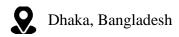
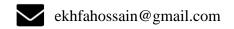
# Ekhfa Hossain







#### Education

# **BS** in Computer Science & Engineering

**Summer 2017 – Summer 2021** 

Dhaka, Bangladesh

North South University

Honor: Magna Cum Laude (CGPA: 3.72/4.00)

### **Work Experience**

# **Trainee Software Engineer**

October 2023 – Present

Sazim Tech Ltd

Dhaka, Bangladesh

- Develop projects tailored to specified requirements, ensuring alignment with goals and objectives.
- Implement project features precisely per instructions, fostering seamless collaboration with design and product teams.
- Optimize projects for scalability, employing robust architecture and practices to accommodate future growth.
- Tech Stack: ReactJs, NextJS, TypeScript, SQL, PostgreSQL, ExpressJS, NodeJS.

### **Teaching Assistant**

**August 2021 – January 2022** 

Department of Electrical and Computer Engineering

North South University

Dhaka, Bangladesh

- Assisted faculty members with course-related tasks, demonstrating a solid understanding of the subject matter.
- Managed a total of 200 students: Two sections for MAT116 (Pre-Calculus) and Three sections for MAT120 (Calculus-I), each with 40 students.
- Proctored exams and quizzes, evaluated exam papers and quizzes, and provided constructive feedback on assignments.
- Collaborated with faculty to enhance the effectiveness of course materials and support the learning objectives.

# **Research Experience**

#### **Directed Research**

February 2021 – November 2021

Department of Electrical and Computer Engineering

North South University

Dhaka, Bangladesh

- Performed sentiment analysis using traditional machine-learning techniques on Bangla Facebook posts.
- Created a meticulously annotated dataset of eleven thousand Bangla comments and corresponding reactions, with rigorous quality assurance using dual approach manual and statistical methods for annotation accuracy.
- Conducted insightful demographic analysis to identify patterns in individuals contributing to hate speech and cyberbullying on social media platforms.
- Supervised by Intisar Tahmid Naheen, Department of Electrical and Computer Engineering.

#### **Publications**

F. H. Shubho, F. Iftekhar, **E. Hossain** and S. Siddique, "*Real-time traffic monitoring and traffic offense detection using YOLOv4 and OpenCV DNN*," TENCON 2021 - 2021 IEEE Region 10 Conference (TENCON), 2021, pp. 46-51 DOI: 10.1109/TENCON54134.2021.9707406

S. A. Kaiser, S. Mandal, A. K. Abid, **E. Hossain**, F. B. Ali, and I. T. Naheen, "Social Media Opinion Mining Based on Bangla Public Post of Facebook," 2021 24th International Conference on Computer and Information Technology (ICCIT), 2021, pp. 1-6

DOI: 10.1109/ICCIT54785.2021.9689860

#### **Skills**

**Programming Language** C, C++, Python, Java, JavaScript **Machine Learning** Google Colab, TensorFlow, Scikit-learn

Web Programming JavaScript, HTML, CSS, Bootstrap, ReactJS, NodeJS, NextJs, ExpessJS

**Database** MySQL, PostgreSQL, Firebase

Mobile ProgrammingAndroidVersion Control SystemGit, GitHubDocumentationLaTeX, Overleaf

Office Suite Microsoft Word, Excel, PowerPoint

### **Honors and Awards**

❖ Merit-based Scholarship from North South University (75% Tuition Waiver)

2017 - 2021

### **Presentations**

# Real-time traffic monitoring and traffic offense detection using YOLOv4 and OpenCV DNN

2021

Poster presentation at North South University Capstone Design Project Day 2021

### **Extracurriculars**

### **NSU ACM W Student Chapter**

2017 - 2020

- Promoted diversity in tech through workshops and seminars, connecting female students with computing professionals for skill enhancement and networking.
- Conducted free classes in Full Stack Software Development, Machine learning, Blockchain, and Web Security for female students.
- Organized flagship event, "Inter-University Girls' Programming Contest (IUGPC 2019)," drawing participation from 80 teams across the nation and captivating nationwide interest among female contestants.

NSU Problem Solvers 2018 – 2020

- Achieved a top 20 rank among 100+ peers, leading to selection for NSUPS Bootcamp training in competitive programming.
- Received training in diverse programming domains, including Number Theory, Binary Search, Dynamic Programming, Data Structure, and Graph Theory.
- Actively participate in weekly programming contests on different online judges, to refine programming skills and problem-solving abilities.

### **Others**

**The Daily Observer** –"Food insecurity in BD" by Ekhfa H, Adiba A, Ania C, Sumaiya L and Farjana B, April 20, 2018.

Link: https://www.observerbd.com/details.php?id=133565