

Amir is a Traffic analyst with over 9 years of experience in traffic engineering, 5 years international experience and 4 years of Canadian experiences, traffic impact studies, roadway design, road construction supervising and survey engineering. Currently, he is working in the area of transit modeling, traffic data collection, and analysis, traffic signal design and optimization. He was involved in many projects in both the public and private sectors with wide-ranging experience in analytical transport planning covering both highway and traffic-related projects through to multi-disciplinary working on the development of major settlements.

Since November 2015 I have been working in Toronto mainly in the area of Light Rail Transit Modelling, with a strong interest in rail technology, transit operations, and urban style design. He has worked on macro and micro transport modeling projects using modeling software tools such as VISUM, EMME, VISSIM, Vistro, Synchro, and AIMSUN.

## PROFESSIONAL EXPERIENCE:

Consultant at Steer Davies Gleave, Toronto, Canada;

Since Nov 2015

### *Transportation Modelling:*

Extensive experience includes modeling complex microscopic and macroscopic traffic simulations with VISSIM and VISUM, as well as junction modeling with Vistro and Synchro Intersection. He has a thorough understanding of traffic analysis, with additional expertise in Aimsun microsimulation. While he was working for both the public and private sectors, he gained a profound understanding of signal operations and coordination and has a clear understanding of their importance in the modeling process. He also has experience safety analysis using accident data and conflict analysis (Before-and-After), Traffic Data Collection and Analysis.

### *Transportation Engineer:*

Amir has gained a significant amount of Highway design includes transportation engineering drawings and reports, undertaking transportation engineering analysis and calculations and site investigations. Prepared Geometric design, Roadside safety analysis, drainage design and quantity calculations based on Highway Capacity Manual (HCM) and Highway Safety Manual (HSM) and TAC's Geometric Design. His work in environmental assessments and corridor studies have led him to be familiar with functional design, preparing conceptual sketches to convey ideas to the design team. Amir has also assisted with the review of numerous site plans for vehicle swept paths, to ensure the functionality of internal road networks.

### *Highway Designing:*

Amir has developed his planning skills by Provided technical and political process concerned with the control of the use of land and design of the urban environment, including transportation networks, drainage, traffic Control signals, street improvements, underground facilities, and Traffic Control signals.

## Projects summary:

### *Traffic Modelling*

- **City of Hamilton light rail transit study**, City of Hamilton, Client Name, 2015-2017, Hamilton, Ontario, Canada

Officials from the City of Hamilton requested assistance investigating the potential of various light rail transit routes within the central area of Hamilton. Detailed modeling work was undertaken to fully understand the impacts on traffic in the downtown Hamilton area following the introduction of the new B-Line LRT route. VISSIM, VISUM and VISTRO models were developed for the purpose and these interacted to provide an optimized solution for traffic and LRT operation in the downtown.

*Traffic modeler using PTV Software: Visum, Vissim, And Vistro*

- **Yonge street EA queen to Carlton**, City of Toronto, 2017-2018, Toronto, Ontario, Canada

To help Deliver an infrastructure planning and design study to develop, evaluate, and recommend design options for streetscaping and public realm improvements for the Yonge Street public right-of-way between Queen Street and College/Carlton Street. The design options will help increase multi-modal trip uses and improve the public realm.

*Corridor evaluation, Data Collection, Intersection analysis using Synchro*

- **Cypress Village Transit Assistance**, British Properties, from 2018, Cypress Village, BC, Canada

Trip generation calculation and determining intersection capacity using PTV Vistro Project

*Traffic Modeler*

- **SNG - Wider Area Traffic Management Planning**, TransLink, South Coast British Columbia Transportation Authority, 2018, Surrey, BC, Canada

An 'Area-Wide Traffic Management Plan' is proposed to mitigate risks and provide a tool for testing construction phasing, closures, and impacts. with developing a mesoscopic traffic simulation software tool that sits between the EMME, Visum, Vistro and VISSIM models.

*Traffic modeler using PTV Software: Visum, Vissim, And Vistro (Traffic signal optimization)*

### *Transit*

- **Waterfront transit 'reset'**, City of Toronto, 2017, Toronto, Ontario, Canada

Helping reset transit planning on the waterfront, with the aim to create a comprehensive transit network along one of the city's most important cultural and environmental landmarks with focus on unresolved areas of the network with the potential to add significant transit network benefits: The East Bayfront and the extension of transit into the Port Lands, and the section from Legion Road and Lakeshore Boulevard to Exhibition Place.

*LRT corridor and Highway Designer using AutoCAD Civil 3D*

- **TO360 wayfinding phase 3**, City of Toronto, From Sep 2017, Toronto, Ontario, Canada

*Corridor evaluation, Data Collection*

*Traffic Engineer*

- **Lonsdale Quay exchange preliminary design, TransLink**, South Coast British Columbia Transportation Authority, 2017, Vancouver, British Columbia, Canada

*Bus terminal analysis and design*

- **All door boarding cost-benefit analysis**, TransitCenter, 2017, New York, USA

*Surveying and data collection, Big Data analysis*

- **Laird in focus, City of Toronto, 2017**, Toronto, Ontario, Canada

*Corridor evaluation, Data Collection*

- **Translink fares modeling**, TransLink - South Coast British Columbia Transportation Authority, 2017, Vancouver, British Columbia, Canada

*Big data analytics***Transportation Engineer/ Team Lead at T.A. Pars Consulting Eng. Isfahan, Iran 2009-2015**

Responsible for atelier of design and project management as the project supervisor of road and traffic. Provided technical guidance to junior engineers and technicians/technologists.

**Projects summary:**

- **Ghamsar-GHOHRUD Road (20Km) (EPC, US\$12M) – Esfahan, Iran. Ministry Of transportation**
- **Esfahan-Ardestan Road” (72Km) (EPC, US\$25M) – Esfahan, Iran. Ministry Of transportation**

Highway design: alignments, geometrics, staging, utilities, roadside safety, CPS, Q-sheets, documents, constructability, drainage and hydraulic design, environmental design, mitigation measures, engineering surveys, geotechnical investigations, and design.

- **Khomeini Shahr – Azadegan ring road (20Km) (EPC, US\$9M) – Esfahan, Iran. Ministry Of transportation**

Responsible for preparing transportation engineering drawings and reports, undertaking transportation engineering analysis and calculations and site investigations. Prepared Geometric design, Roadside safety analysis, drainage design and quantity calculations based on the Highway Capacity Manual (HCM) and Highway Safety Manual (HSM).

- **Mashhad-Golbahar Subway & Parand New Town- Tehran Subway (EPC, US\$80M) Ministry Of transportation**

Members of the study and design team for examining the feasibility and suggesting a draft, presenting different alternatives and minimizing the impact of land development on the environment. Designed and drawn the geometric alignment (including vertical and horizontal curves) and plans, cross-sections, etc. of the corridor of study using Civil 3D and Microstation; calculated cutting and filling volumes using Civil 3D. Drawn several maps such as topographic maps, and 2D and 3D plans.

- **Rezvanshahr-Tiran residential town (12ha) (EPC, US\$5M) Ministry Of transportation**
- **Lohrimesh- Golpayegan residential town (30ha) (EPC, US\$15M) Ministry Of transportation**

Provided technical and political process concerned with the control of the use of land and design of the urban environment, including transportation networks. Planning, design bridges, libraries, police stations, bikeways, drainage, street lights, traffic Control signals, street improvements, underground facilities, and Traffic Control signals.

### Qualifications:

#### *Academic:*

- Concordia University, Montreal Canada - Master of Civil Engineering, Transportation  
Anticipated graduation - Fall 2019 (Convocation ceremony)
- Isfahan University - Bachelor of Civil Engineering

#### *Years of experience:*

9 Consulting; 2 Years of academic

#### *Languages:*

English – Advanced

French – Intermediate

### Computer Skills:

Aimsun, VISSIM, VISUM, Vistro, Emme, Synchro Studio, Civil3D, Autodesk Land Desktop, Civil Design, ArcGIS, VB scripting, Raster Design, ETABS, Safe, Sap, Micro Station, 3d Max, AutoTURN, Dreamweaver, MATLAB, SQL Server, Adobe Creative Suite, Microsoft Office Suite, and Desktop Support.