



#### EDUCATION

- Bandung Institute of Technology
  - Bachelor of Science, Civil Engineering, 2011
  - Master of Science, Civil Engineering, 2012
- University of Texas at San Antonio
  - Doctor of Philosophy, Civil Engineering, 2021

#### PRACTICE AREAS

- Nondestructive Evaluation
- Condition Assessment
- Instrumentation/Load Testing
- Bridges and Civil Infrastructure
- Structural Analysis/Computer Modeling

#### REGISTRATIONS

- ACI Nondestructive Testing Specialist - Concrete Strength
- NHI Course 130055 - Safety Inspection of In-Service Bridges
- Professional Engineer in Texas
- Transportation Worker Identification Credential

#### PROFESSIONAL AFFILIATIONS

- American Concrete Institute (ACI)
- Structural Engineers Association of Texas (SEAOt)

#### TECHNICAL COMMITTEES

- ACI 228 and ACI 369

#### CONTACT

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210.425.2907  
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#### EXPERIENCE

Ariel Suselo is engaged in condition assessments, evaluation, and repair/rehabilitation designs of existing structures, including concrete, steel, and wood. Dr. Suselo specializes in the application of nondestructive evaluation (NDE) technologies, including, but not limited to, mechanical wave/vibration, electromagnetic, and electrochemical-based techniques utilizing multimethod approaches.

Before joining WJE, Dr. Suselo worked as a research assistant at the University of Texas at San Antonio, where he contributed to several sponsored research projects, including the calibration of concrete column nonlinear behavior, low-cycle fatigue test of high-strength reinforcing bars, and image-based analysis for concrete column damage assessment. Before and during his graduate studies, he accumulated more than five years of experience in engineering and laboratory services, including the application of NDE technologies, performance-based structural analysis and design, load testing, instrumentation, vibration analysis, and construction material testing.

#### REPRESENTATIVE PROJECTS

##### Nondestructive Evaluation

- Wastewater Treatment Plant - Houston, TX: Assessment of existing concrete structures due to chemical-induced distress (cover survey, corrosion potential, resistivity)
- Port of Stockton - Stockton, CA: Deep voiding investigation behind concrete bulkhead wall due to water erosion
- Liquefied Natural Gas Plant - Port Isabel, TX: Identification of potential internal voiding on concrete tank walls
- Office Building - Jackson, MS: Deep foundation/pier evaluation using sonic echo and impulse response method
- Historical Buildings Reuse - Abilene and Port Arthur, TX: Assessment of concrete structural elements (cover survey, reinforcing steel configuration, foundation thickness)
- Parking Garages - MS and TX: As-built configuration of post-tensioned (PT) tendon on elevated slab/beam

- Office Buildings, Bridges, Parking Garages, and Other Civil Infrastructure - TX: Assessment of internal voiding on concrete walls, PT beam-column joint, inverted-T bent cap, raker beams

##### Condition Assessment

- Parking Garages - Houston, TX: Visual assessment of precast and composite structural elements
- Condominium and Turbine Foundation - Houston, TX: Evaluation of fire-damaged concrete
- Commercial Buildings - Houston, TX: Assessment of structural and nonstructural elements due to soil movement

##### Instrumentation/Load Testing

- Parking Garage - Houston, TX: Instrumentation and load testing of precast and prestressed concrete double-tee beams
- Various Buildings - Houston, TX: Construction vibration monitoring

##### Bridges and Civil Infrastructure

- Sound Transit East Link Extension - Seattle, WA: Post-installed anchors potential conflict investigation on segmental PT concrete bridge, internal void assessment on concrete plinths
- Samsung Austin Semiconductor - Taylor, TX: Mechanical splice coupler investigation on precast concrete building
- Various Bridges - Texas: evaluation of deck with low-strength concrete
- In-Service Bridges - Houston, TX: Routine inspections

##### Structural Analysis/Computer Modeling

- Turbine Foundation Structure - Houston, TX: Design of post-installed anchor for embedded steel plate replacement
- Electrical Vault Cover - Houston, TX: Modeling, analysis, and code review of two-way concrete slab
- High-Rise Buildings - Jakarta, Indonesia: Nonlinear modeling of concrete frames/walls, analysis, and performance-based design \*

\* Indicates with the previous firm