Sadia Karim, EIT
(416) 303-2521,sadiazobair@gmail.com , 5248 Cinnamon Road Mississauga, L5V1T3

SUMMARY

- Registered with PEO as EIT; Pursuing P.Eng.
- Master of Engineering with focus on Transportation Engineering and Planning
- Well-versed with Traffic Engineering with focus on Signal Optimization, Coordination, Traffic Simulation and Operational Analysis, Project Planning and Scheduling
- Familiar with Transportation Planning, Travel Demand Forecasting, Traffic Impact Studies, Active Transportation and Traffic Demand Management
- Knowledge on geometric roadway design, road safety, collision analysis, collision modification factors and road safety audits
- Knowledge on transportation guidelines, standards, and regulations including OTM, TAC and HTA
- Proficient in analyzing data using MS Excel and MS Access
- Developed communication skills, problem solving skills and organization and time management skills by working in multi-cultural team environment
- Experienced working with Synchro/ SimTraffic, AutoCAD, HCS, MS Project and MS office
- Familiar with AIMSUN and ArcGIS

PROFESSIONAL EXPERIENCE

Assistant Engineering Technologist (Technical Trainee) *Jan.2018- Feb.2018*

Traffic Management Centre

City of Toronto

- Conducted study to update specific sections of the City's "Traffic Signal Operations - Policies and Strategies" document and prepared technical report on updated section
- Assisted in signal timing requests for the TransSuite and SCOOT traffic control systems
- Assisted senior engineer in signal coordination studies by using Synchro
- Analyzed data related to traffic flow and assisted in proposing development of appropriate measures of effectiveness (MOEs) such as V/C ratio, delay and LOS by changing offset using Synchro software
- Acquired knowledge in microsimulation studies using AIMSUN
- Reviewed technical documents whether they meet relevant transportation guidelines, standards and policies using OTM
- Attended meetings on technical updates on signal timing operations (Signal Timing Card Preparation, Scheduling Plans in TransSuite, TSOG SRs in TMMS, Timekeeping in TMMS)
- Participated meetings on Project and Policies updates (ITSO Business Continuity Plan, Signal Coordination projects, Traffic Signal Policy-Technical document, Operating practice for Bicycle Timings, Revised Workplace Violence Policy, Guidelines and Appendices, Critical

Incidents in the Workplace: Management and Employee Guide, Standard Operating Practice -Toronto Triathlon Festival)

Project Coordinator *Sept.2009- Dec.2014*
BDDL properties LTD, Dhaka

- Assisted senior engineers in developing preliminary and detailed design, cost estimating, field investigations and data collection and data analysis
- Assisted engineers to develop design options using AutoCAD, and assisted in preparation of proposals, reports and presentations
- Provided meeting administration, including preparing meeting agendas, and taking and distributing notes
- Established and maintained productive working relationships with internal and external stakeholders
- Assisted the Project Manager in planning, scheduling, monitoring, tracking, coordinating of different types of civil engineering project using MS Project

EDUCATION

M. Eng. in Civil Engineering (Transportation) *2017*
Ryerson University, Toronto

M.Sc. in Civil Engineering *2009*
Bangladesh University of Engineering & Technology, Bangladesh (BUET)

B.Sc. in Civil Engineering (Major in Transportation) *2005*
Bangladesh University of Engineering & Technology, Bangladesh (BUET)

ACADEMIC PROJECTS

- **Reliability Analysis of Pedestrian Crossing Sight Distance**
  Developed a methodology for the evaluation of pedestrian crossing sight distance by first order second moment (FOSM) method and advance first order second moment (AFOSM) method by reliability analysis. The spreadsheet for analysis of this study can be used to calculate required sight distance for a pedestrian crossing at any design variable.

- **Urban Street Segment Performance Analysis using Synchro**
  Evaluated the capacity and quality of service provided to road users in a network of six signalized intersections in Downtown area, city of Toronto by Synchro. After intersection optimization, the major improvement was found in Jarvis & Gerrard Street intersection.