## Mehadi Hasan

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NAYANCSE27







## **OBJECTIVE**

Seeking a challenging position in Computer Science and Engineering to leverage my expertise in academic instruction, programming, and research. Aiming to contribute to innovative projects at the intersection of advanced research and practical problem-solving in fields such as software development, artificial intelligence, and algorithm optimization.

#### **EXPERIENCE**

Lecturer

## Daffodil International University [ ]

January, 2024 - Present

Dhaka, Bangladesh

- Developed curriculum for Computer Science courses, improving student engagement and learning.
- Implemented new teaching methods, enhancing classroom interaction and learning outcomes.
- Supervised undergraduate research projects involving computer vision and machine learning applications.
- · Actively involved in departmental research activities and academic program development.
- Contributed to national-level computing events (e.g., ICPC, JCPC) as a core technical committee member.

#### **EDUCATION**

## • Master's in Computer Science and Engineering

June, 2023 – December, 2024

Dhaka, Bangladesh

- Jahangirnagar University • Research Topics: Exploring Semantic Segmentation: Dataset, Techniques, and Challenges
- · Supervised by: Dr. Mohammad Shorif Uddin, Professor, Department of CSE, Jahangirnagar University. Vice Chancellor (Green University of Bangladesh)

## Bachelor's in Computer Science and Engineering

February, 2018 - May, 2023

Jahangirnagar University

Dhaka, Bangladesh

- Research Topics: Diagnosmart: A machine learning-based research that will predict diabetes, heart disease, and pneumonia disease from the medical report.
- Supervised by: Dr. Israt Jahan, Professor, Department of CSE, Jahangirnagar University

#### LEADERSHIP EXPERIENCE

#### ACM Committee Convener Daffodil International University

June, 2024 - Present



- Organized Unlock the Algorithm and TakeOff contests, boosting student participation.
- Advised DIU CPC, ACM wing, enhancing student-led programming activities.
- Developed children's programming platform, promoting early interest in computer science.
- Conducted committee meetings, improving coordination and effectiveness of ACM initiatives.

• Module Leader June, 2024 - Present

Daffodil International University



- Redesigned course outline, ensuring improved alignment with industry standards.
- Organized faculty meetings, promoting synchronized teaching across all sections.
- Created exam papers, standardizing assessment quality for midterms and finals.

Teaching Assistant

*January*, 2022 - December, 2023

Jahangirnagar University

- Taught C/C++ programming, Data Structures, and Algorithms, improving junior students' foundational skills.
- Monitored student performance, identifying areas for improvement and guiding personalized learning.
- Managed training sessions and practice contests, boosting students' problem-solving abilities.

#### RESEARCH WORK

- Exploring Semantic Segmentation: Dataset, Techniques, and Challenges (Under Review)
- Student Performance Prediction Using Machine Learning and Explainable AI (Under Review)

#### VOLUNTEER EXPERIENCE

## • Technical Setup (Hardware/Software) Committee Member

Daffodil International University

August, 2024 - December, 2024



- Set up and configured contest servers, networking, and hardware systems to ensure a seamless competition environment.
- Monitored system performance during the contest to detect and resolve hardware or connectivity issues promptly.
- Ensured proper installation and testing of software on all competition machines to meet ACM ICPC standards.

# • Junior Competitive Programming Contest Management Committee Member Daffodil International University

August, 2024 - December, 2024



- Conducted school visits to promote the Junior Competitive Programming Contest, inspiring students to participate and develop problem-solving skills
- Identified and fulfilled technical and logistical requirements for the contest environment, ensuring a smooth and professional competition setup.
- Collaborated in designing and preparing problem sets that challenge and engage participants while maintaining fairness and quality standards.

## PROGRAMMING COMPETITIONS EXPERIENCE

Solved 1900+ problem in various Online Judge
 Maximum codechef rating: 1638
 Handle: NAYAN\_CSE27
 Handle: nayan\_cse27

• Best global rank in codechef: 118th

Contest Link: March Lunchtime 2022 Division 3

Best global rank in codeforces: 1220th
 16th position in MBSTU IDPC 2021
 Organizer, Judge and Problem Setter
 Contest Link: CSE-MBSTU IDPC 2021
 Contest Link: Binary Brains Battle

• Judge and Problem Setter Contest Link: MMC-April-L1T2

## **PROJECTS**

Diagnosmart

February, 2023 – May, 2023

Tools: Python, Jupyter Notebook, Streamlit Python library.

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- **Diagnosmart** is a machine learning-based project that will predict diabetes, heart disease, and pneumonia disease from the medical report.
- · Algorithm: Support Vector Machine, Logistic Regression, Convolutional Neural Network.

olduct

May, 2023 – Jun, 2023

Tools: Javascript, Mongodb, NodeJS, React, Redux toolkit, JSON Web Token.

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- **olduct** is a web-based e-commerce application for buying and selling old products.
- Major Features: Authentication & Authorization, Buyer-Seller profiles, Biding, Custom Search, Notification Management.

## **SKILLS**

- Programming Languages: C, C++, Python, JavaScript, SQL
- Web Technologies: HTML, CSS, MongoDB, Express.js, ReactJS, Node.js
- Data Science & Machine Learning: OpenCV, NumPy, Pandas, Matplotlib, SciPy
- Other Tools & Technologies: Git, GitHub, VS Code, Postman

#### REFERENCES

#### 1. Professor Dr. Mohammad Shorif Uddin

Department of Computer Science and Engineering Jahangirnagar University

Vice Chancellor

Green University of Bangladesh

Email: shorifuddin@juniv.edu, vc@green.edu.bd

Phone: +880-1747615832

Relationship: Teacher and Research Supervisor

#### 2. Professor Dr. Sheak Rashed Haider Noori

Professor & Head

Department of Computer Science and Engineering

Daffodil International University Email: headcse@daffodilvarsity.edu.bd

Phone: +880-1847140016

Relationship: Professional Supervisor