Java, Python, C/C++, R

Other Languages: MATLAB, Mathematica, LATEX, x86 Assembly, Bash, Verilog

Web Programming: PHP, MySQL, HTML5, CSS

Library: TensorFlow, Keras, Scikit-learn, Pandas, NumPy, Matplotlib, JOGL **Software & Tool**: Git, Altera Quartus, Microwind, PSpice, emu8086

HONOR & AWARD

- Completed Bachelor's with Highest Distinction (Awarded to candidates whose CGPA is 3.80 or higher).
- Got placed on Vice Chancellor's List for 6 times during Bachelor's (Awarded as recognition of achieving a GPA of 3.90-4.00 on a particular semester).
- Got placed on Dean's List for 5 times during Bachelor's (Awarded as recognition of achieving a GPA of 3.70-3.89 on a particular semester).
- Special Recognition Award (Vice Chancellor's Certificate) for Residential Semester (Top 4.4%. Awarded as recognition of high standard of Discipline and Devotion during Residential Semester).
- Merit Based Scholarship (70% waiver on Tuition Fees in every semester).

ACADEMIC PROJECT

- Automation on Agriculture Field by Creating Mesh Network using esp8086 (Microprocessors)
- Employee Management & Performance Tracker System (Database Systems)
- Automated Restaurant Management System (Software Engineering & System Analysis & Design)
- Maze Solver & Android based Bluetooth Controlled Robot (Digital System Design)

SERVICE

- Lab Course Coordinator [Summer 2022, Fall 2022, Spring 2023, Summer 2023], Brac University (Coordinated with the Lab Faculty Members of 10-13 different sections & approximately 400 students to conduct the Lab Course of those particular semesters).
- Pre Thesis II Panel Member [Summer 2022, Fall 2022, Spring 2023], Brac University (Evaluated & provided feedback to the Posters & Presentations of the Undergraduate Thesis groups).
- Organizing & Hosting Webinars, Northern University Bangladesh. (Invited guests both from Academia & Industry to share their journey & experience with the Undergraduate students).

MISCELLANEOUS

- Grand Finalist of 'Champions of Earth: Season I', North South University (Top 2.7%. Participated in an Environmental based Idea Generation Competition. Around 296 teams participated in first round & 8 teams made it to Grand Finale.)
- Contributed Talk: Short Introduction to Neural Networks & Deep Learning, Brac University