2025 Forensics Engineering Conference Steering Committee Bios



Juan Carlos Araiza, Ph.D., PE, M.ASCE Senior Vice President EFI Global, Inc.

Dr. Juan Carlos Araiza has over twenty years of design, construction, research, and technical leadership experience related to the evaluation of existing structures, forensic engineering, and expert witness services. Araiza has extensive experience with structural dynamics and advanced finite element modeling applied to failure analysis. He has led the forensic investigation of some of the most significant structural collapses in the US for the last few years, including the 2018 collapse of the FIU Bridge in Miami and the 2019 collapse of the Hard Rock Hotel in New Orleans. Araiza holds a Ph.D. in structural engineering from Universitat Politècnica de Catalunya. He is an active member of the ASCE Forensic Engineering Division and ACI Committee 444 on Structural Health Monitoring.



Ryan Kalina, Ph.D., PE Vice President Forensix Consulting Lecturer Cockrell School of Engineering

Dr. Ryan Kalina has been involved in the evaluation and analysis of a wide variety of defects and failures at thousands of buildings and other structures, such as design and construction defects; material defects; damage related to hurricanes, tornadoes, wind, and hail; structural failures related to collapse, impact, and fire; and damage to flooring systems due to improper installation. Kalina has provided repair recommendations and designs for structural systems and building envelopes as a result of defects and failures.

Kalina's interests include the evaluation of material defects, particularly as they relate to

concrete durability, such as alkali-silica reaction, sulfate attack, delayed ettringite formation, and improper concrete mixture design. Other interests related to material defects include the corrosion of metals and coatings. He also has an interest in the evaluation and analysis of structural failures due to instability and collapse. Kalina's doctorate research in the Department of Civil, Architectural, and Environmental Engineering (CAEE) at the University of Texas at Austin was in concrete materials and structural engineering. His research is focused on deficiencies in the current ASTM standard for characterization of supplementary cementitious materials for use in concrete and the behavior and comparison of high alkali fly ash and natural pozzolans in test methods for alkali-silica reaction. Kalina obtained his M.S. in structural engineering, also from the Department of CAEE at the University of Texas at Austin, with a focus in research on the corrosion resistance of pre-stressing strands for use in the post-tensioning of bridges.

Prior to becoming an engineer, Kalina worked in the construction industry and is experienced in the placement of concrete, erection of steel and wood framing systems, roof installation, and interior finish-out.



Kerry Lee Founder and President Forensix Consulting

Kerry Lee is a recognized expert in civil, structural, and architectural engineering and provides expert solutions to large, complex, and multi-discipline projects and disputes. He brings to an investigation a unique combination of experience in forensic engineering and evaluation, civil and structural design and repair, and building envelope assessment, which enables him to provide expert solutions to large, complex, and multi-disciplined forensic projects.

Lee also possesses a wealth of experience in the evaluation of failures, the assessment of the extent of damage, and the development of scopes of repair for thousands of commercial, industrial, single-and multi-family residential, institutional, educational,

athletic, agricultural, and healthcare projects due to design defects, construction defects, partial and complete collapse, foundation movement and failure, defective grading and drainage, construction vibration, fires and explosions, hail, windstorms, tornadoes, and hurricanes, among many others.

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His projects are performed for a wide array of client types including attorneys, insurance companies, contractors, and property owners. An established expert in civil engineering, structural engineering, construction defects, design defects, and the evaluation of building envelope installations and failures, Lee has provided expert testimony in numerous depositions, mediations, arbitrations, administrative hearings, and trials over the course of his career and has been qualified as an expert in multiple state and federal courts.

Lee has also published multiple papers on forensic investigation, delivered numerous presentations to a wide variety of professional and industry audiences, and co-authored a chapter in an engineering handbook for the evaluation of hurricane damage. Mr. Lee also brings a background in civil and structural design on projects throughout the United States and in locations throughout the world, and he also has experience in constructability and in a construction and project management capacity, which infuses firsthand, real-world knowledge of construction projects into his forensic investigations.



Stewart Verhulst, MS, PE Senior Vice President Executive Technical Director Nelson Forensics

Mr. Stewart Verhulst has evaluated structural systems and components, foundations, material failures, building envelopes, and roofing for hundreds of existing buildings. He has provided solutions for property owners, municipalities, institutions, insurance carriers, attorneys, contractors, and design professionals.

Verhulst facilitates the development of technical expertise for Nelson's team, spearheading initiatives for continuing education, training, research, and publication. He is an active member of ASCE's Forensic Engineering Division, where he is on the Executive Committee and the Committee on Forensic Investigation, and he is a

Registered Roof Consultant (RRC) through the International Institute of Building Enclosure Consultants (IIBEC). He enjoys mentoring engineering personnel, helping to guide and develop careers in forensic engineering. Verhulst has delivered presentations on forensic engineering and related topics to a variety of audiences, including industry professionals and student groups. He has published multiple peer-reviewed papers and is a leading voice in Nelson Forensics' ongoing technical research efforts.

Verhulst has provided expert testimony in deposition, arbitration, and trial. He has designed new structures and performed remedial design for existing structures and structural systems.



Jim D. Wiethorn, Ph.D., PE Founder & Chairman International Crane & Construction Safety Solutions, LLC

Jim Wiethorn is the founder and chairman of International Crane & Construction Safety Solutions, LLC. He was formerly the principal engineer and chairman of Haag Engineering Co. Throughout his career, Wiethorn has been involved damage and failure analysis in the design, construction, and evaluation of residential, commercial, and industrial buildings, especially involving crane accidents.

Weithorn has been involved in over 350 cases involving crane failures. Some of the most publicized cases include the Miller Baseball Park roof/crane collapse in Milwaukee; the Jack Breslin Center roof/crane collapse in East Lansing; the Maumee River Bridge

launching girder collapse in Toledo; and the Hoover Dam Bypass Bridge cableway collapse.

Wiethorn graduated with a B.S. and M.S. in architectural engineering from University of Texas at Austin. He serves on the Engineering Advisory Board in the Cockrell School of Engineering and on the Board of Advocates in the College of Engineering and Computer Science at Baylor University.