

Nader Aly

Civil Design Engineer

Contact

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Education

- **Doctor of Philosophy in Civil Engineering**, Concordia University - QC (GPA: 4.20/4.30) 01/2016 – 01/2020
- **Master of Science in Civil Engineering**, American University of Sharjah - UAE (GPA: 3.72/4.00) 02/2012 – 01/2016
- **Bachelor of Science in Civil Engineering**, American University of Sharjah - UAE (GPA: 3.90/4.00) 09/2007 – 08/2011

Qualifications

- Qualified Owner's Engineering Lead at Bruce Power, ON, CA
- P.Eng. application in progress with PEO
- Engineer-In-Training (E.I.T.-USA)

Skills

- Structural Analysis & Design
- Team Leader
- Strong technical writing and communication skills
- Proficient in: Maximo, STAAD Pro, SAP2000, ETABS, SAFE, CSI Bridge, MIDAS Civil, Seismosoft software, LARSA-4D, OpenSees, Leap Bridge, AutoCAD, and MicroStation.

Languages

- Fluent in English
- Limited proficiency in French

Civil engineering professional with 8+ years of experience in the analysis and design of structural steel, reinforced concrete, reinforced masonry, and pre-stressed concrete structures according to the Canadian, American, and British codes and standards. Published over 20 peer-reviewed journal and conference papers in the fields of structural and earthquake engineering. Serving as a reviewer in several ASCE and Elsevier structural engineering journals.

Work History

- 07/2020 - Current
Owner's Engineering Lead - Civil Design
Bruce Power, Kincardine, CA (Contractor)
- Controlling MCR design engineering activities to maintain design requirements, adhere to timelines and meet regulatory requirements
 - Providing technical support and oversight during the various phases of engineering changes
 - Leading the design teams to break down problems, evaluate solutions and make decisions
- 02/2018 - 12/2020
Founding Member and Structural Engineer, *Casa Duro, Montréal, CA*
- Responsible for the design, specifications, & project management of Casa Duro's products and projects
- 01/2020 - 10/2020
Postdoctoral Fellow, *Concordia University, Montréal, CA*
- Designed and analyzed structural steel reaction frames for test setups
 - Performed experimental and numerical simulations of innovative structural systems
 - Developed and optimized design processes for innovative structural systems
 - Team leader of graduate (M.Sc. and Ph.D.) students.
- 01/2016 - 12/2019
Research and Teaching Assistant, *Concordia University, Montréal, CA*
- Performed experimental and numerical simulations of RC and RM structures under seismic loading
 - Tutorial Leader, Laboratory demonstrator, and Marker for "Design of RC Structures"
- 01/2015 - 01/2016
Structural Bridge Design Engineer, *Louis Berger, Dubai, UAE*
- Analyzed and designed post tensioned concrete box girder and segmental bridges, underpasses, underground utilities, and chambers.
- 07/2012 - 01/2015
Structural Engineer, *Parsons Overseas Limited, Dubai, UAE*
- Analyzed and designed at grade and elevated Tram Stations and depots
 - Analyzed and designed RC Traffic Management Centers
 - Analyzed and designed various types of concrete bridges, ramps underpasses, underground chambers, and utilities' foundations
 - Provided on-site design support for the execution contractor
- 11/2011 - 06/2012
Façade Structural Engineer, *Zebian Industries, Sharjah, UAE*
- Analyzed and designed façade structural elements, steel, and aluminum structures
 - Prepared and maintained the quality of shop drawings and structural calculations
- 03/2011 - 09/2011
Researcher, *Elkem Material, Dubai, UAE*
- Improved the sustainability of concrete using Micro silica
- 01/2010 - 10/2010
Intern Site Engineer, *AMANA Steel Buildings and Contracting, Sharjah, UAE*
- Supervised and monitored site activities to ensure the implementation of drawings and project specifications
 - Estimated material quantities and prepared bill of material