**Farhad Razmyar**

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**Highlights of Qualifications**

* Education1: Completed Bachelor’s Degree in Civil Engineering- Major in structural
* Education2: Completed Master’s Degree in Transportation Engineering and Planning
* Member of Professional Engineers of Ontario and Eligible to obtain P.Eng. Licence designation – in process.
* Member of International Transportation Engineers (ITE)
* Member of Transportation Association of Canada (TAC-ATC).
* **Programs experienced and mastered with:** 
  + Transportation / Traffic Engineering : HCS, Synchro, Aimsun, ESRI ArcGIS (GIS) ArcMap, MapInfo , Microstation v8i, Bentley Inroads, AutoCAD , Civil 3D, Crash, AutoTurn
  + Civil Engineering: SAP 2000, Safe, RISA, AutoCAD - Civil
  + Analytical and technical: Microsoft Office( MS Excel, MS Word, MS Access, MS PowerPoint), Visio, IBM SPSS
  + Project management: MS Project, Primavera
  + Programming: Python, Visual Basic, Java
  + Mapping: ArcMap, ArcCatalog, Google Earth (.kml, .kmz files)
  + Traffic Control : SCATS, SCOOT, Blip-Track
* **Civil and Transportation Studies, Designs, reports that experienced and mastered with :**
  + Geometric Design of urban/Rural intersections
  + Geometric corrections of intersections
  + Geometric Design of urban/rural streets, rural highways, Bicycle tracks, Parking lots, BRT lanes, pedestrian pathways
  + Geometric design of Terminals and public transportation facilities
  + Pavement marking Designs of Urban Streets
  + Transportation Master Plan phase I and Phase II
  + Traffic Impact Studies of new developments
  + Traffic Simulation and optimization of networks and Arterials
  + Traffic Signal timing of intersection, Arterials (progression assignments) and networks
  + Highway Capacity and Level Of Service analysis
  + Design of Concrete structures, footings, Foundations, Shells and Mat foundations
  + Design and analysis of Composite concrete structures
  + Design and analysis of space frames and Trusses
  + Design and analysis of steel structures
  + Feasibility and prefeasibility studies of Transportation alternatives
  + Business Plan analysis and reports
  + Traffic Safety Analysis of Corridors and intersections
  + Active transportation studies and sustainable transportation alternatives studies, analysis and designs
  + Geometric design of Urban Tunnels (underpasses)
  + Transit Master Plan Studies
  + Highways, Airports and Refinery Lighting design and manufacturing
  + Traffic Engineering technology and traffic Engineering principles including data collections (different approaches such as video recording, blip-track Wi-Fi detection, image processing and induction loop sensors and tube data collection methods
* **Competencies and Experiences:**
* Extensive experience in functional geometric design of urban streets, municipal infrastructures, Bicycle trails , roads and sidewalks, tunnels, bridges and pedestrian pathways according to TAC-ATC, AASHTO and MUTCD standards, using AutoCAD (versions from 12 to 2017), Civil 3D, Microstation V8i, InRoads and AutoTurn.
* As analyst and Engineer utilized professionally computerized systems such as MS Office programs (Word, Excel, Access, PowerPoint), Visio, MS Project and database software packages such as Microsoft SQL Server.
* Experienced and familiar with relational databases including Microsoft SQL Server
* Gained years of experience as a Project leader and project manager which handled, managed and directed, organized and carried out multiple and diverse projects and prioritize tasks in a detail and deadline oriented environment
* Highly experienced in project budgets, budgeting, its management and capital delivery of projects
* Gained Knowledge of Civil, transportation engineering and planning principles, standards, designs, Codes, guidelines, and applications in an urban multimodal system
* The former member of Transportation Association of Canada (TAC-ATC).
* Gained years of experience in Project management that includes Project governance, Planning, Delivery and related methodologies
* Experienced with sustainable transportation issues and its solutions, innovative practices and designs, and creative approaches to active transportation in complex with urban environment system
* Self-motivated, detail oriented, performance driven, well organized in assignments and resourceful with strong technical skills demanding critical judgement, analytical skills to make sound decisions and proper independent judgements in dealing with technical and Engineering matters and initiating creative solutions, organizational thinking, problem-solving skills, project coordination skills and interpersonal skills and with the ability to take initiative, Liaise with public, contractors, staff, do multi-task assignments and take responsibility to work under time constraints.
* Advanced communication, interpersonal and presentation skills verbally and in writing (specifically report writing) with presentation skills to interact and communicate effectively in complex projects, correspondence and conflict resolution skills with all levels of government, organization, Engineers, Consultants, Elected officials and external clients (Customer issues) and public as an active team player with Proven track record of solid internal and external relationships and strong leadership and management capacity.
* Gained Experience and knowledge of core competencies including flexibility, adaptability, change management, customer service, and communication internally and externally, team work, initiative and self-management, accountability.
* Highly experienced in supervising personnel in private and public sector as a supervisor, manager and director of corporation with highly positive outcome
* Worked independently with minimal supervision as well as part of a team
* Developed and implemented ESRI ArcGIS (Geographic Information System using ArcMap), mobile technologies (Such as Blip-Track) and incorporate spatial data, contract management, cost recovery, service requests and work orders into a new work management system using TMMS
* Highly experienced in Transportation and traffic modeling and simulation including Microscopic, Mesoscopic and Macroscopic modeling and traffic optimizations using SYNCHRO, Aimsun and HCS based on Highway Capacity Manual (HCM)
* Gained work Experience in a large organizations such as City of Toronto (from 2017 up to now), combined with an in-depth knowledge of cycling and pedestrian issues including safety issues and initiatives and a thorough understanding of the requirements and operations of Council.
* Experienced in active transportation initiatives (Pedestrian and Cyclists), including bike parking infrastructure, bike lane, Safety features and other related programs
* Experienced in operating and accountable project leader and project manager; identified needs; initiated, coordinated and managed and implemented solutions in response to departmental and contractual issues.
* Utilized project management tools and programs for planning and implemented complex projects, correspondence, Council reports, policies and procedures.
* Fully experienced in writing formal correspondence and reports in different formats in a clear, concise and legible fashion
* Prioritized multiple projects, worked with cross-functional teams, set clear directions and design terms of reference and project plan for individual and chain projects
* Gained thorough experience in General Traffic Engineering and technology, specific in traffic operations and road construction.
* Experienced in conducting research and applying technical requirements of Highway Traffic Act (HTA), Ontario traffic Manuals (OTM), municipal traffic specifications and parking by-laws, Geometric Design included but not limited to AASHTO, TAC Geometric Road Design Guide including pedestrian and cycling infrastructure Standards, city of Toronto standards in geometric design and traffic analytical techniques
* Achieved highest degree of computer proficiency in, management, project coordination, Civil Engineering and Transportation Engineering and planning related programs such as MS Office Suite including Word (word processing), Excel (spreadsheets), Outlook, PowerPoint, Access (Database manipulation) and other Data management programs, IBM SPSS, MS Project, AutoCAD, Bentley MicroStation v8i (CADD Drafting and designing), ESRI ArcGIS Suite, MapInfo, Adobe Acrobat Pro, Visio, Microsoft Project, Primavera, other Engineering and project coordination and management proprietary programs and software packages.
* Experienced in traffic Operations and modelling software including highway Capacity Software (HCS), Synchro/Sim Traffic, Aimsun, Crash (Collision database), Flow (City of Toronto traffic data) and other microsimulation programs.
* In-depth knowledge of legislative governing authorities including Ontario Municipal Bylaws, transportation related statutes and government legislations, regulations, standards and practices, Highway Traffic Act, Ontario Highway traffic Act, Municipal Act, Occupational Health and Safety Act and collective agreements, Ontario Provincial Standards Drawings, Transportation Association of Canada (TAC-ATC), Ministry of Environment, Labour legislations, Council, Committees and their policies, procedures and City of Toronto Uniform Traffic By-Law, geometric Design Guidelines and other regulations related to transportation engineering and relevant municipal by-laws
* Delivered complex transportation planning projects including transit studies (Subway systems), Transit Project Assessment, evaluation and modelling process, Environmental Assessments, Corridor studies as well as Station studies
* Experienced in making Engineering reports on **Traffic Impact Studies** and environmental impact studies pertain to development proposals and land use changes scenarios
* Experienced on performing and reviewing prefeasibility studies, feasibility studies of developments and transportation related projects, cost-benefit analysis and applying engineering economics analysis to those studies
* Knowledgeable in relational database systems and programs. Used databases for research, analysis of engineering concepts to support the hypothesis.
* The former member of Transportation Association of Canada (TAC-ATC).
* Knowledgeable in planning Act, provincial and federal policies and legislations, in transportation planning, municipal infrastructures including and Municipal Class Environmental Assessment Act,

The Environment Protection Act, Ministry of Environment Act and regulations

* Gained project coordination skills and exercised sound judgment skills in personnel and public relations, engineering judgments and technical situations. Able to represent the Division and City of Toronto in a variety of situations and successful in any negotiation.
* Gained general knowledge of City of Toronto Government structure and functions. Gained knowledge of City of Toronto Bylaws and its related legislations
* Knowledgeable and experienced in traffic engineering practices, statutes and regulations and traffic engineering manuals, by-laws and statutes such as Ontario Traffic Manuals and the Highway Traffic Act, municipal traffic by-laws, TAC (Transportation Association of Canada) Manual of Geometric Highway Design Guidelines and standards , City of Toronto standards and guidelines in geometric design and municipal traffic/ transportation by-laws, AASHTO manuals, HSM (highway Safety Manual), MUTCD (Manual of Uniform Traffic Control Devices), HCM (highway Capacity manual), Ontario Traffic Manual (OTM), Ontario provincial standards and specifications (OPS) , Ontario provincial standard drawings, and other related safety manuals. Familiar with municipal road-related legislations, relevant management systems, and related issues.
* Studied Ontario government legislations and statues, including the Occupational Health and Safety Act and its detailed regulations and applied them in the workplace such as traffic control, and WHIMS
* Eligible for membership in the Ontario Association of Engineering, Technicians and Technologists (OACETT)
* **Possess valid City Driver's permit** (valid up to 2023) and class "G" Ontario Driver's license in good standing. Capable to travel in work locations and control different work locations with time efficient manner with owned vehicle.

**Professional Experience / Engineering and Management Practice**

**City of Toronto - Transportation Services (Employee Number 8171096)**

**North York - Traffic Operation - Technical Trainee (Analyst)** Sept. 2018-Now

* Applied ArcGIS (using ArcMap) to model Grass Cut Locations within the North York district. Created district wide model to managed Green spaces using ArcMap.
* Using Project management Programs, estimated time required to fully complete the project.
* Created Geospatial database and Calculated geometries and other required calculations
* Applied Python programming to utilize geospatial data and data referencing
* Replied to requests from City officials and stakeholders based on by-laws and agreements
* Controlled contractor estimates and applied adjustments
* Controlled contractors work-orders and placed proper inspection to control their quality and quantity of work
* Mapped grass-cut locations in the North York district, calculated geometries, created database for those information using ArcGIS (ArcMap) and Excel
* Created reports for weekly deficiency list of contractors and prepared reports for management
* Followed up with contractors for deficiencies to rectify them
* Supervised staff to prepare Map booklets and controlled their output and corrected the errors

**City of Toronto - Transportation Services (Employee Number 8171096)**

**Toronto and East York - Traffic Design- Technical Trainee** April 2018-Sept. 2018

* Designed and traffic operation plans including marking and Signage plans for resurfacing projects, traffic Calming and other requests using **SSARA** and **MicroStation V8i** within Toronto and East York Major Arterials (e.g. Yonge St. and Queens Quay)
* Prepared Geometric Design corrections for several intersections in Toronto and East York according to City of Toronto guidelines, TAC and AASHTO using MicroStation and **AutoTurn** programs
* Evaluated collision hazards for cyclists and prepared appropriate drawing that will improve cyclists and pedestrian safety in major arterials in the City of Toronto using MicroStation, vast knowledge of geometric design and safety measures
* Prepared drafts and drawings for traffic and transportation by-law amendments including parking amendments, traffic calming plans and other planning work orders.
* Prepare drafts and drawings for traffic calming proposals within the local neighborhoods
* Thoroughly studied on permanent road closure and procedural manual, closing public highways, chapter 743 use of streets and sidewalks, Municipal and Local Improvement Act, local improvement charges regulation and amendments under The City of Toronto Act, Expropriation of Lands and its Act in Ontario and the Municipal Act Expropriation of lands under City policies, The opening of new public lanes, Assumption of private lane, Toronto official plan and city of Toronto traffic operation procedural manual

**City of Toronto - Traffic Safety Unit - Technical Trainee** June 2017- Jan 2018

* Traffic safety unit- Under the supervision of Data analysis supervisor, senior traffic safety engineer, and traffic safety unit manager, processed collision data using Excel, Word, PowerPoint, Access and CADD programs. Analyzed and presented a variety of traffic data using Synchro, IBM SPSS and Aimsun. Prepared presentations and other tasks ordered by the supervisor. Prepared collision diagrams and interpreting causes of collisions and proposed appropriate remedies. Evaluated corridors and intersections based on safety measures and possible solutions.
* Researched and prepared collision and road safety reports and statistics for councillors and general manager’s office when required.
* Studied vulnerable road users ( Pedestrians and cyclists) safety and proposed proper recommendations
* Performed field investigations for fatal collisions and prepared reports based on MVA reports, reconstruction reports and other police-related reports.
* Prepared recommendations regarding vulnerable road users including pedestrians, cyclists and proposed safety improvements.
* Prepared Collision diagrams based on MVA reports, CRC reports and used software programs such as Cars-map and Crash to retrieve required information
* Performed studies on Multi-Use Trail Cyclist Safety Review – City of Toronto- draft publication created on Dec.2018
* **ITS Capital-** Under the supervision of senior engineer of ITS capital, prepared before studies reports including travel time studies using real-time Blip track system (**Big Data**) (record and analysis of data from Bluetooth and wireless sensors). Recorded sensys volume data and phasing data from corridors and compared these data with travel time to see the variations and correlation of travel time and volume in corridors to identify the appropriate proposal of an adaptive system for the city of Toronto by applying programs such as Excel, SPSS and Blip track for this purpose.

**Green Envoy Consultants Inc./ Hamgam Taradod Joint venture - Director** Sept.2009- Nov-2016

* + Founded www.sakhtemoon.com as a directory of civil and construction companies and their products and services active in Iran. Ranked 1540 (Aug. 2019) based on [www.alexa.com](http://www.alexa.com)
    - Applied Project management that includes Project governance, Planning, Delivery and related methodologies
    - Facilitating sessions with members of board to identify optimal processes and business requirements as well as technical necessities to gain maximum efficiency
    - Experienced in using computer programs, such as MS Office (i.e. Word, Excel and PowerPoint, Access), process design software (Visio) and project management Programs (MS Project and Primavera)
    - Designed and performed data analysis on qualitative and quantitative initiatives using methodologies and software applications using Excel and Access
    - Applied System Development Life Cycle (SDLC Models such as waterfall and Agile software development) and systems development methodologies
  + As a director, provided leadership and problem-solving in the joint venture. Managed Geometric design projects and implemented techniques to increase safety in highways and residential areas.
  + **Niyayesh Tunnel**: Designed Phase I geometric design of the inter-connection tunnels of two major freeways (East to West of CBD Tehran – Iran) as Consultant (Value 350m Euros). Applied DTM and Design experience to create alternatives using AutoCAD, Civil 3D, Microstation and InRoads.
  + Velenjak St. Tehran-Iran. Acted as project director and project manager- A multimillion-dollar project to install new modern pedestrian walkways, new underground drainage installation, geometric design corrections and safety measures implementation for Velenjak St. in City of Tehran, Iran
  + Performed research on recycling roofing shingles to produce RAS and other bi-products in paving industries for more information please visit [www.abcconstruct.com](http://www.abcconstruct.com),

**Abnieh Gostar Inc.** – **Director (Member of Board of Directors)** March 1993- Sept. 2008

* As a director and manager, chaired various transportation engineering projects. Examples:
  + Phase I – Transportation master plan for the city of Rafsanjan - Iran
  + Phase I – transportation master plan for the city of Shahryar – Iran
  + Phase I and II subway and mass transit system for city of Oroumieh- Iran
  + Prepared future plans for major arterials of the City of Tehran – Iran
  + Geometric Design and Safety consideration for specified intersections and arterials of City of Mashhad –Iran
  + Geometric design and safety considerations for specified intersections of the city of Tehran
  + Performed New Developments Traffic and related Environmental impact studies
  + Transportation planning review for major arterials of the City of Tehran
* Performed as a director and senior engineer in manufacturing and installation (more than 15 different projects) signal poles including mast arm poles and installations.
* Designed, manufactured and installed Bus terminal accessories and furniture
* As a manager and Director in more than 120 different turnkey highway lighting, airport lighting, industrial and commercial lighting projects (List available upon request):

Designed, Manufactured and installed Traffic signal poles, lighting poles, VMS, lane monitoring system, CCTV poles and installations, lighting poles and lighting systems for major highways in Tehran, Lighting system for IKEA airport and Mehrabad Airport for Ministry of Transportation and Urbanization, Abadan refinery and Khark Island for NIOPDC, Solar Lighting for highways, streets and parks.

**Municipality of Tehran**

**- Traffic and Transportation Services - Engineer / Manager** June 1991-Dec 1993

* Performed as manager of geometric design department in the municipality for correction of geometries for corridors and intersections of Tehran- Iran using AutoCAD and applying AASHTO standards for design alternatives. Collaboratively provided engineering solutions for safety standards and better level of service in At-Grade intersections, Main Roads, Arterials and local streets. Studied Codes and Provided signal timing design and Green wave calculations to reach optimum bandwidth for arterials.

**Tehran Traffic Control Company - R&D Transportation Engineer** Sept.1989- June 1991

* Performed as a member of R&D team to evaluate appropriate traffic control system for the city of Tehran-Iran. Attended in several upgrading courses in Traffic control and ITS topic.
* As a team member, provided comparison studies of current traffic control systems including SCATS and SCOOT for the city of Tehran. As a team member performed studies to install a first generation Adaptive control system (SCATS) for first 120 intersections of Tehran. Provided ITS Solutions and TIS for the city of Tehran including Tehran traffic Monitoring center which manages traffic in the Traffic control center of Tehran.

**Professional Community Experience**

**Professional Engineers of Tehran Province – Elected Board member official Jan1999- Dec.2009**

* Elected as a member Traffic and Transportation expertise in the panel of directors to supervise Transportation Engineers' Ethics and their conducts for Tehran Province. Assisted panel for decision making and providing professional policies for transportation engineers. Prepared standards and codes of ethics for transportation engineers to study and provided courses for transportation engineers to prepare for licensing exam. Prepared licensing

**Professional Engineers of Tehran Province – Board elected officials Member June 2016- Now**

* Elected as the same above-mentioned position to continue the duties. Currently through the video conference and remote meetings, try to perform the duties

**Education**

* University of Tehran – Azad- Master’s Degree in Transportation Engineering and Planning -1994**-** Evaluated and Certified by WES, Toronto, Canada 2016 (achieved highest mark amongst the students)
* University of Tehran – Azad- Bachelor Degree in civil Engineering 1991 - Evaluated and Certified by WES, Toronto, Canada 2016

**Courses and certificates**

* Certificate, MS Office, MS Project, Tehran Institute of Technology, Tehran, Iran2002
* License of Professional Engineering,Ministry of Housing & Urbanization – Tehran, Iran 2003
* Certificate, AutoCAD, Tehran Institute of Technology, Tehran, Iran 2006
* Transportation engineering, Ontario Society of professional Engineers, Toronto 2010
* Law and Ethics, Ontario Society of professional Engineers, Toronto 2010
* Statistics using IBM SPSS, Seneca College continuing Education, Toronto 2017
* Bentley MicroStation V8i, Bentley learning, City of Toronto 2018
* GIS in the City - City of Toronto 2018
* Property Law – Seneca college - University of UBC, Sauder school of business 2017
* Fundamental of property and land appraisal – Seneca College, University of UBC 2016

**Membership and Associations**

* Member of professional Engineers of Ontario 2008
* Member of ITE (International Transportation Engineers)
* Member of professional Engineers of Tehran Province
* Member of Appraisal Institute of Canada

**Publications**

* Design Standards for Urban Roads and Streets, 12 volumes, Publisher: Ministry of Housing and Urban Development Iran – member of team of authors. 1998
* Multi-Use Trail Cyclist Safety Review – City of Toronto- Dec. 2018