

HIGHLIGHTS OF QUALIFICATIONS

- Over 5 years' experience in structural design from conceptual to detailed stage of several structures such as industrial, commercial, institutional, residential, high-rise buildings, bridges, and complex projects
- Ph.D. Degree in Civil Engineering - Sherbrooke University, QC
- Proven ability to resolve engineering challenges, analyze data, and develop coordinated design
- Excellence in mentoring, developing and leading team to accomplish pre-set objectives
- Familiar with North American standards, codes, and relevant design guidelines (e.g. ACI 318, ACI 440, AASHTO, CSA A23.3, CSA S6, CSA S806, NBC)
- In depth knowledge of drafting and structural design software including SAP, SAFE, Staad, ETEBS, Revit, AutoCAD 2D / 3D and MS Office (Word, Excel, Access, PowerPoint) applications
- Multilingual communications: English, French (Intermediate), and Arabic

EMPLOYMENT HISTORY

Structural Engineer

September 2018 – November 2018

AJW Engineering Ltd., Mississauga, ON

- Performed inspections and structural assessments of existing structures
- Carried out structural calculations, analysis, and modeling
- Designed temporary shoring, bracing, scaffolding, and swing stages
- Generated technical reports
- Prepared construction drawings and specifications for concrete structures and associated elements

Structural Engineer

August 2015 – November 2017

Pultrall Inc., Thetford Mines, QC

- Prepared standard engineering computations and designs for concrete structural elements using fiber-reinforced polymers (FRP) or steel bars, e.g. bridge deck slabs and poles
- Participated in preparation of quotes, proposals and construction cost estimates
- Prepared proposal studies, designs, drawings, quantity estimates, plans, technical specifications, and construction estimation for structure projects
- Participated in brainstorming sessions to seek new design ideas to resolve engineering and manufacturing problems
- Displayed strong sense of initiative, innovation and commitment towards technical excellence and continuous improvement
- Contributed towards career development and support of junior staff, including technical direction, training recommendations, coaching and mentoring
- Provided assistance to branch manager and sales department for business planning and marketing to insure process improvement of product development, time saving and increase in sales

Projects:

- Underground electrical chambers, Manitoba
- Deck slab of highway Queensway bridge, Toronto, ON
- HAS-799 deck slab bridge, Nottingham township, Harrison country, OH, USA
- Box culvert, Charlotte city, North Carolina, USA
- Reinforced concrete slab of electrical chamber, Federal electricity commission, Mexico
- Precast pedestrian bridge, city of Greater Geelong, Australia
- Deck slabs of the Peace Bridge, Buffalo, New York joining USA and Canada

Structural / Design Engineer

July 2014 – July 2015

Urban Development Centre, Cairo, Egypt

- Approved design calculations / drawings and ensured all projects meet guidelines and specifications of building codes and other regulations
- Generated structural analysis reports for new designs or design modifications
- Project Coordination tasks with junior engineers, professionals, technicians, project managers, architectural engineers and multiple domain engineers to ensure consistency in execution of civil design activities and complete project on time, budget, and within quality standards
- Manage activities of technical staff participating on projects
- Participated in design meetings and suggested improvements to design engineering practices

Projects:

- Design El-Marg Reinforced Concrete Bridge, Egypt
- Contributed in work shop drawing for El-Fahahil Prestressed Bridge, Kuwait
- Contributed towards design of deep foundation of Special Court, Gezan, KSA
- Commercial Center Projects including; restaurants, medical center, cinemas and garage, Egypt

R&D Engineer and Ph.D. Candidate

January 2011 – June 2014

Sherbrooke University, Sherbrooke, QC

- Created finite element analysis and models for use in stress analysis
- Conducted experimental tests as required by research program and study
- Performed detail engineering design/analysis for concrete structure including static and dynamic loads in addition to seismic loads for high-rise buildings
- Performed technical studies, product process improvement/innovation and generated technical engineering written communications, reports, and articles
- Resolved project development technical problems needing research and in-depth analysis and insure the work run in compliance with the Occupational Health and Safety Act

Civil Engineer

July 2004 – December 2010

Fouad Consulting Office, Cairo, Egypt

- Analyzed and designed various structural components of small-scale through large-scale civil structure projects such as bridges, industrial, institutional, commercial, residential RC structures
- Performed conceptual and product design calculations, layouts, sketches, technical specifications and approvals for reinforced concrete and steel structures
- Participated in design of 6th October Concrete Bridge, Nasr City extension, Egypt
- Designed lifting precast slab for La Cigale Hotel – Qatar
- Participated in design of 2nd ring road bridges
- Designed several reinforced concrete liquid tanks
- Detailed 12 storeys residential tower, implemented site visits and super construction administration phase

EDUCATION

Ph.D. Degree in Civil Engineering

2014

Sherbrooke University, QC

Master's Degree in Civil Engineering

2009

Helwan University, Egypt

PROFESSIONAL DEVELOPMENT

Online Health and Safety (WHMIS)

2018

MEMBERSHIPS AND AFFILIATIONS

Professional Engineers of Ontario (PEO), Canada from December 2017