

# 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]

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

## TECHNICAL SKILLS

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

**Other Languages:** MATLAB, Mathematica,  $\text{\LaTeX}$ , 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

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- 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

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- 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

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- Lab Course Coordinator [Summer 2022, Fall 2022], 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], 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

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- 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