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Engineering & Scientific Consulting

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Professional Profile

Dr. Ahlberg received a Ph.D. in Civil Engineering at the University of California, Los Angeles. His primary area of research is in soil-structure interaction of foundation elements. He is involved in drilled shaft and abutment wall research, including lateral performance of drilled shafts and passive pressure development for wall-type foundations.

Dr. Ahlberg has investigated structures damaged by earthquake, storm surge, wind, fire, snow, blast pressure, vehicle impact, construction problems, design defects, ground settlement, and soil pressure. He also has experience in earthquake engineering, reinforced concrete, steel, wood and masonry design, as well as geotechnical designs for retaining walls, tiebacks, and deep foundations. Dr. Ahlberg has also investigated, and evaluated for compliance, temporary structures such as shoring and scaffolding systems.

Dr. Ahlberg is an expert in noise and vibration monitoring, and has expertise in sensor installation, monitoring, data acquisition, and analysis. He also has experience in sensor data management, remote monitoring of sensor and camera data, and long-range wireless transmission of data and imaging.

Dr. Ahlberg also serves as Laboratories Manager and Principal Development Engineer for the Department of Civil and Environmental Engineering at the University of California, Los Angeles (UCLA). Dr. Ahlberg also has served as a Lecturer for undergraduate and graduate courses in Mechanics, Materials, Structural Dynamics, Earthquake Engineering, and Structural Design at UCLA and the University of California, Irvine. Dr. Ahlberg also developed and has taught the Wood and Timber Design course at UCLA since 2018.

Academic Credentials & Professional Honors

Ph.D., Civil Engineering, University of California, Los Angeles (UCLA), 2008

M.S., Civil Engineering, Structures Concentration, University of California, Los Angeles (UCLA), 2005

B.S., Architectural Engineering, California Polytechnic State University, SLO, 2001

SEAOSC Scholarship, Civil Engineering Department, UCLA, 2003

Licenses and Certifications

Community Noise Enforcement Certification

Academic Appointments

University of California - Los Angeles (UCLA), Civil and Environmental Engineering, Lecturer

Professional Affiliations

Structural Engineers Association of Southern California (Member)

American Society of Civil Engineers (Member)

Publications

Charles DeVore, Ph.D., and Eric Ahlberg, Ph.D., P.E., "Review of the Codes and Standards for Noise and Vibration Investigations in Buildings," Seventh Congress on Forensic Engineering, Miami, FL, November 2015

Khalili-Tehrani P, Ahlberg E, Rha C, Lemnitzer A, Stewart J, Taciroglu E, Wallace, J. Nonlinear load-deflection behavior of reinforced concrete drilled piles in stiff clay. ASCE Journal of Geotechnical and Geoenvironmental Engineering, March 2014; 140(3).

Lemnitzer A, Khalili-Tehrani P, Ahlberg E, Rha C, Taciroglu E, Wallace J, Stewart, J. Nonlinear efficiency of bored pile group under lateral loading. ASCE Journal of Geotechnical and Geoenvironmental Engineering, December 2010; 136(12).

Lemnitzer A, Ahlberg E, Nigbor R, Shamsabadi A, Wallace JW, Stewart JP. Lateral performance of full-scale bridge abutment wall with granular backfill. ASCE Journal of Geotechnical and Geoenvironmental Engineering, 2009 April; 135(4).

Ahlberg E. Interaction between soil and full scale drilled shafts under cyclic lateral loads. Doctoral Dissertation, Civil Engineering, Department of Civil and Environmental Engineering, University of California, Los Angeles, CA, Spring 2008.

Stewart JP, Wallace JW, Taciroglu E, Ahlberg E, Lemnitzer A, Rha C, Tehrani P, Keowen S, Nigbor RL, Salamanca A. Full scale cyclic testing of foundation support systems for highway bridges. Part II: Abutment backwalls. Report No. UCLA-SGEL 2007/02, Structural and Geotechnical Engineering Laboratory, University of California, Los Angeles, October 2007.

Stewart JP, Wallace JW, Taciroglu E, Ahlberg E, Lemnitzer A, Rha C, Tehrani P, Keowen S, Nigbor RL, Salamanca A. Full scale cyclic testing of foundation support systems for highway bridges. Part I: Drilled shaft foundations. Report No. UCLA-SGEL 2007/01, Structural and Geotechnical Engineering Laboratory, University of California, Los Angeles, December 2007.

Ahlberg E, Rha C, Stewart JP, Nigbor RL, Wallace JW, Taciroglu E. Field testing and analytical modeling of a reinforced concrete embedded pile under lateral loading. 5th National Seismic Conference on Bridges and Highways, San Mateo, CA, September 18, 2006.

Ahlberg E, Stewart JP, Wallace JW, Rha C, Taciroglu E. Response of a reinforced concrete embedded pile under lateral loading. Part I: Field testing. Caltrans Bridge Conference, Sacramento, CA, November 1, 2005.

Rha C, Taciroglu E, Ahlberg E, Stewart JP, Wallace JW. Response of a reinforced concrete embedded pile under lateral loading. Part II: Numerical simulations. Caltrans Bridge Conference, Sacramento, CA, November 1, 2005.

Presentations and Published Abstracts

Wallace J, Ahlberg E. The Harmon Tower – Exposed. Los Angeles Tall Buildings Structural Design Council – Annual Conference, May 6, 2016.

Shusto L, Ahlberg E. California Earthquake Authority (CEA) Earthquake Claims Certification Course for the Automobile Club of Southern California, Costa Mesa, CA, October, 2014.

Ahlberg E. California Earthquake Authority (CEA) Earthquake Claims Certification Course for Integrity Adjusters, Integrity Adjusters Western Training Conference, Orange, CA, February, 2013.

Ahlberg E. California Earthquake Authority (CEA) Earthquake Claims Certification Course for California Association of Independent Insurance Adjusters (CAIIA), Diamond Bar, CA, July, 2012.

Ahlberg E. Insurance adjuster training for evaluating earthquake damage. State Farm Insurance Company, Irvine, CA, March, 2011.

Shusto LM, Ahlberg E. Earthquake damage assessment of wood-frame structures. Proceedings, 2011 Architectural Engineering National Conference, March 30-April 2, 2011.

Ahlberg E, Reyes L. Building code issues and adjustments. PLRB/LIRB 2010 Regional Adjusters Conference, Anaheim, CA, November 2-3, 2010.

Ahlberg E, Rha C, Stewart JP, Nigbor RL, Wallace JW, Taciroglu E. Field testing and analytical modeling of reinforced concrete foundation systems under lateral loading. George E. Brown Network for Earthquake Engineering Simulation (NEES) Annual Meeting, Snowbird, UT, June 19, 2007.

Peer Reviews

American Society of Civil Engineers, *Journal of Geotechnical and Geoenvironmental Engineering*