Haytham.sadeq@seeroeng.com

# **Professional Summary:**

A highly skilled transportation/civil and road safety engineer (registered EIT at EGBC & eligible for P.Eng.) with +8 years experience in traffic engineering, road design, road safety, storm-water and structural design. Experience with taking projects from proposal stage through conceptual design, detailed design, and construction. Experience and knowledge of several civil engineering software such as AutoCAD, AutoTurn, Civil 3D, Inforworks, Visum, Vissim, Viswalk, Synchro, Sidra, HCS, Vistro, ETAB, SAFE, SAP2000, STAAD Pro and Microsoft Package. Team leader and pro-active team member with excellent communication, presentation, and writing skills. Able to apply critical and logical thinking to solve problems and take decisions. Able to deliver tasks and achieve objectives promptly in a fast-paced, and high-pressure environment.

# **Professional Experience:**

**Transportation & Road Safety Engineer (EIT)** Seero Consulting Ltd., Vancouver, Canada

Oct. 2017 to Present

General Manager / Transportation & Road Safety Engineer

Apr. 2012 to Sep. 2017

Seero Engineering Consulting, Doha, Qatar

#### **Transportation Planning:**

Worked on transportation studies that include both full Traffic Impact Studies (TIS) for 30+ new large developments (above 500 two-way trips) and 100+ limited traffic assessments for smaller developments (less than 500 two-way trips). The studies included the following duties:

- Worked on preparing traffic studies methodologies and preparing trip and parking generation calculations. The works also include preparing development site plans including circulations assessments, and accessibility using AutoCAD & AutoTurn.
- Worked on Visum strategic modeling with updating land use zones, nodes, & links for 30+ projects. The Visum model includes 1300+ zones for the State of Qatar (11,000 sq. km). The Visum model study areas range between 40 to 900 Hectares.
- Worked on Vissim micro-simulation modeling for 15+ TIS projects with study areas range between 40 to 100 Hectares. Micro-simulations were conducted using dynamic assignments with validation of volumes across Visum, Vissim and traffic counts.
- Worked on static traffic assessment using Synchro for junctions, Sidra for roundabouts, & HCS for
- Prepared traffic data collection and traffic survey reports which include turning movement counts for junctions, automatic traffic counts for links, and parking lots' surveys.
- Prepared final TIS Reports that includes all traffic assessment results and the proposed mitigation measures to achieve the level of service required by the clients/authority.
- Key projects conducted using Visum, Vissim, Synchro, Sidra, & HCS are the following:
  - TIS of the Boulevard Mall (2500 two-way trips)
  - TIS of the Philippine School, (4500 students)
  - TIS of the Al-Andalus School (5000 students)
  - TIS of the Al-Mazroua Laboratories Complex, (2500 two-trips)
  - TIS of the Aspire Park Edutainment Complex, Kidzania (1500 two-way trips) (critical area)
  - TIS of the QIMC Tower, (850 Two-way trips at Doha downtown)
  - TIS of the Warehouse Driving School and Taxi Complex, (800 two-way trips)
  - TIS of the Burj Al-Mana Tower, (800 Two-way trips at Doha downtown)

### Road Safety:

Worked in 60+ Road Safety Audits (RSA) for expressway roads in Qatar, Temporary Traffic Management (TTM) schemes, local roads, and developments. The audits were conducted as per Qatar RSA guidelines and UK HD 19/15 guidelines. The audits were conducted on concept, preliminary and detailed design drawings in addition to construction audits on built schemes pre-opening to the public. Key road safety audits include:

- RSA Stage 1 Concept Design 19 bus stations under the Ministry of Transport & Communications (MOTC) across Qatar
- RSA Stage 2 Preliminary Design South Al-Bustan Expressway (4 KM)
- RSA Stage 3 Detailed Design multiple areas at Qatar south local roads
- o RSA Stage 3 Detailed Design for TTM of Wakra By-pass, Qatar south
- o RSA Stage 4 Pre-Opening Wakra By-Pass expressway, Lusail & Shamal expressways
- RSA Stage 4 Pre-Opening multiple areas at Qatar south local roads
- RSA Stage 4 Pre-Opening TTM of Wakra By-pass expressway, Qatar south local roads, Rayyan road expressway, and Lusail Expressway.
- o RSA Stage 4 Pre-Opening Amiri road at the new Hamad International Airport, Qatar

## Civil Design:

Worked on several civil design projects that included stormwater assessments, pavement design, structural design, geotechnical studies and street lighting design. Key projects include:

- Geotechnical and pavement assessment for Luhwaileh link Project, Qatar.
- o Geotechnical and structural foundation assessment for earthworks on AlBayt Stadium, Qatar.
- o Pavement design for local roads and expressway in Wukair, Qatar.
- Storm water assessment for Luhwaileh link project, Qatar.
- Storm water assessment for Rayyan club training pitches, Qatar
- o Road and storm water design for local roads, La Plage, The Pearl, Qatar
- o TTM Traffic Diversion Plans (TDP) design for IDRIS project, Qatar
- Road design in Civil 3D for Al Wakra Stadium (for FIFA 2022), Qatar
- Storm water assessment for Golf course, Qatar
- o Civil Design for Al Wakra Beach, Qatar.
- o TTM Traffic Diversion Plans (TDP) and street lighting design for Qatar Rail project, Qatar.
- Structural design for Street lighting at Al-Bayt Stadium, Qatar.

#### **Business Management Duties:**

Worked in several aspects of business management in Seero office in Qatar which include the following key responsibilities:

- Worked on preparing business proposals including technical scoping and pricing.
- Worked on marketing and business developments activities.
- Worked on managing financial and accounting matters related to the consultancies.
- Worked on the human resource management.
- Worked on the business process management documents to build a quality management system.
- Were responsible about the whole business operations on 30+ team members.

# Research Assistant Sep. 2010 to Apr. 2012

Department of Civil Engineering at University of British Columbia (UBC), Vancouver, Canada Carried out research project titled "Automated Roundabout Safety Diagnosis" for an operating roundabout in the City of Vancouver, Canada to identify safety problems. The research was supervised by Prof. Tarek Sayed. Participated also in an automated before-and-after safety research study for three intersections in the City of Penticton, British Columbia, Canada. Works included data collection, coding in MATLAB, reviewing conflicts and preparing road safety evaluations results.

#### **Teaching Assistant**

Department of Civil Engineering at UBC, Vancouver, Canada

Sep. 2011 to Dec. 2011

Worked as a teaching assistant in the transportation group in UBC supervised by Prof. Jinhua Zhao (MIT graduate) to help and teach civil engineering and planning students in the urban transportation economics and policy course.

### **Graduate Structural Engineer**

Mar. 2010 to Aug. 2010

Halcrow Engineers and Architects (Currently CH2M), Doha, Qatar

Worked in the property business group on several projects such as the Msheireb project and a substation design. The work included structural analysis and design using STAAD, ETAB and SAFE software. The work also includes preparing AutoCAD design drawings for all structural members.

### **Civil Site Engineer**

Jul. 2009 to Nov. 2009

Amana Steel Buildings, Doha, Qatar

Worked in the construction activities for the Al-Swaidi cable factory including civil foundation works, site surveys, and structural works.

## **Civil Engineering Intern**

Jun. 2008 to Aug .2008

Overseas Bechtel, Incorporated, Doha, Qatar

Trained in the construction department at the new Hamad International Airport project which includes all roads and buildings constructions activities.

## **Software:**

AutoCAD, AutoTurn, Civil 3D, Inforworks, Visum, Vissim, Viswalk, Synchro, Sidra, HCS, Vistro, ETAB, SAFE, SAP2000, STAAD Pro (Advanced Word, Advanced Excel, Outlook & PowerPoint)

# **Training:**

- "Introduction to Microscopic Traffic Flow Simulation with Vissim" by PTV, May 5-6, 2014
- "Macroscopic Traffic Modeling with PTV Visum" by PTV, April 27 to May 1, 2014
- "Modelling Vehicle-Actuated Signal Programs with VisVAP" by PTV, May 7. 2014
- "Vissim Advance Training" by PTV, May 8, 2014
- "Vistro Traffic Analysis" by PTV, May 4, 2014
- "Road Safety Engineering, Accident Analysis and Prevention" by TMS Consultancy and RoSPA, April 12-16, 2015
- "Road Safety Audits" by TMS Consultancy and RoSPA, April 19-23, 2015

### **Education:**

- MASc. in Civil Engineering (Transportation), UBC, Vancouver, Canada, 2013
- BSc. in Civil Engineering, Qatar University, 3.94/4.00 GPA, Doha, Qatar, 2009

### **Professional Membership:**

- Registered Engineer-in-Trainee (Eligible for P.Eng.) (179794) EGBC, Canada
- Registered Civil Engineer No. 177 Qatar Ministry of Municipality & Environment (MME)
- Member Reg. 000071861 Chartered Institution of Highways & Transportation (CIHT)
- Member No. 1031742 Institute of Transportation Engineers (ITE)
- Member TAC & CARSP

#### Notes:

References are available upon request.

Permanent Resident of Canada & authorized to work.