



#### EDUCATION

- Azad University
  - Bachelor of Science, Civil Engineering, 2009
- Ferdowsi University of Mashhad
  - Master of Science, Structural Engineering, 2014
- Missouri University of Science and Technology
  - Doctor of Philosophy, Civil Engineering, 2022

#### PRACTICE AREAS

- Structural Analysis/Computer Applications
- Failure/Damage Investigation
- Foundation Engineering
- Structural Metal
- Concrete Structures
- Nondestructive Evaluation

#### REGISTRATIONS

- Professional Engineer in TX

#### PROFESSIONAL AFFILIATIONS

- American Concrete Institute - San Antonio Chapter
- Structural Engineers Association of Texas

#### CONTACT

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#### EXPERIENCE

Ali Pourhassan specializes in developing advanced analytical models and performing detailed structural analyses for steel, concrete, wood, and masonry structures. He also has experience with forensic investigations, structural assessments, nondestructive testing, and foundation engineering. In addition, he is skilled in preparing construction documents for both new and existing structures and in providing construction-phase services.

Dr. Pourhassan has led multiple research projects, including evaluating the performance of sustainable materials for pavement treatments, applying 3D scanning techniques for texture measurements, and investigating the seismic behavior of reinforced concrete beam-column connections with mechanically anchored beam reinforcement.

#### REPRESENTATIVE PROJECTS

##### Structural Analysis/Computer Applications

- Alamo Visitor Center and Museum - San Antonio, TX: Analysis of facade retention system to preserve the historic facade during deconstruction and reconstruction
- Aircraft Hangar Collapse: Computer modeling and analysis to assess the stability and failure mechanisms of a collapsed metal building
- Plush Suites Hotel - Dallas, TX: Analysis of the effects of construction defects on a multi-level, steel-framed building's load-resisting system
- Mission San Jose - San Antonio, TX: Analysis of stability of historic mass masonry walls and design of foundation stabilization measures

##### Failure/Damage Investigation

- JPMorgan Chase Campus Parking Garage - Plano, TX: Investigation of expansion joint connection failures in five parking garages
- Crane Tip-Over Damage - Sealy, TX: Investigation of structural damage caused by crane tip-over and design of repairs
- All Faiths Chapel - Austin, TX: Analysis of deteriorated glue-laminated wood frame and development of repair design

#### Foundation Engineering

- Cibolo Valley Elementary School - Cibolo, TX: Evaluation of foundation condition and distress and design of mitigation measures to address root causes of movement
- Refugio Courthouse - Refugio, TX: Design of stormwater and subsurface water mitigation
- Chase Bank Facility - San Antonio, TX: Assessment of the effectiveness of foundation drainage improvements
- Surgical Hospital of San Antonio - San Antonio, TX: Moisture testing and assessment of foundation-related distress

#### Structural Metal

- Texas Capitol - Austin, TX: Analysis of structural components for skylight replacement and rehabilitation
- Steele High School - San Antonio, TX: Fatigue analysis and repair design of light poles
- Port San Antonio Boeing Buildings - San Antonio, TX: Analysis and repair design of steel-joint roof system

#### Concrete Structures

- Lackland Air Force Base - San Antonio, TX: Fiber reinforced polymer (FRP) repair design for columns
- UTSA Arts Building - San Antonio, TX: Shallow and partial-depth concrete repair and FRP installation for beams and slabs
- Austin City Lofts - Austin, TX: Punching shear analysis of concrete slab floors
- El Centro Apartments Parking Garage - Los Angeles, CA: Post-tensioned concrete structure distress assessment

#### Nondestructive Evaluation

- I-35 Northeast Expansion - San Antonio, TX: Ultrasonic pulse velocity testing and evaluation of cast-in-place bridge elements to assess structural integrity
- New Filter Building Nuclear Waste Facility - Carlsbad, NM: Development of investigation plan and nondestructive evaluation of precast roof panels
- Historic Woolworth Building - San Antonio, TX: As-built structural drawings for a historic reinforced concrete building using nondestructive evaluation techniques