RONAUQ (RON) SABHARWAL

(647) 325-5679 | ronauq@gmail.com | www.linkedin.com/in/ronauq-sabharwal

RE: Transportation Engineer **March 4th, 2019**

Dear Ms. D'Obrenan,

Throughout my career, I have sought opportunities to create meaningful change. The Transportation Engineer position will provide me with an excellent prospect of applying my existing transportation modelling skills towards solving complex transportation problems and provide opportunities to continue to improve my skills. I believe that by offering my talents to 30 Forensic Engineering, I will provide diligent hard work, high-quality results and a relentless drive.

I can be a key contributor in the 30 Forensic Engineering team because of my understanding of transportation modelling, enthusiasm towards tackling complex problems, and analytical skills, which align very well with the exemplary work that 30 Forensic Engineering is currently doing. At University of Toronto, I excelled in the Masters in Cities Engineering and Management, as I completed a two-year program in one year with a 3.9 GPA. Within this program, I specialized in Operations Research, where I successfully delivered a system dynamics model and agent-based model to optimize subway operations, utilizing AnyLogic and Python. Furthermore, I evaluated the economic impact of the Ottawa's LRT system and created an extensive report detailing the decision-making framework of the Melbourne Metro Project. Throughout my professional career, I have relied upon my time-management, organizational and interpersonal skills to deliver high-quality results.

I have amassed a portfolio of quantitative expertise, which I utilize to solve complex urban problems and deliver on major projects in a timely and efficient manner. Most recently, I worked on a project for Ontario's Ministry of Economic Development, Job Creation and Trade that involved creating socio-economic profiles of Ontario's municipalities. The project was technically rigorous, involving big-data cleaning, wrangling and analytics. The project involved finding similarities between municipalities, opportunities for collaboration, and detailing the results in an extensive report. In my work with the GTA Urban Emissions Group, an academic Research Group at University of Toronto, I collect and analyze the GHG Emissions data within Toronto. I believe my technical expertise and strong problem-solving skills make me an ideal candidate for this position

I believe my excellent problem solving and analytical skills combined with my background in transportation engineering and extensive problem-solving skills will make me a valuable asset to the 30 Forensic Engineering' Consulting team. I find excitement in roles that provide learning opportunities beyond just the scope of its immediate roles and responsibilities and allow me to utilize my technical and research skills to solve today's challenges.

I look forward to discussing this opportunity with you in person. Thank you for considering my application.

Regards,

Ronauq Sabharwal

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PROFILE

Advanced analytical skills with proficiency in PTV VISSIM, AutoCAD, R, Python, ArcGIS and MatLAB

On track to become P.Eng, with successful completion of PPE

Highly capable multi-tasker with robust organizational and adaptability skills

Driven individual that successfully delivers on critical deadlines

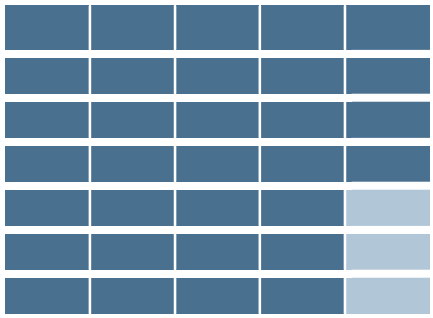
Strong teamwork attributes complimented by strong work ethic and exceptional communication skills

Proficient in quantitative analysis, established through rigorous academic and professional experiences

Excellent research skills strengthened throughout my academic career by various projects

Exceptional report writing and presentation skills, developed through professional and academic experiences

PROFESSIONAL SKILLS



EDUCATION

MASTERS IN CITIES ENGINEERING AND MANAGEMENT | 2018
UNIVERSITY OF TORONTO

Specialized in Operations Research, with emphasis on relationship between urban policy and engineering

Held a 3.9 GPA while finishing a two-year program in one year

Pursued Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE) Certification, developing a broader skill set by excelling in courses such as Financial Management and Project Management

Relevant Courses: The Challenges of Urban Policy Making, Cities and Data Analytics, Methods in Data Analysis I & II, Infrastructure and Urban Economics, and Financial Engineering

BACHELOR OF APPLIED SCIENCE – ENVIRONMENTAL ENGINEERING | 2010-2015 |
UNIVERSITY OF WATERLOO

Delivered an 8-month design project, *Naturalization of Victoria Park Lake Tributaries*, which utilized Hec-Ras, ArcGIS, AutoCAD and MatLAB and was developed into a Case Study for the Hydrology course at University of Waterloo

Relevant Courses: Transit Planning and Operations, Air Pollution Control, and Building Science and Technology

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EXTRACURRICULARS

Vice-President of Civil Engineering Graduate Student Association, organizing various events for the student body

Organized multiple events for Brookfield Renewable employees as part of the Social Committee

Captained an intramurals Volleyball team at University of Toronto

Enjoy reading, playing disc golf, volleyball, basketball, tennis and board games

Currently reading: The Economics of Inequality by Thomas Piketty & Sacred Games by Vikram Chand

WORK EXPERIENCES

RESEARCH ASSISTANT | SEP 2018 - PRESENT
GTA URBAN EMISSIONS PROJECT – UNIVERSITY OF TORONTO

Quantifying the total methane emissions in the GTA and identifying individual point sources

Responsible for collection, calibration and analysis of data collected from the bike-mounted emissions laboratory

Researching numerous articles to evaluate various statistical methodologies to best analyze the data collected

Creating a detailed report summarizing the findings from the statistical analysis performed on the data

GENERATION PLANNER | AUG 2015 – DEC 2017
BROOKFIELD RENEWABLE

Showed initiative by leading an implementation of a non-linear optimization software which resulted in faster forecast results, which improved Energy Bidding Process

Presented the optimization software's results to the Hydropower Operations and Planning Group (HOPIG), where we were awarded the "most innovative idea"

Created a dynamic model to forecast generation of two hydroelectric facilities, resulting in an increase in contract value

Responsible for generation optimization and safe operations of 3000 MW hydro-power fleet across North America

Lead team meetings with various stakeholders to ensure successful implementation of optimization software

Assessed impact on energy revenues due to variation in generation conditions, mitigating risks endured by Traders

ASSISTANT ENGINEER | SEP 2013 – DEC 2013
CITY OF WATERLOO

Represented City of Waterloo at multiple pre-construction, budget hearing and site meetings, maintaining successful relationships with stakeholders and mitigating conflicts to ensure successful completion of projects

Wrote technical reports and reviewed technical drawings for Integrated Planning and Public Works Department