ANIL K. GARG, Ph.D., P.E., S.E.

Forensic Structural Engineer & Expert Witness

Principal, Garg Forensic Engineering · Irving, Texas · anil@gargforensics.com · gargforensics.com
Curriculum Vitae · August 2026

PROFESSIONAL SUMMARY

Forensic structural engineer and expert witness with nearly four decades of consulting and design experience. Practice focused on construction-defect, structural-failure, and subrogation litigation involving reinforced concrete, retaining walls, foundations, bridges, and industrial structures. Engagements include investigation of failure causes, development of defensible engineering opinions, expert reports, rebuttal analysis, and deposition testimony; available for trial testimony as required. Accepts engagements from both Plaintiffs and Defendants depending on the merits.

Credentials include Ph.D. in Structural Engineering & Mechanics; P.E. licensure in 5 states (TX, OK, CA, NM, OH); S.E. licensure in Oklahoma; Active NCEES Record; Fellowship in ASCE and SEI; and U.S. Extraordinary Ability merit classification (EB-1A).

EDUCATION

Ph.D., Structural Engineering & Mechanics

University of Texas at Arlington — 2007

Doctoral research: shear behavior and finite-element analysis of reinforced concrete structures

M.Tech., Structural Engineering

Indian Institute of Technology (IIT) Delhi — 2000

M.B.A., Operations

Indira Gandhi National Open University (IGNOU) — 1998

B.E., Civil Engineering

Institution of Engineers (India) — 1986

PROFESSIONAL LICENSES

- **Professional Engineer (P.E.)** — Texas (primary jurisdiction), Oklahoma, California, New Mexico, and Ohio
- **Structural Engineer (S.E.)** — Oklahoma
- **FHWA-NHI Bridge Inspection Program Manager** — FHWA-approved comprehensive bridge inspection training completed April 2011; refresher training most recently November 2018
- **Active NCEES Record** — expedited P.E. licensure available in additional states upon engagement

HONORS & DISTINCTIONS

- **U.S. "Extraordinary Ability" Merit Classification (EB-1A)** — granted by USCIS based on demonstrated sustained national and international acclaim in structural engineering
- **Fellow, American Society of Civil Engineers (ASCE)**
- **Fellow, Structural Engineering Institute (SEI)**
- **2011 ASCE Outstanding Reviewer Award** — ASCE Journal of Bridge Engineering

AREAS OF SPECIALIZED EXPERTISE

Structural Forensics & Failure Analysis

- Reinforced concrete defects, cracking, and rebar connection failures
- Precast and post-tensioned concrete components
- Expansion joint failures
- Foundation movement, settlement, and bearing capacity
- Bridge structural distress and load-rating issues

Retaining Wall Systems

- Cantilever (cast-in-place reinforced concrete) retaining walls
- Mechanically Stabilized Earth (MSE) retaining walls
- Soldier pile and lagging systems
- Segmental block / gravity retaining walls
- Stone masonry and gabion systems
- Wall design under flood, seismic, and surcharge loading conditions

Code & Standard-of-Care Analysis

- 2015/2018/2021 IBC and IEBC including §1612 (Flood Loads) and §1807 (Foundations)
- AASHTO LRFD Bridge Design Specifications (contributor to amendments)
- FHWA standards: GEC No. 7, GEC No. 11, HEC-15, HEC-18, HEC-23
- USACE EM 1110-2-2502, EM 1110-2-1601; NAVFAC DM 7.02
- OSHA 29 CFR 1926 Subpart P (excavation safety)

Litigation Support

- Expert reports for construction defect, structural failure, and subrogation matters
- Deposition and trial testimony support
- Standard-of-care analysis and rebuttal of opposing-expert opinions
- Cost-justification analysis and damage allocation
- Authority Having Jurisdiction (AHJ) compliance review

PROFESSIONAL EXPERIENCE

Principal — *Infrastructure Consultants, Inc. / Garg Forensic Engineering*

2011 – Present · Irving, Texas

Garg Forensic Engineering is the forensic and litigation-support practice of Infrastructure Consultants, Inc., a Texas-registered engineering firm in continuous active standing since 2011. The practice serves construction-defect, structural-failure, and subrogation litigation involving reinforced concrete, retaining walls, foundations, bridges, and industrial structures, representing both Plaintiffs and Defendants depending on the merits, with failure-cause investigation, expert reports, rebuttal analysis, and deposition and trial testimony as required.

Senior Structural Engineer — *Terracon Consultants, Inc.*

2018 – 2024 · Dallas–Fort Worth Metroplex

Senior structural engineer with forensic and litigation focus across Terracon's DFW and broader Southwest practice.

- Forensic evaluations of bridges, retaining walls, foundations, and commercial building structures
- Expert reports and technical analyses supporting attorneys and insurance carriers
- Standard-of-care assessments and peer review of third-party engineering reports
- Technical support for TXDOT in disputes involving retaining wall deficiencies and bridge construction defects

Forensic Engineer — *Donan Engineering*

2017 – 2018 · Irving, Texas

Investigated foundation failures, roofing system defects, and civil/structural claims. Delivered expert reports used in litigation and insurance claim resolution.

Senior Civil Structural Engineer — *White Hawk Engineering & Design, LLC*

April 2015 – September 2016 · Dallas–Fort Worth Metroplex

Senior structural engineer specializing in retaining wall design, retrofit, and forensic evaluation for major Texas transportation authorities including NTTA and TXDOT.

Senior Technical Advisor / Project Manager — *Willbros Group, Inc.*

2011 – 2015 · Fort Worth, Texas

Senior advisor for energy infrastructure including oil, gas, water, and processed water systems. Structural design review, pipeline support engineering, and standard-of-care oversight.

Senior Civil/Structural Engineer — *AP Engineering Consultants, Inc.*

2009 – 2011 · Dallas–Fort Worth Area

Light rail station structures, highway bridges, airport terminal and aviation facility structural engineering, and DISD bond program structural design.

Structural Engineer — *Jacobs Engineering Group*

2007 – 2009 · Dallas–Fort Worth Metroplex

Structural engineer for federal, aviation, and energy sector projects including aircraft hangar long-span roof systems and federal facility structural engineering.

> Earlier experience: senior engineering roles in India (1986–2004) including bridge design, industrial structural engineering, and academic teaching. Detail available on request.

ACADEMIC & PROFESSIONAL SERVICE

- Adjunct Faculty — University of Texas at Arlington (graduate-level structural engineering coursework)
- Editorial Board Member — ASCE Journal of Bridge Engineering (2013–2017)
- Contributor — AASHTO LRFD Bridge Design Specification amendments
- Doctoral research published as a single-author volume (see Publications)

PUBLICATIONS

Book

Garg, A.K. — *Shear Behavior of Reinforced Concrete Box Culverts: In SI and Customary Units.* Single-author volume based on doctoral research at University of Texas at Arlington.

Peer-Reviewed Journal Articles

- Garg, A.K., Abolmaali, A., Fernandez, R. (2007). "Experimental investigation of shear capacity of precast reinforced concrete box culverts." *ASCE Journal of Bridge Engineering*, 12(4), 511–517.
- Abolmaali, A., Garg, A.K. (2008). "Effect of wheel live load on shear behavior of precast reinforced concrete box culverts." *ASCE Journal of Bridge Engineering*, 13(1), 93–99.
- Abolmaali, A., Garg, A.K. (2008). "Shear behavior and mode of failure for ASTM C1433 precast box culverts." *ASCE Journal of Bridge Engineering*, 13(4), 331–338.
- Garg, A.K., Abolmaali, A. (2009). "Finite-element modeling and analysis of reinforced concrete box culverts." *ASCE Journal of Transportation Engineering*, 135(3), 121–128.

Editorial Service

- Editorial Board Member — ASCE Journal of Bridge Engineering (2013–2017)
- 2011 Outstanding Reviewer Award — ASCE Journal of Bridge Engineering

Standards Contributions

- Contributing Reviewer — AASHTO LRFD Bridge Design Specification Amendments
- FHWA-NHI Bridge Inspection Program Manager — comprehensive training 2011; refresher November 2018

PROFESSIONAL AFFILIATIONS

- Fellow, American Society of Civil Engineers (ASCE)
- Fellow, Structural Engineering Institute (SEI)
- Member, American Concrete Institute (ACI)
- Member, American Institute of Steel Construction (AISC)
- Member, ASTM International
- Member, Structural Engineers Association of Texas (SEAoT)
- Member, Transportation Research Board (TRB)

COMPENSATION

Compensation is not contingent upon the outcome of any litigation. Fee structures are available on request and are set forth in the engagement letter executed at the outset of each matter.