## Hossein Mohammadi, M.Sc., E.IT.

Hamilton, ON ♦ Phone: +1 (289) 659 7808 ♦ Email: H Mohammadi@live.com

# **HIGHLIGHTS:**

- More than three years of experience in structural design of residential, commercial, and industrial structures
- Familiar with loading and design codes: NBCC2015, CSA-S16, CSA-A23.3, ASCE-7, AISC360, ACI318
- Extensive experience with structural design and analysis software SAP 2000, ETABS, and SAFE
- Excellent written and verbal communication skills (presented in conferences and published journal papers)
- Outstanding skills in working in teams or individually
- Strong troubleshooting and problem-solving skills
- Engineer in Training (EIT)
- Proficient with AutoCAD
- Proficient with Microsoft Office
- Valid driver's license and access to a vehicle

#### **WORK EXPERIENCE:**

#### Structural and earthquake engineering research assistant, McMaster University, Hamilton, ON (2016-2018)

- Proposed a novel high-performance steel connection and developed related design methodology
- Conducted finite element analyses of braced frames and connection using ABAQUS

## Structural engineer at Pars Geometry Consultants, Tehran, Iran

(Feb 2016 - Aug 2016)

- Designed offices and residential buildings, foundations, and retaining walls
- Collaborated with other engineering disciplines on large projects such as:
  - o Selecting the best structural system for The Expansion Project, Karbala, Iraq
  - o Designing the office buildings for the largest seawater desalination plant in Iran, Bandar Abbas, Iran

#### Structural engineer at Sharif Sazeh, Tehran, Iran

(2011 - 2013)

- Developed economical designs for steel and concrete residential/office buildings (3- to 7-story)
- Assisted in designing residential, commercial, and industrial buildings, strengthening, reducing material consumption, and incorporating structural design changes due to architectural modifications

## **EDUCATION:**

# M.Sc. in structural and earthquake engineering, McMaster University, Hamilton, ON (GPA: 3.9/4) (2016 - 2018)

- Developed novel localized heat treatment designs for enhanced seismic performance of concentrically braced frames
- Served as a teaching assistant for:
  - o Civil Engineering Materials and Design
  - Seismic Design of Structures

#### M.Sc. in structural engineering, Sharif University of Technology, Tehran, Iran (GPA: 17.8/20) (2013 - 2015)

• Conducted research on a new steel brace which eliminates brace buckling and remains undamaged after earthquakes

## BSc. in civil engineering, Karaj Azad University, Karaj, Iran (GPA: 17.8/20)

(2005 - 2011)

• Graduated in the top 5% students

## **PROFESSIONAL AFFILIATIONS:**

• Engineer in Training (EIT) (2019 - present)

• Member of Canadian Society for Civil Engineers (CSCE) (2017 - present)

Member of Earthquake Engineering Research Institute (2016 - present)

- Volunteered at high school outreach events with the McMaster EERI Student Chapter
- Employment License for Engineers, Ministry of Road and Urban Development, Tehran, Iran (2015 present)

# PRESENTATIONS AND JOURNAL PUBLICATIONS:

(2015 - present)

- CSCE Annual Conference, Proceedings 6th International Structural Specialty, Fredericton, NB
- Novel gusset plate design using high strength steel and heat treatment (Journal of Constructional Steel Research)
- Performance-based assessment of an innovative braced tube system for tall buildings (Bulletin of Earth. Eng.)
- Experimental evaluation of pinned frame equipped with ribbed bracing system (Journal of Earth. Eng.)
- Seismic performance of ribbed bracing system in passive control of structures (Journal of Vibration and Control)