PERSONNEL QUALIFICATIONS

Ata Anvari | Associate III

EDUCATION

- Azerbaijan Shahid Madani University
  - Bachelor of Science, Civil Engineering, 2015
- University of Illinois Chicago
  - Master of Science, Civil Engineering, 2017
- Purdue University
  - Doctor of Philosophy, Civil Engineering, 2022

PRACTICE AREAS

- Structural Evaluation/Assessment
- Facade Access and Fall Protection
- Repair and Rehabilitation Design
- Advanced Finite Element Analysis
- Bridge and Infrastructure Analysis

REGISTRATIONS

- Professional Engineer in WA

PROFESSIONAL AFFILIATIONS

- American Concrete Institute (ACI)
- American Institute of Steel Construction (AISC)
- American Society of Civil Engineering (ASCE)

TECHNICAL COMMITTEES

- ASCE Fire Protection Committee

CONTACT

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EXPERIENCE

Since joining WJE, Ata Anvari has gained experience in structural investigations, condition assessments, and analytical evaluation of buildings and infrastructure systems. Dr. Anvari's work includes structural evaluations and repair design for reinforced concrete, structural steel, wood, cold-formed steel, and masonry structures. He has assessed various types of structural framing systems and evaluated deterioration mechanisms affecting structural components, including corrosion and environmental degradation. His experience also includes the evaluation of building envelope systems, including exterior wall assemblies and facade components.

Dr. Anvari has a keen interest in conducting advanced structural analysis and computer modeling to evaluate components and structural systems subjected to complex loading conditions. His analytical work includes finite element analysis of structural and building envelope components, detailed modeling of bridge structures, and seismic vulnerability assessment of structural systems.

Before joining WJE, he conducted experimental and computational research in structural fire engineering. His research contributed to national design practices and was incorporated into standards, such as the AISC 360 specification. He has authored peer-reviewed publications on structural fire behavior, composite systems, reinforced concrete modeling, and data-driven structural prediction methods, establishing a technical foundation that supports his current analytical and investigative work at WJE.

REPRESENTATIVE PROJECTS

Structural Evaluation/Assessment

- Broward County Public Schools - Broward County, FL: Structural condition assessment of school facilities, identification of deficiencies, and preparation of conceptual repair recommendations for district-wide capital planning
- Regal Lofts - Chicago, IL: Structural evaluation of heavy timber framing, including field investigation and documentation of deterioration mechanisms
- Sheffield Student Roost - Sheffield, UK: Assessment of structural performance during fire exposure

Facade Access and Fall Protection

- University of Texas, Main Building Tower - Austin: Analysis and design of facade access equipment and fall protection systems
- Indian Community School - Milwaukee, WI: Design and assessment of fall protection systems for multi-roof campus facilities

Repair and Rehabilitation Design

- The Salvation Army, Emergency Services Building - Elk Grove Village, IL: Assessment of wall cracking and structural distress, including development of repair strategies for masonry elements
- 10 E Ontario - Chicago, IL: Assessment of cracking, delaminations, and spalling in concrete balcony slabs to identify deterioration mechanisms for developing repairs

Advanced Finite Element Analysis

- I-345 - Austin, TX: Advanced structural modeling to evaluate bridge and substructure behavior, including complex load combinations and numerical analysis
- Vacuum Insulating Glass - Northbrook, IL: Structural cyclic and overload modeling
- Fitness-for-service assessments of equipment or components exhibiting corrosion or localized wall thinning using nonlinear finite element analysis

Bridge and Infrastructure Analysis

- IDOT: Seismic analysis and vulnerability assessment of multiple state-owned bridges
- FHWA Long-Term Bridge Program: Review of state policies and nationwide utility study support for long-term bridge performance monitoring