

Key Qualifications

- Proficient computer skills (SAP 2000, ALGOR, AutoCAD, MATLAB, Visual Basic and MS-Office Suite)
- Multi-linguistic (Fluent in English, Urdu, Punjabi and Hindi; Basic Japanese)
- Management of bridges (inspection, on-site monitoring, evaluation, life cycle cost analysis)
- Planning, analysis and design of bridges, both new builds and rehabilitation
- Sound knowledge of seismic analysis and design

Relevant Work Experience

Project Engineer

2XXX – Present

Boundary Layer Wind Tunnel Laboratory, London, ON

- Carried out full-scale testing for Glenmore Trail Footbridge and assessed it's dynamic properties
- Upgraded and supervised full-scale monitoring systems for Bronx-Whitestone Bridge and Edmonton Foot Bridge, ensuring systems worked efficiently
- Developed numerical models of transmission towers in Great Basin, USA and validated models and dynamic properties of towers through full-scale data
- Regularly produced high quality reports for clients according to stated deadlines

Research Assistant

2XXX – 2XXX

Boundary Layer Wind Tunnel Laboratory, London, ON

- Analysed 10-year full-scale monitoring data for Confederation Bridge and validated 100-year wind speed and wind loads specified for bridge design
- Developed numerical model of Confederation Bridge and validated model and dynamic properties of bridge using full-scale data
- Conducted drivability study of Confederation Bridge and determined bridge closure criteria and safety factors against roll-over for high-sided vehicles under extreme wind conditions

Research Assistant

2XXX – 2XXX

Department of Civil Engineering, Saitama University, Saitama, Japan

- Developed bridge evaluation system for Saitama Prefecture Government resulting in government's ability to prioritize funds among the network of bridges
- Collaborated with ministry to inspect various bridges, understand needs and realize goals, leading to development of quality system for management of bridges
- Studied bridge management systems, including PONTIS (USA) and J-BMS (Japan), understood mechanics of systems, highlighted shortcomings and compared features to guide decision-making process

Design Engineer

2XXX – 2XXX

Multidimensional Consultants, Lahore, Pakistan

- Planned, analysed and designed culverts, short and medium span bridges, residential and school buildings, plazas and parking lots
- Supervised work of CAD designer to ensure detailed drawings were free of errors and delivered to client on time
- Inspected reinforcement detailing through occasional site visits

Education

Ph.D. in Civil Engineering

2XXX – 2XXX

The University of Western Ontario, London, ON

M.A.Sc. in Civil Engineering

2XXX – 2XXX

Saitama University, Saitama, Japan

B.A.Sc. in Civil Engineering

2XXX – 2XXX

University of Engineering & Technology, Lahore, Pakistan

Professional Affiliation

- P. Eng application in process