



OBJECTIVE

*To advance my career as a **Structural EIT** with a leading organization that will utilize my education in civil engineering while allowing me to develop further as a professional*

Technical professional highly regarded for supporting complex projects, with a passion for developing sustainable infrastructure that builds communities in positive ways. Analytical thinker and quick learner adept at solving challenging problems under pressure, using a combination of industry standard and cutting-edge technologies. Respected as a dedicated, passionate team player who leverages excellent communication skills to work with diverse individuals.

CORE COMPETENCIES

- Strategic Planning
- Organization
- Inspections
- Cross-Functional Communication
- Agency Cooperation
- Data Collection & Analysis
- Time Management
- Reporting
- Team Leadership

EDUCATION

UNIVERSITY OF TORONTO, TORONTO, ON, SEPTEMBER 2017 TO APRIL 2022

BASC IN CIVIL ENGINEERING, MINOR IN ENGINEERING BUSINESS

- Cumulative GPA: 3.51/4.0
- Relevant Coursework: Steel and Timber Design, Reinforced Concrete I, Civil Engineering Materials, Construction Management, Civil Engineering Graphics, Engineering Communications I
- Final Year Coursework: Reinforced Concrete II, Introduction to Structural Dynamics, Prestressed Concrete, Structural Analysis II, Solid Mechanics II, Behaviour and Design of Steel Structures

PROFESSIONAL EXPERIENCE

TORONTO HYDRO, TORONTO, ON, SEPTEMBER 2020 TO AUGUST 2021

SENIOR TECHNICAL STUDENT

- Evaluated full stream cut application status of 100+ projects and reported this information at the end of every month using Excel and VBA.
- Partnered with supervisors, other utilities, and engineering firms to identify and coordinate hundreds of potential conflicts, using the city's project tracking portal (PTP).
- Monitored road cut restoration invoices received from the City of Toronto; obtained approval from designers, supervisors, and engineering firms; and addressed any invoice disputes with the city.
- Edited civil and electrical assets in Toronto Hydro's Geospatial Information System (GEAR); assisted with the incorporation of 27 bulletin documents into the GEAR Digitizing Manual.
- Analyzed CAD drawings on MicroStation to ensure compliance with internal standards and the Municipal Consent Requirements (MCR); provided sign-off if there were no conflicts identified with existing or proposed Hydro assets.

UNIVERSITY OF TORONTO, TORONTO, ON, MAY 2019 TO AUGUST 2019

RESEARCH ASSISTANT

- Supported Professor Bentz's MSc and PhD students with their reinforced concrete research by preparing stirrups, installing strain gauges on rebar, and constructing formwork using CAD drawings.
- Inspected regions under combined shear and torsion of two reinforced concrete beams; collected data on loaded UHPFRC shell element behaviour.
- Measured deformations and modelled components of steel viscoelastic coupling damper testing, using MATLAB, SolidWorks, and Abaqus Finite Element Analysis.

PROJECT EXPERIENCE

SEISMIC DESIGN TEAM, UNIVERSITY OF TORONTO, TORONTO, ON, OCTOBER 2019 TO PRESENT

DESIGN AND ANALYSIS LEAD

- Achieved 3rd place out of 36 teams from Universities worldwide at the 2021 Seismic Design Competition, the best result in the team's history.
- Assessed existing structure provided for the 2021 competition using SAP2000; collaboratively designed extension for the tower; and recommend retrofits to the existing structure.
- Prepared a Design Response Spectrum as per Chapter 11 of ASCE 7-16; selected and scaled time histories for future analysis.
- Researched applications of topology optimization using Altair HyperWorks CAE software.
- Constructed a balsa wood tower based on a team Revit model to ensure precision; tested model tower and examined data using Python/MATLAB.
- Performed design analysis on the scaled model of high-rise structure, using SAP2000 to determine the period, displacements, and member forces.

AWARDS AND HONORS

- Jeffrey Skoll Scholarship – University of Toronto (August 2021)
- Introduction to Revit for Structural Engineers – Pluralsight (May 2020)
- Undergraduate Student Research Award – NSERC (May 2019)
- Youth Leadership Scholarship – Milal Scholarship Award (December 2018)
- AutoCAD 2017 Essential Training – Lynda.com (January 2018)

TECHNICAL SKILLS

Programming: Python, VBA, MATLAB, HTML, CSS

Software: AutoCAD, Revit, Microsoft Office, SketchUp, SolidWorks, SAP2000, Altair HyperWorks, Abaqus, ETABS

ADDITIONAL INFORMATION

Languages: English, Bengali, Hindi, Urdu

Other: Driver's License

Interests: Soccer, Basketball, Cricket, MMA, Biking, Travel, Documentaries, Investing