

Amir Jamshidi

Ph.D., P.Eng., P.E.



Box 3584
Langley, British Columbia
V3A 4R9

EDUCATION

Doctor of Philosophy in Structural Engineering (2016)
University of Alberta, Edmonton, Alberta

Master of Science in Structural Engineering (2007)
Amirkabir University of Technology (Tehran Polytechnic), Tehran, Iran

Bachelor of Science in Civil Engineering (2003)
Azad University, Najafabad, Iran

PROFESSIONAL REGISTRATION/LICENSING

- Registered Professional Engineer, Alberta (APEGA), 2013 – Present
- Registered Professional Engineer, British Columbia (EGBC), 2016 – Present
- Registered Professional Engineer, Saskatchewan (APEGS), 2016 – Present
- Registered Professional Engineer, Manitoba (EGM), 2017 – Present
- Registered Professional Engineer, Yukon (APEY), 2018 – Present
- Registered Professional Engineer, Ontario (PEO), 2019 – Present
- International Professional Engineer/APEC Engineer in the discipline of Structural Engineering, APEC/IPEA, 2016 – Present
- Registered Professional Engineer, Montana, 2014 – Present
- Registered Professional Engineer, Alaska, 2019 – Present
- Registered Professional Engineer, New York, 2020 – Present
- Registered Professional Engineer, Washington, 2020 – Present
- Registered Professional Engineer, Arizona, 2021 – Present
- CWB Welding Engineer (CSA W47.1), 2017 – Present

TECHNICAL AFFILIATIONS

- Associate Member, American Society of Civil Engineers (ASCE), 2004 – Present
- Associate Member, American Institute of Steel Construction (AISC), 2004 – Present
- Associate Member, Canadian Institute of Steel Construction (CISC), 2009 – Present
- Member, Project Management Institute (PMI), 2015 – Present

PROFESSIONAL EXPERIENCE

Amir is a Professional Engineer with over 15 years of experiencing specializing in structural forensic investigations. He has provided engineering and technical services to the steel fabrication and oil & gas industries, including the design and analysis of steel structures and connections, as well as performing fatigue and fracture analysis. He has worked on major infrastructure projects and provided structural assessments on industrial, and commercial and residential buildings. He is a licensed professional engineer in Alberta, British Columbia, Saskatchewan, Manitoba, Ontario, the Yukon and the states of Montana, Alaska, New York, Washington and Arizona.

January 2021 to Present

Forensic Structural Engineer, *Origin and Cause Inc.*
Edmonton, Alberta

- Conduct on-site examinations of structural collapse of buildings and structures
- Prepare technical reports for the insurance industry with professional opinion on the probable root cause of structural and building envelope losses
- Investigating losses involving a variety of structures, including bins, storage buildings, industrial buildings, commercial buildings

- Prepare detailed emergency structural designs and recommendations to make damaged structures safe for entry and during repair/rebuild
- Provide recommendations for safe entry
- Provide high level forensic investigations to law firms in support of litigation
- Provide expert witness testimony in courts when required

September 2019 to Present

President & CEO / Founder, **Niik Group**

- Offer engineering and technical services to the steel industry, oil and gas industry, infrastructures (highway and railway bridges), industrial buildings, in addition to commercial and residential buildings
- Offer complex design and high-fidelity analysis of steel structures and steel connections
- Perform fatigue and fracture analysis of steel structures, damage assessments
- Offer construction engineering, constructability of structures, and formwork design
- Resolve fabrication and construction site queries on complex projects
- Review project details or specifications related to steel fabrication and construction
- Structural assessments, peer review for structural design, and forensic engineering

January 2016 to September 2019

Director of Technical Services, **Supreme Group**

- Responsible for the engineering, drafting, and quality management departments
- Created and implemented engineering practices: steel connections, construction engineering, erection procedure, welding procedure datasheet
- Developed technical strategy, policies, procedures, and RASCI charts and process mapping flowcharts
- Set performance goals in corporation with divisional managers and departments

January 2012 to September 2014

Bridge/Structural Engineer, **AECOM**

- Seismic analysis and design evaluation of a 12-span railway bridge in Surrey, BC, Client: BNSF
- Analysis and design of Through-Plate-Girders (TPGs) railway bridges in Vancouver, Client: BNSF
- Analysis and design of semi-integral roadway bridge, Jean River Crossing 6B, located in Quebec
- Assessment on the resistance of the Red River Bridge under various loading conditions, Client: Pitblado Law
- Load evaluation of existing bridges for Solvent Bullet and Settler Vessel from Edmonton to Suncor Fort Hills Project in Fort McMurray, Client: Worley Parsons
- Design and analysis check of a 3-span steel railway bridge (Piste Cyclable du Bois-de-Liesse Project) in Montreal, Quebec, Client: CN
- Seismic analysis and design of steel railway bridges of segment 8 of Simandou Project, Guinea, West Africa, Client: Flour

February 2003 to February 2008

Project Manager/Structural Engineer, **Gransa Pars Engineering Company**

- Project Manager of Soork Dam and Tunneling project, Shahrekord, Iran

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- Retrofitted and rehabilitated a 6-storey steel structure, Shahrekord, Iran
- Designer of the 3rd blast furnace of Isfahan Iron Foundry, Isfahan, Iran

ACADEMIC/INSTITUTIONAL EXPERIENCE

- Vice-chair of CISC Education and Research Council, 2017 – Present
- Chair of CISC Education and Research Committee (Alberta Region), 2018 – Present
- Technical Member, AASHTO/NSBA, 2016 – Present
- Technical Member of the ASCE/SEI Disproportionate Collapse Committee, 2014 – Present
- Lecturer at the University of Alberta, Structural Design III (Design of Highway Bridges), 2015 – Present
- Committee Member, ISO TC167/WG3, 2021 – Present

PROFESSIONAL DEVELOPMENT AND TRAINING

- Advanced Operations Drone Pilot Certificate, Transport Canada
- Cold Region Engineering, University of Washington
- Part 9 The House Building Envelope, George Brown College
- Construction Law, CHBABC
- Project Management & Site Supervision, CHBABC
- Building Science for New Homes, CHBABC
- British Columbia Building Code (BCBC), CHBABC
- Business Planning & Management, CHBABC
- Home Service & Warranty, CHBABC
- Steel Erection - Engineering and Execution, AISC
- Primer on Lateral Load Resisting Frames Using Steel Joists and Joist Girders, SJI
- Roof Design with Special Profile Joists, SJI
- Advances in Erection Engr for High-Rise Steel Structures, AISC
- Fatigue of Welded Connections, AISC
- Design + Detail Issues That Add Cost to Steel Projects, AISC
- Industrial Bldg. Design & Non-Bldg. Structures, AISC
- Bolting, Splices, Detailing, and Fabrication, AISC
- Conceptual Layout, Framing, & Loads, AISC

AWARDS AND SCHOLARSHIPS

- Governor General's Gold Medal Nominee, June 2016
- SGSC First Prize Winner, September 2015
- G.L. Kulak Scholarship Award, April 2013 and May 2015
- Golden Key Research Award, December 2014
- Engineers Canada - Manulife Financial Award, June 2014
- Transport Canada Scholarship in Safety and Security Award, July 2013
- Green and Gold Student Leadership and Professional Development Award, Canada, December 2012
- Queen Elizabeth II Award, University of Alberta, Canada, 2009, 2010, 2011, 2012
- Provost Doctoral Entrance Scholarship, University of Alberta, Canada, 2009, 2010, 2011
- Award of Excellence, Amirkabir University of Technology, Iran, April 2007

PUBLICATIONS AND PRESENTATIONS

Available Upon Request (more than 20)