FARIA YEASMIN RAHA

Email: rahafaria2@gmail.com   Personal Website: https://fariaraha.com   Linkedin: fariaraha

RESEARCH INTERESTS

- Transportation Safety
- Transportation Systems Planning
- Travel Behavior Analysis
- Transportation Data Analysis
- Sustainability

RESEARCH EXPERIENCE

Pandemic induced changes in fatal crash rates and characteristics   Jan. 2021-Present

I am working with Dr. Alyssa Ryan, Ass. Prof, UArizona, and we are researching on the changes of demographic characteristics of fatal crashes between pre and post pandemic time

Skid-resistance on wet pavement and hydroplaning speed prediction   Aug. 2021 - Present

I am working with Dr. Armana Huq, Ass. Prof, BUET, and we are researching effective materials to increase friction of wet pavement and the development of a hydroplaning warning system using machine learning models to reduce wet weather crashes. The abstract of my first paper as first author has been accepted at CSCE 2022.

Detection of FRP debonding in I-Girder by vibration monitoring   Oct. 2017 – Oct 2018

As my undergraduate thesis, debonding characteristics of FRP retrofitted Tista bridge were presented using the Finite Element Modeling for frequency analysis, stiffness analysis, and MAC analysis.

. Tools: Abaqus- Finite Element Software, MATLAB 15a

WORK EXPERIENCE

ARMAN Engineering Ltd.- Junior Structural Engineer   Oct. 2020 – Aug. 2021

- Responsibilities: Façade design with analysis
- Selected projects: Designing of skylight and windows of Dhaka Metro Rail development project, BRAC University façade design, Faujian Glass roof, Exterior facade design of Exim Bank
- Tools: STAAD Pro, SketchUp, AutoCAD, Glass Wizard

Global Research and Marketing Consultancy Firm – Research Intern   May 2020 – Sep. 2020

- Responsibilities: Data collection from respondents, analysis, and providing reviews.
- Project: I was a part of orange door research commissioned by The World Bank to identify the effect of the COVID-19 pandemic in the lives of Bangladeshi people.

EDUCATION

Bangladesh University of Engineering and Technology   Aug. 2014 – Sep. 2019
B.Sc. in Civil Engineering
. Credits completed: 160

STANDARDIZED TEST SCORES

- GRE General Test (Dec. 2019)
  Quant – 160,   Verbal – 149,   Writing – 3.0

- The TOEFL iBT Test (Dec. 10, 2021)
  Listening – 27,   Reading – 24,   Speaking - 22, Writing – 23

TECHNICAL SKILLS

· STAAD Pro	· Python	· ABAQUS	· Sketchup
· ETABS	· MATLAB	· Decision Tree Model	· AutoCAD

EXTRA-CURRICULAR ACTIVITIES, AWARDS

· Compensatory Scholarship from Bangladesh University of Engineering and Technology
· Designer in Civil Fest 2017 organized by Civil Engineers Society Associations, BUET