NOUSHIN SYEARA RODOSHI

Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh
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EDUCATION

Bangladesh University of Engineering and Technology (BUET) — Apr 2019 – Jul 2024
BSc. in Civil engineering — Dhaka, Bangladesh
CGPA: 3.78 out of 4.00
Major: Transportation Engineering

RESEARCH INTEREST

Intelligent Transport System | Transportation System Modelling | Sustainable Transportation and Urban Planning
Traffic Engineering | Pavement & Infrastructure Engineering

PROJECTS

- **YOLOv8 Traffic Detection for Dhaka (CV/ML Project) [Github]**

Deployed a YOLOv8-L object detector for Dhaka traffic imagery, using ~21k labeled images and class-balanced training; strong performance on common modes (car, bus, CNG, rickshaw) with clear documentation for reuse.

- **Dhaka Corridor Multimodal Traffic Counts from Video (YOLOv8, Python) [Github]**

Used a YOLOv8 detector, line-based tracking, and hand-drawn ROIs on a 5-minute Dhaka corridor video to extract lane-level multimodal counts (pedestrians, bicycles, rickshaws, vehicles) and identify contra-flow movements. **[Watch Demo]**

- **Road Traffic Accident Severity Prediction (Python/ML Project) [Github]**

Developed ML models to predict accident severity (Slight, Serious, Fatal) using a Kaggle dataset of over 12,000 incidents in Addis Ababa (2017-2020). Analyzed factors like driver demographics, vehicle types, and road conditions; handled imbalanced data with SMOTE and undersampling; evaluated with F1-score using XGBoost, Random Forest, and SHAP for interpretability.

RESEARCH EXPERIENCE

- Noushin Syeara Rodoshi[1], S M Sakif Shahriyar[1], Md. Amin Al Noor[2], Md. Shamsul Hoque[3]
A Review of the Freight Generation Models and Data Collection Techniques.
- Noushin Syeara Rodoshi[1], Md. Shamsul Hoque[3]. Urban Freight Attraction Modeling in Dhaka City: An Establishment Based Approach for a Developing Country. Accepted for Springer Book Series of ICACE 2024.
- Undergraduate Thesis: Establishment-Level Freight Trip Attraction and Freight Attraction Modelling in Dhaka City; Supervisor: Md. Shamsul Haque

Developed predictive models to analyze factors influencing urban freight demand using OLS, robust regression and multinomial logit, generating location-based insights for congestion and freight-infrastructure planning in Dhaka.

WORK EXPERIENCE

- Line Manager, Production Engineering Departement — Dec 2024-Present
British American Tobacco Bangladesh

TECHNICAL SKILLS

- Programming: Python, R, MATLAB (Familiar)
- Machine & Deep Learning: TensorFlow, PyTorch, Keras, Scikit-learn, OpenCV, YOLO
- Data Analysis & Visualization: Pandas, NumPy, SciPy, Matplotlib, Seaborn
- Developer Tools: Git, GitHub, VS Code

LANGUAGE PROFICIENCY

IELTS (Academic): Overall Band 8
Listening: 9 | Reading: 7.5 | Writing: 7.5 | Speaking: 8

HONORS AND AWARDS

1. **Dean's List**: Awarded for achieving a CGPA higher than 3.75 in two consecutive terms.
2. **Scholarship of Merit (Talentpool Category)** by the Government of Bangladesh in
• Higher Secondary School Certificate (2018)
• Secondary School Certificate (2016)
• Junior School Certificate (2013)

EXTRA CURRICULUM

- Founding Member, BUET Innovation and Development Club (BIDC): Instrumental in club establishment, innovation and teamwork.
- Vocalist, Band Bihongo: Fronted band performances at concerts, contributing to the university's cultural life.
- Organizing Committee Member: Integral to BUET CE Fest 2023 and Civil Day 2024, ensuring smooth event execution.
- Master of Ceremonies: Hosted several programs showcasing adept event management and public speaking skills.

REFERENCES

Dr. Md. Shamsul Haque
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Dr. Md. Asif Raihan
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BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA

TRANSCRIPT OF ACADEMIC RECORD

Name	: **Noushin Syeara Rodoshi**
Student Number	: **1804098**
Date of Birth	: September 10, 2000
Degree Awarded	: **Bachelor of Science in Civil Engineering** abbreviated as **B.Sc.Engg.(Civil)** (degree awarded with HONOURS)
Sessions Attended[1]	: 2018-19 to 2021-22
Date of completion of the degree requirements	: July, 2024
Minimum number of Credits required for Degree	: 160.00
Total number of Credits earned by the student	: 160.00
Grade Point Average (GPA)[2] earned	: 3.78
Highest GPA in the class	: 3.99
Number of students in the graduating class	: 191
Merit position of the student	: 44
Number of graduates in the class with GPA more than the GPA of this student	: 43

This Transcript contains four pages including this page.

Date Prepared 14/09/2024

Prepared by

Verified by

Office of The Controller of Examinations BUET Dhaka

Controller of Examinations
Bangladesh University of Engineering & Technology
DHAKA

1. It may be noted that there is an anomaly regarding "Sessions Attended" and "Date of completion of degree requirements". The anomaly has arisen due to delay in starting an academic session and extension of the academic calendar beyond the stipulated calendar year due to various reasons. Students are normally expected to complete degree requirements within four/five academic sessions which may extend over more than four/five calendar years.

2. **Grade Point Average (GPA) =** $\frac{\sum CiGi}{\sum Ci}$ = $\frac{\text{Summation of (Number of Credits in a Course X Grade Point Earned in that Course)}}{\text{Total Number of Credits Earned}}$

Maximum Attainable GPA = 4.00
GPA Required for Degree with HONOURS = 3.75
Minimum GPA Required for Award of Degree = 2.20

Grading System

Letter Grade	Grade Point	Numerical Equivalent
A+	4.00	80% and above
A	3.75	75% to below 80%
A-	3.50	70% to below 75%
B+	3.25	65% to below 70%
B	3.00	60% to below 65%
B-	2.75	55% to below 60%

Letter Grade	Grade Point	Numerical Equivalent
C+	2.50	50% to below 55%
C	2.25	45% to below 50%
D	2.00	40% to below 45%
F	0.00	Less than 40%
X	Continuation	
S	Satisfactory	