

SALIH TILEYLIOGLU, Ph.D., P.E.

CURRICULUM VITAE

CONTACT INFORMATION

Kadir Has University

Department of Civil Engineering
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EDUCATION

University of California, Los Angeles

Ph.D., Civil Engineering, December 2008
Major: Geotechnical Engineering
Minor: Structural Engineering

Middle East Technical University, Ankara/TURKEY

MS, Civil Engineering, December 2002
Emphasis: Geotechnical Engineering

Eastern Mediterranean University, Gazimagosa/TRNC

BS, Civil Engineering, June 1999

WORK EXPERIENCE

Assistant Professor

Kadir Has University, Istanbul, Turkey

September 2019 -

Assistant Professor

Çankaya University, Ankara, Turkey

December 2013-September 2019

Senior Staff Engineer

Ninyo & Moore, Irvine, CA.

November 2010- September 2013

Worked as a Senior Staff Engineer on various projects that involved foundation design, ground improvement, excavations, slope stability and forensic engineering. Responsibilities included performing fieldwork, performing engineering analyses and calculations, writing reports, assigning laboratory tests to soil samples, writing proposals and project management.

Project Engineer

Diaz Yourman & Associates, Santa Ana, CA.

March 2009-August 2010

Worked as a Project Engineer on various projects that involved foundation design, ground improvement, excavations and slope stability. Responsibilities included performing engineering analyses and calculations, quality assurance of engineering analyses, writing and reviewing reports, assigning laboratory tests to soil samples, writing proposals, project management and preparing spreadsheets for various engineering calculations.

Site Engineer

IC Ictas Construction, Ankara, Turkey.

March 2004-July 2004

Worked as a site engineer in the construction of the 2nd terminal building of Antalya International Airport in Turkey. Responsibilities included the supervision of reinforced concrete work, grading work and reporting to the senior engineer. Supervised the set up of the construction site.

Site Engineer

Turner-Proge JV, Ankara, Turkey.

January 2003-November 2003

Worked as a site engineer in the renovation and structural reinforcement of the Ankara Stad Hotel (now Radisson Ankara). The structural reinforcement work was carried for mitigation purposes for future earthquakes in accordance to FEMA 356. A shear wall was constructed and existing beams were reinforced with metal plates to meet the specified criteria. Responsibilities included supervising the sub-contractor execute the work, and the preparation of progress reports.

Summer Internship

Metis Construction, Ankara, Turkey.

June 1998-August 1998

Worked as an intern in the construction of the Sabiha Gokcen Airport runways in Istanbul, Turkey. Worked with the site engineer in grading of the runway and construction of culverts.

RESEARCH EXPERIENCE

Dissertation Research

University of California, Los Angeles

September 2004-December 2008

Dissertation Title: *Evaluation of Soil-Structure Interaction Effects from Field Performance Data.*

Dissertation Advisor: Prof. Jonathan P. Stewart.

This research focused on dynamic soil-structure interaction effects using data collected from a model test structure subjected to forced vibration tests and earthquakes. The goal was to gain more insight into the soil-structure interaction problem and to test simplified models available in the literature. A parametric system identification procedure was developed for forced vibration tests to identify modal properties of structures. Foundation-soil stiffness characteristics were evaluated through non-parametric procedures.

Research

University of California, Los Angeles May 2007-March 2009

With Prof. Jonathan P. Stewart and John A. Martin & Associates, Los Angeles, CA

Research Title: *Investigation of the impact of various foundation modeling techniques on the accuracy of the response obtained from three-dimensional response history analysis of buildings.*

This research involved the investigation of soil-structure interaction effects on the response of buildings with subterranean levels by comparing different foundation modeling techniques as well as different input motions. The buildings included in this research were a part of the California Strong Motion Instrumentation Program (CSMIP). Recordings from the 1994 Northridge earthquake were available at various levels within the buildings analyzed.

University of California, Los Angeles. October 2006-October 2007

Research Title: *Elevators as an Excitation Source to Structural Health Monitoring.*

Research Advisor: Dr. Robert L. Nigbor.

With Prof. Mark Hansen and Andrew Baek, Department of Statistics, UCLA.

This research included low amplitude forced vibration tests on the UCLA Factor Building and the instrumentation of the counterweight of an elevator in the building. The objective of the research was to evaluate the potential of elevators being utilized as an excitation source for structural health monitoring purposes.

Masters Thesis Research

Middle East Technical University, Ankara. January 2001-December 2002

Thesis Title: *Contribution of Soil Nails to Slope Stability Analyses.*

Thesis Advisor: Prof. M. Ufuk Ergun.

The study was a critical evaluation of how soil nails contribute to slope stability. Comparisons of available approaches were carried out to investigate the contribution of bending stiffness of a soil nail to the stability of slopes.

Middle East Technical University, Ankara. June 2000-January 2001

Research Title: *The Effects of Blade Types on Deep Soil Mixing.*

Advisor: Prof. M. Ufuk Ergun.

The study investigated deep mixing of soils in the laboratory, focusing on the different types of mixing blades that were modeled based on those used in practice. The goal was to evaluate the efficiency of the mixing blades and the strength of the resulting soil-grout column.

TEACHING EXPERIENCE

Cankaya University

Assistant Professor

CE 102: Introduction to Civil Engineering

CE 104: Engineering Geology

CE 221: Engineering Mechanics: Statics

CE 361: Geotechnical Engineering

CE 362: Foundation Engineering

CE 468: Introduction to Ground Improvement Techniques
CE 564: Geotechnical Earthquake Engineering (**Graduate Level**)

University of California, Los Angeles

Teaching Assistant

CEE 125: Fundamentals of Earthquake Engineering. Instructor: R.L. Nigbor.
CEE 121: Design of Foundations and Earth Structures. Instructor: D. Pradel.

PUBLICATIONS

Journal Articles:

Star, M. L., **Tileylioglu, S**, Givens J. M., Mylonakis G. and Stewart, J.P. (2019), "Evaluation of Soil-Structure Interaction Effects from System Identification of Structures Subject to Forced Vibration Tests" *Soil Dynamics and Earthquake Engineering*, 116 747-760

Star, M. L., Givens J. M., **Tileylioglu, S** (2018). "Force-displacement and moment rotation relationships in the context of dynamic soil-structure interaction". *International Journal of Engineering and Science Invention* 07(9), 23-28.

Tileylioglu, S., Stewart, J.P Nigbor, R.L. (2011). "Dynamic stiffness and damping of a shallow foundation from forced vibration of a field test structure", *Journal of Geotechnical and Geoenvironmental Engineering*, 137(4), 344-353.

Stewart, J.P. and **Tileylioglu, S.** (2007). "Input ground motions for tall buildings with subterranean levels," *The Structural Design of Tall and Special Buildings*, 16(5), 543-557.

Conference Papers and Presentations:

Givens, M.J., Star, L.M., **Tileylioglu, S.**, Mylonakis, G., Stewart, J.P. (2015). "Analysis of Foundation Damping from Theoretical Modeling and Forced Vibration Testing," 6th International Conference on Earthquake Geotechnical Engineering, November 1-4, 2015.

Tileylioglu, S., Naeim, F., Alimoradi, A., Stewart J.P. (2010). "Impact of foundation modeling on the accuracy of response history analysis of a tall building," *Proc. 9th US National and 10th Canadian Conference on Earthquake Engineering, EERI and Canadian Assoc. for Earthquake Eng.*, July 25-29, 2010, Paper No. 1666.

Tileylioglu, S., Nigbor, R.L., and Stewart, J.P. (2008). "Determination of soil-structure interaction effects for a model test structure using parametric system identification procedures," *Geotechnical Engineering and Soil Dynamics IV*, May 18-22, 2008, Sacramento, CA, ASCE Geotechnical Special Publication No. 181, D. Zeng, M.T. Manzari, and D.R. Hiltunen (eds.), 10 pages (electronic file).

Nigbor R. L, Hansen M., **Tileylioglu S.**, Baek J (2007). "Elevators as repeatable excitation source for SHM in buildings," *6th International Workshop on Structural Health Monitoring 2007, September 11-13, 2007, Stanford University, Stanford CA, Quantification, Validation and Implementation*, 379-386.

THESIS SUPERVISED

Banu Buyuk, July 2017, Masters Thesis Title: The Application of Occupational Health and Safety Regulations and the Prevention of Work Accidents During the Assembly and Use of Scaffoldings in Construction Works.

PUBLICATION REVIEWS

- The Journal of Deep Foundations Institute, (DFI), 2015
- International Journal for Numerical and Analytical Methods in Geomechanics (Wiley), 2015.
- Canadian Geotechnical Journal (NRC), 2011 & 2012.
- Journal of Geotechnical and Geoenvironmental Engineering (ASCE), 2009.
- Bulletin of Earthquake Engineering (Springer), 2009.
- 4th International Conference on Geotechnical Engineering and Soil Dynamics (ASCE), 2008.

PROFESSIONAL LICENSES

- Registered **Professional Engineer, California #78615**

PROFESSIONAL AFFILIATIONS

- Member of the Earthquake Engineering Research Institute (EERI).
- Member of the American Society of Civil Engineers (ASCE).
- Member of Chamber of Civil Engineers, Turkey (IMO).
- Member of Turkish Soil Mechanics and Geotechnical Engineering Society (ZMGM)

COMPUTER SKILLS

MATLAB, PLAXIS, SHAKE91, SVSLOPE3D, GSTABL, L-PILE, A-PILE, SHAFT, MSEW, GInt, MS-OFFICE