JIAN ZHANG

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EDUCATION

Ph.D. in Civil Engineering, **University of California, Berkeley**, December 2002
Major: Structural Engineering Minors: Mathematics and Mechanics
Ph.D. Dissertation: *Seismic Response Analysis and Protection of Highway Overcrossings Including Soil-Structure Interaction*

M.S. in Civil Engineering, **University of California, Berkeley**, May 1997
Major: Structural Engineering, Mechanics and Materials

M.E. in Civil Engineering, **Southeast University**, Nanjing, China, March 1994
Major: Geotechnical Engineering
Master Thesis: *The Analysis on Consolidation Deformations of Special Subgrade by Finite Element Method*

B.E. in Civil Engineering, **Nanjing Tech University** (formerly Nanjing Architecture and Civil Engineering Institute), Nanjing, China, July 1991

ACADEMIC EXPERIENCE

Vice Chair of Undergraduate Affairs, Department of Civil & Environmental Engineering, University of California at Los Angeles (**UCLA**), July 2018 to Present
Associate Professor, Department of Civil & Environmental Engineering, University of California at Los Angeles (**UCLA**), July 2011 to Present
Assistant Professor, Department of Civil & Environmental Engineering, University of California at Los Angeles (**UCLA**), July 2005 to July 2011
Assistant Professor, Department of Civil & Environmental Engineering, University of Illinois at Urbana-Champaign (**UIUC**), October 2002 to June 2005
Graduate Student Researcher, Department of Civil & Environmental Engineering, University of California at Berkeley (**UCB**), August 1996 to August 2002

RESEARCH INTERESTS

Earthquake engineering and structural dynamics, soil-structural interaction, earthquake hazard mitigation using passive and semi-active protective devices, rocking response and overturning of rigid blocks, performance-based response assessment of bridges under seismic shaking and liquefaction induced lateral spreading, seismic modeling of embankment, shallow foundation and pile foundation, seismic behavior and analysis of reinforced concrete structures, structural mechanics and ground motion characteristics.

HONORS AND AWARDS

- ASCE Professor of The Year (2013), UCLA
- Northrop Grumman Excellence in Teaching Award (2009), UCLA
- JSPS Short-Term Invitation Fellowship (2003), Japan Society for The Promotion of Science
- Global Exchange Distinguished Visiting Scholar (2017), Nanjing Tech University

- Keynote Speaker, 5th National Forum on Safety and Disaster Prevention in Civil Engineering (2017)
- 1st Annual NHERI-NIED/E-DEFENSE Collaborative Meeting, Full Travel Support, NSF (2017)
- A Multi-hazard Engineering Collaboratory for Hybrid Simulation (MECHS) Workshop, Full Travel Support, NSF (2017)
- Keynote Speaker, 5th International Conference on Seismic Technology for Building Structures (2016)
- Keynote Speaker, International Conference on Advances in Civil Infrastructure Engineering (2012)
- Recipient of New Millennium Yuelu Lectureship, School of Civil Engineering, Hunan University, China (2012)
- Hybrid Simulation Task Group User Guide/Dictionary Workshop, Full Travel Support, NSF/NEES (2014)
- Hybrid Simulation Task Group Acceptance Criteria Workshop, Full Travel Support, NSF/NEES (2014)
- 4th Workshop on Chin-US Collaboration for Disaster Evolution/Resilience of Civil Infrastructure and Urban Environment, Full Travel Support, NSF/NEES (2013)
- 3rd Workshop on Chin-US Collaboration for Disaster Evolution/Resilience of Civil Infrastructure and Urban Environment, Full Travel Support, NSF/NEES (2012)
- 2nd Workshop on China-US Collaboration for Disaster Evolution/Resilience of Civil Infrastructure and Urban Environment, Full Travel Support, NSF/NEES (2011)
- Workshop on China-US Collaboration for Disaster Evolution/Resilience of Civil Infrastructure and Urban Environment, Full Travel Support, NSF/NEES (2010)
- EERI 9USN/10CCEE, Travel Grant, EERI (2010)
- NEES/E-Defense Joint Research Coordination Meeting, Travel Support, NSF (2006, 2007)
- NEES Consortium Annual Meeting Travel Award (2003, 2006)
- University Fellowship (1996-1997), Department Grant for Out-of-state Tuition Waiver (1997, 1999), and GSR Assistantship (1997 to 2000), University of California, Berkeley
- Department Fellowship (1995-1996), University of Notre Dame
- University Alumni Scholarship (1993) and Outstanding Graduate Student Scholarships (1991-1994), Southeast University, Nanjing, China
- Outstanding Student Scholarships (1987-1991) and the Best Graduate Award (top 1% graduate, 1991), Nanjing Tech University (formerly Nanjing Architecture and Civil Engineering Institute), Nanjing, China

PROFESSIONAL MEMBERSHIPS AND SERVICES

- Chair, ASCE/SEI Analysis and Computation Technical Activities Committee, 2018-present
- Chair, ASCE/SEI Structure Control and Sensing Committee, 2015-2018 (Vice Chair 2011-2015)
- Chair, ASCE/SEI Performance-Based Design of Structures Committee, 2011- 2015 (Secretary, Vice Chair 2009-2011)
- Associate Editor, Journal of Bridge Engineering, ASCE, 2010 - present
- Guest Editor, Journal of Bridge Engineering, Special Issue on Recent Advances in Seismic Design, Analysis and Protection of Highway Bridges, 2012
- Technical Topic Chair (Bridge Structures), 11th National Conference in Earthquake Engineering, 2018
- Session Chair, Bridge 1: Innovative Seismic Design and Protection of Bridges, 11NCEE, June 2018

- Session Chair, Performance Based Design of Structures: Evolution, State-of-the-art, and State-of-Practice, Structure Congress'15, April 2015
- Session Co-Chair, Performance Based Design of Bridges: Practical Applications, Structure Congress'13, May 2013
- Session Chair, Performance of Structures under Extreme Loads through Field Observations and Analytical Investigations, Structure Congress'11, April 2011
- Session Chair, Methods and Tools for Performance-Based Engineering, Structure Congress'10, May 2010
- Session Chair, Numerical Methods in Earthquake Engineering, 14th World Conference on Earthquake Engineering (14WCEE), October 2008
- Session Chair, Research Frontiers-Track 2: Modeling and Assessment of Bridge Foundations and Columns, Structure Congress'07, May 2007
- Session Chair, Soil-Structure Interaction: Recent Analysis and Design Issues in Buildings and Bridges, Structure Congress'05, April 2005
- Member, NEEScomm Simulation Steering Committee, 2011-2014
- Member, NEEScomm Requirements Analysis and Assessment Subcommittee (RAAS) of Project Advisory Committee (PAC), 2013-2014
- Member, ASCE/SEI Emerging Analysis Methods in Earthquake Engineering Subcommittee, 2009-present
- Member, ASCE/SEI Seismic Effects Committee, 2003-present
- Associated Member, American Society of Civil Engineers (ASCE), 2002-present
- Member, Earthquake Engineering Research Institute (EERI), 2002-present
- Member, Consortium of Universities for Research in Earthquake Engineering (CUREE), 2003-2005, 2007-present
- Member, NEES Consortium, 2003-present
- Member, American Society of Engineering Education (ASEE), 2004-2006
- Reviewer, Earthquake Engineering and Structural Dynamics, Journal of Structural Engineering, Journal of Engineering Mechanics, Journal of Bridge Engineering, Journal of Earthquake Engineering, Shock and Vibration, Earthquake Spectra, International Journal of Soil Dynamics and Earthquake Engineering, Journal of Geotechnical and Geoenvironmental Engineering, Journal of Structural Control and Health Monitoring, International Journal of structural Engineering and Mechanics.
- Proposal Reviewer, National Science Foundation, CMMI Unsolicited, NEES research, EFRI-SEED, 2003- present
- Faculty In-Charge, PEER Scholar Course at UCLA, November 2006
- Faculty Mentor, Natural Hazard Mitigation in Japan (NHMJ Program), June 2003

PUBLICATIONS

Refereed Journal Publications (H-index=15, Total Citation=790 ISI Web of Science)

Note: names underlined are students, names with "+" are former advisor, names with "*" are visiting students or scholars.

J1. Selig[+], E.T., **Zhang, J.**, Ebersohn W., "Evaluation of Dynamic Earth Pressure Cells for Subgrade", *Transportation Research Record,* 1596:1-6, 1997. ***(Cited by 4* by Scoupus, IF=0.695)***

J2. Makris[+], N. and **Zhang, J.**, "Time Domain Viscoelastic Analysis of Earth Structures", *Earthquake Engineering and Structural Dynamics*, 29(6):745-768, June 2000. ***(Cited by 30, IF=2.807)***

J3. **Zhang, J.** and Makris[+], N., Comment on "Estimates of the Ground Accelerations at Point Reyes Station During the 1906 San Francisco Earthquake," by A. Anooshepoor, T. H. Heaton, B. Shi and J. N. Brune, *Bulletin of the Seismological Society of America*, 90(5):1342-1348, October, 2000. ***(Cited by 9, IF=2.343)***

J4. **Zhang, J.** and Makris[+], N., "Rocking Response of Free-Standing Blocks Under Cycloidal Pulses", *Journal of Engineering Mechanics*, ASCE, 127(5):473-483, May 2001. ***(Cited by 175, IF=1.799)***

J5. Makris[+], N. and **Zhang, J.**, "Rocking Response of Anchored Blocks Under Pulse-Type Motions", *Journal of Engineering Mechanics*, ASCE, 127(5):484-493, May 2001. ***(Cited by 43, IF=1.799)***

J6. **Zhang, J.** and Makris[+], N., "Kinematic Response Functions and Dynamic Stiffnesses of Bridge Embankments", *Earthquake Engineering and Structural Dynamics*, 31(11):1933-1966, November 2002. ***(Cited by 39, IF=2.807)***

J7. **Zhang, J.** and Makris[+], N., "Seismic Response Analysis of Highway Overcrossings Including Soil-Structure Interaction", *Earthquake Engineering and Structural Dynamics*, 31(11):1967-1991, November 2002. ***(Cited by 53, IF=2.807)***

J8. Makris[+], N. and **Zhang, J.**, "Seismic Response Analysis of a Highway Overcrossing Equipped With Isolation Bearings and Fluid Dampers", *Journal of Structural Engineering*, ASCE, 130(6):830-845, June 2004. ***(Cited by 32, IF=1.903)***

J9. **Zhang, J.**, Makris[+], N. and Delis, T., "Structural Characterization of Modern Highway Overcrossings - A Case Study", *Journal of Structural Engineering*, ASCE, 130(6):846-860, June 2004. ***(Cited by 16, IF=1.903)***

J10. **Zhang, J.**, Huo, Y., Brandenberg, S.J. and P. Kashighandi, "Effects of Structural Characterization on Fragility Functions of Bridges Subjected to Seismic Shaking and Lateral Spreading", *Earthquake Engineering and Engineering Vibration*, 7(4): 368-382, December 2008. ***(Cited by 27, IF=0.847)***

J11. **Zhang, J.** and Xu S-Y., "Seismic Response Simulations of Bridges Considering Shear-Flexural Interaction of Columns", *International Journal of Structural Engineering and Mechanics*, 31(5):545-566, March 2009. ***(Cited by 10, IF=2.191)***

J12. **Zhang, J.** and Huo, Y., "Evaluating Effectiveness and Optimum Design of Isolation Devices for Highway Bridges Using Fragility Function Method", *Engineering Structures*, 31(8):1648-1660, August 2009. ***(Cited by 67, IF=2.755)***

J13. Agrawal, A.K., Tan, P., Nagarajaiah, S., and **Zhang, J.**, "Benchmark Structural Control Problem For a Seismically Excited Highway Bridge, Part I: Problem Definition", *Structural Control and Health Monitoring*, 16(5):509-529, August 2009. ***(Cited by 43, IF=3.622)***

J14. **Zhang, J.** and Tang, Y., "Dimensional Analysis of Structures with Translating and Rocking Foundations under Near-Fault Ground Motions", *Soil Dynamics and Earthquake Engineering*, 29(10):1330-1346, October 2009. ***(Cited by 23, IF=2.077)***

J15. Tang, Y. and **Zhang, J.**, "Response Spectrum Oriented Pulse Identification and Magnitude Scaling of Forward Directivity Pulses in Near-Fault Ground Motions", *Soil Dynamics and Earthquake Engineering*, 31(1):59-76, January 2011. ***(Cited by 27, IF=2.077)***

J16. Tang, Y. and **Zhang, J.**, "Probabilistic Seismic Demand Analysis of RC Shear Walls Considering Soil-Structure Interaction Effects", *Engineering Structures*, 33(1):218-229, January 2011. ***(Cited by 25, IF=2.755)***

J17. Xu S-Y. and **Zhang, J.**, "Hysteretic Shear-Flexure Interaction Model of Reinforced Concrete Columns for Seismic Response Assessment of Bridges", *Earthquake Engineering and Structural Dynamics*, 40(3):315-337, March 2011. ***(Cited by 29, IF=2.807)***

J18. **Zhang, J.**, Xu S-Y. and Tang, Y., "Inelastic Displacement Demand of Bridge Columns Considering Shear-Flexure Interaction", *Earthquake Engineering and Structural Dynamics*, 40(7): 731-748, June 2011. ***(Cited by 12, IF=2.807)***

J19. Brandenberg, S.J., Kashighandi, P., **Zhang, J.**, Huo, Y. and Zhao, M., "Fragility Functions for Bridges in Liquefaction-Induced Lateral Spreads", *Earthquake Spectra*, 27(3):683-717, August 2011. ***(Cited by 9, IF=2.079)***

J20. Xu, S-Y. and **Zhang, J.**, "Axial-Shear-Flexural Interaction Hysteretic Models for Reinforced Concrete Bridge Columns under Combined Actions", *Engineering Structures*, 34(1):548-563, January 2012. ***(Cited by 13, IF=2.755)***

J21. Zirakian, T. and **Zhang, J.**, "Elastic Distortional Buckling of Singly Symmetric I-shaped Flexural Members with Slender Webs", *International Journal of Structural Stability and Dynamics*, 12(2):359-376, March 2012. ***(Cited by 2, IF=2.082)***

J22. Huo, Y. and **Zhang, J.**, "Effects of Pounding and Skewness on Seismic Response of Multi-Span Highway Bridges Using Fragility Function Method", *Journal of Bridge Engineering*, ASCE, 18(6):499-515, June 2013. ***(Cited by 30, IF=1.454)***

J23. Sun*, Z.Y., Wu, G., Wu, Z.S., and **Zhang, J.**, "Nonlinear Behavior and Simulation of Concrete Columns Reinforced by Steel-FRP Composite bars", *Journal of Bridge Engineering*, ASCE, 19(2):220-234, February 2014 ***(Cited by 9, IF=1.454)***

J24. Wang*, J.Q., Qi, J.A., **Zhang, J.**, "Optimization Method and Experimental Study on the Shear Strength of Externally Prestressed Concrete Beams", *Advances in Structural Engineering,* 17(4):607-615, April 2014 ***(Cited by 3, IF=0.968)***

J25. Narasimhan, S. and **Zhang, J.**, "Special Issue on Recent Advances in Seismic Design, Analysis, and Protection of highway Bridges", *Journal of Bridge Engineering*, 19(8), A2014001, DOI: 10.1061/(ASCE)BE.1943-5592.0000652, August 2014.***(Cited by 0, IF=1.454)***

J26. **Zhang, J.** and Zirakian, T., "Probabilistic Assessment of Structures With SPSW systems and LYP Steel Infill Plates Using Fragility Function Method", *Engineering Structures, 85:195-205, February* 2015. ***(Cited by 7, IF=2.755)***

J27. Zirakian, T. and **Zhang, J.**, "Buckling and Yielding Behavior of Unstiffened Slender, Moderate and Stocky Low Yield Point Steel Plates", *Thin-Walled Structures,* 88:105-118, March 2015. ***(Cited by 8, IF=2.881)***

J28. Zirakian, T. and **Zhang, J.**, "Seismic Design and Behavior of Low Yield Point Steel Plate Shear Walls", *International Journal of Steel Structures,* 15(1):135-151, March 2015. ***(Cited by 7, IF=0.734)***

J29. Zirakian, T. and **Zhang, J.**, "Structural Performance of Unstiffened Low Yield Point Steel Plate Shear Walls", *Journal of Constructional Steel Research, 112:40-53, September* 2015 ***(Cited by 7, IF=2.509).***

J30. Zirakian, T. and **Zhang, J.**, "Study on Seismic Retrofit of Structures Using SPSW Systems and LYP Steel Material", *Earthquakes and Structures, 10(1):1-23, January* 2016. ***(Cited by 2, IF=1.309)***

J31. Sun*, Z.Y., Wu, G., **Zhang, J.**, Xiao W.C. and Zeng Y.H., "Experimental Study on Concrete Columns Reinforced by Hybrid Steel-Fiber Reinforced Polymer (FRP) Bars Under Horizontal Cyclic Loading", *Journal of Construction & Building Materials*, 130(2017): 202-211, January 2017 (http://dx.doi.org/10.1016/j.conbuildmat.2016.10.001) ***(Cited by 3, IF=3.485)***

J32. Shu, Z., **Zhang, J.** and Nagarajaiah S., "Dimensional Analysis of Inelastic Structures with Negative Stiffness and Supplemental Damping Devices", *Journal of Structural Engineering*, 143(3):04016184, March 2017 (http://ascelibrary.org/doi/pdf/10.1061/(ASCE)ST.1943-541X.0001658). ***(Cited by 7, IF=1.903)***

J33. Xie, Y. and **Zhang, J.**, "Optimal Design of Seismic Protective Devices for Highway Bridges Using Performance Based Methodology and Multi-Objective Genetic Optimization", *Journal of Bridge Engineering*, 22(3):04016129, March 2017 (http://dx.doi.org/10.1061/(ASCE)BE.1943-5592.0001009). ***(Cited by 4, IF=1.454)***

J34. Li, S., Zhang, F., Wang*, J.Q., Alam, S. and **Zhang, J.**, "Effects of Near-Fault Motions and Artificial Pulse-Type Ground Motions on Super-Span Cable-Stayed Bridge Systems", *Journal of Bridge Engineering*, 22(3), March 2017 (http://dx.doi.org/10.1061/(ASCE)BE.1943-5592.0001008). ***(Cited by 2, IF=1.454)***

J35. Xie, Y., Huo, Y. and **Zhang, J.**, "Development and Validation of p-y Modeling Approach for Seismic Response Prediction of Highway Bridges", *Earthquake Engineering and Structural Dynamics*, 46(4): 585-604, April 2017 (DOI:10.1002/eqe.2804). ***(Cited by 5, IF=2.807)***

J36. Shu, Z., Li, S., **Zhang, J.** and He, M., "Optimum Seismic Design of a Power Plant Building with Mass-varying Pendulum Tuned Mass Damper System by Its Heavy Suspended Buckets", *Engineering Structures*, 136(4):114-132, April 2017 (http://dx.doi.org/10.1016/j.engstruct.2017.01.010) ***(Cited by 5, IF=2.755)***

J37. Li, S., Zhang, F., Wang*, J.Q., Alam, S. and **Zhang, J.**, "Seismic Responses of Super-span Cable-Stayed Bridges Induced By Ground Motions In Different Sites Relative to Fault Rupture Considering Soil-Structure Interaction", *Soil Dynamics and Earthquake Engineering,* 101:295-310, October 2017 (https://dx.doi.org/10.1016/j.soildyn.2017.07.016) ***(Cited by 2, IF=2.077)***

J38. Wu, B., Lu, J., Mei*, Y. and **Zhang, J.**, "Buckling Mechanism and Global Stability Design Method of Buckling-Restrained Braces", *Journal of Constructional Steel Research,* 138:473-487, November 2017 (https://dx.doi.org/10.1016/j.jcsr.2017.07.023) ***(Cited by 1, IF=2.509)***

J39. Cui, H., Wu, G., Feng, D., **Zhang, J.**, and Xu, J., "Hysteretic Behavior Analysis of Damage-Controllable Rocking Wall", *Journal of Southeast University (Natural Science Edition)*, 48(2):288-293, March 2018, in Chinese (https://dx.doi.org/10.3969/j.issn.1001-0505.2018.02.016)

J40. Wang, Z., Wang*, J.Q., Liu, T., and **Zhang, J.**, "An Explicit Analytical Model for Seismic Performance of an Unbonded Post-tensioned Precast Segmental Rocking Hollow Pier", *Engineering Structures*, 161:176-191, April 2018 (https://doi.org/10.1016/j.engstruct.2018.02.025) (***Cited by 1, IF=2.755***)

J41. Xie, Y., **Zhang, J.** and Huo, Y., "Simplified Drift Demand Prediction of Bridges Under Liquefaction Induced Lateral Spreading", *Journal of Bridge Engineering*, 23(8):04018053, August 2018 (https://doi.org/10.1061/(ASCE)BE.1943-5592.0001266) ((***Cited by 1, IF=1.454***).

J42. Xie, Y. and **Zhang, J.**, "Design and Optimization of Seismic Isolation and Damping Devices for Highway Bridges Based on Probabilistic Repair Cost Ratio", *Journal of Structural Engineering*, 144(8): 04018125, August 2018 (https://doi.org/10.1061/(ASCE)ST.1943-541X.0002139) (***Cited by 1, IF=1.903)***.

J43. **Zhang, J.** and Shu, Z., "Optimal Design of Isolation Devices for Mid-rise Steel Moment Frames Using Performance Based Methodology", *Bulletin of Earthquake Engineering*, 16(9): 4315-4338, September 2018 (https://doi.org/10.1007/s10518-018-0321-0) ***(Cited by 0, IF=2.303)***.

J44. Xie, Y., **Zhang, J.**, and Wang, X., "Effectiveness Evaluation and Optimal Design of Nonlinear Viscous Dampers for Inelastic Structures under Pulse-Type Ground Motions", *Earthquake Engineering and Structural Dynamics*, 47(14): 2802-2820, November 2018 (https://doi.org/10.1002/eqe.3109) (***Cited by 0, IF=2.807***)

J45. Shu, Z. and **Zhang, J.**, "Dimensional Estimation of Residual Drift Demands for Bilinear Systems under Near-Fault Ground Motions", *Journal of Bridge Engineering*, 23(11): 04018087, November 2018 (https://doi.org/10.1061/(ASCE)BE.1943-5592.0001298) (***Cited by 0, IF=1.454***)

J46. Wang*, J.Q., Wang, Z., Tang, Y., Liu, T., and **Zhang, J.**, "Cyclic Loading Test of Self-Centering Precast Segmental Unbonded Post-tensioned UHPFRC Bridge Columns", *Bulletin of Earthquake Engineering*, 16(11): 5227-5255, November 2018 (https://doi.org/10.1007/s10518-018-0331-y) ***(Cited by 1, IF=2.303).***

J47. Wang, Z., Wang*, J.Q., Tang, Y., Liu, T., Gao, Y., and **Zhang, J.**, "Seismic Behavior of Precast Segmental UHPC Bridge Columns with Replaceable External Cover Plates and Internal Dissipaters", *Engineering Structures*, 177: 540-555, December 2018 (https://doi.org/10.1016/j.engstruct.2018.10.012) (***Cited by 0, IF=2.755***)

J48. **Zhang, J.**, Xie, Y., and Wu, G., "Seismic Responses of Bridges with Rocking Column-Foundation: A Dimensionless Regression Analysis", *Earthquake Engineering and Structural Dynamics*, 48(1):152-170, January 2019 (https:doi.org/10.1002/eqe.3129) (***Cited by 0, IF=2.807***)

J49. Wang, Z., Wang*, J.Q., Tang, Y., Gao, Y.F. and **Zhang, J.**, "Evaluating the Lateral Behavior of Precast Segmental UHPC Bridge Columns Based on the Equivalent Plastic Hinge Model", *Journal of Bridge Engineering*, 24(3): 04018124, March 2019 (***Cited by 0,***, ***IF=1.454***)

J50. Xie, Y., **Zhang, J.**, DesRoches, R. and Padgett, J., "Seismic fragilities of single-column highway bridges with rocking column-footing", *Earthquake Engineering and Structural Dynamics*, 2019 (***Accepted, IF=2.807***)

J51. Ozdagli, A.I., Xi, W., Ou, G., Li, B., Dyke, D.J., Wu, B., **Zhang, J.**, Ding, Y., Xu, G.S., and Wang, T., "Experimental Verification of an Accessible Geographically-Distributed Real-time Hybrid Simulation Platform", *Structural Control and Health Monitoring*, 2018 (revised 5/14/18)

J52. Wang, Z., Wang*, J.Q., Liu, J., Han, F., and **Zhang, J.**, "Large-scale Quasi-static Testing of Precast Bridge Column with Pocket Connections Using Noncontact Lap-spliced Bars and UHPC Grout", *Bulletin of Earthquake Engineering*, 2018 (submitted 10/7/2018)

J53. Wang, Z., Wang*, J.Q., Zhu, J.Z., Zhao, G.T., and **Zhang, J.**, "Energy Dissipation and Self-centering Capacities of Post-tensioning Precast Segmental UHPC Bridge Columns", *Structural Concrete*, 2019 (submitted 1/22/2019)

J54. Wang, Z., Wang*, J.Q., Zhu, J.Z., and **Zhang, J**., "Seismic Behavior of Precast Bridge Columns with Lap-Spliced Large-Diameter Bars and UHPC Grout: Experimental and Numerical Researches", *Construction & Building Materials*, 2019 (submitted 1/31/2019)

Technical Reports

R1. **Zhang, J**., Ebersohn, W. and Selig, E.T., "Evaluation of Earth Pressure Cells for Pavement Subgrade Performance Study", *Geotechnical Report No. CRR95-427F*, University of Massachusetts, Amherst, MA, August 1995.

R2. Makris, N. and **Zhang, J**., "Rocking Response and Overturning of Anchored Equipment Under Seismic Excitations", *Report No. PEER-1999/06,* Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA, November 1999.

R3. **Zhang, J**. and Makris, N., "Seismic Response Analysis of Highway Overcrossings Including Soil-Structure Interaction", *Report No. PEER-2001/02,* Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA, May 2001.

R4. Makris, N. and **Zhang, J**., "Structural Characterization and Seismic Response Analysis of a Highway Overcrossing Equipped With Elastomeric Bearings and Fluid Dampers – A Case Study", *Report No. PEER-2002/17,* Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA, November 2002.

R5. Brandenberg, S.J., **Zhang, J**., Kashighandi P., Huo, Y., and Zhao, M., "Demand Fragility Surfaces for Bridges in Liquefied and Laterally Spreading Ground", *Report No. PEER-2011/01,* Pacific Earthquake Engineering Research Center, University of California, Berkeley, CA, March 2011.

R6. Nakata, N., Dyke, S.J., **Zhang, J**., Mosqueda, G., Shao, X., Mahmoud, H., Head, M.H., Bletzinger, M., Marshall, G.A., Ou, G. and Song, C., "Hybrid Simulation Primer and Dictionary", *https:// nees.org/resources/7702*, NEES, April 2014.

R7. Ozdagli, A.I., Xi, W., Ou, G., Dyke, S.J., **Zhang, J**. and Wu, B., "Verification of Real-Time Hybrid Simulation with Shake Table Tests for a Three Story Structure Equipped with MR Damper", *Report No. IISL-06, https://nees.org/resources/12822*, Intelligent Infrastructure Systems Laboratory, Pur due University, West Lafayette, IN, September 2014.

Conference Papers

C1. Burton, S.A., Makris, N., Antsaklis, P.J. and **Zhang, J**., "Nonparametric Models for Characterization and Response Control of a Controllable Fluid Damper", *Building to Last: Proceedings of Structures Congress XV,* Vol. 2, pp. 1363-1367, Portland, OR, April 1997. 6 pages.

C2. Makris, N., Roussos, Y. and **Zhang, J**., "Rocking Response of Rigid Blocks Under Near-Source Motions", *Proceedings, 13th ASCE Engineering Mechanics Division Conference*, Baltimore, MD, June 1999. 10 pages.

C3. Makris, N., Roussos, Y. and **Zhang, J**., "Rocking and Overturning of Electrical Equipment Under Pulse Type Motions", *Proceedings, 5th US Conference on Lifeline Earthquake Engineering*, Seattle, WA, August 1999. 10 pages.

C4. **Zhang, J**. and Makris, N., "Seismic Protection of Highway Overcrossings Using Modern Technologies", *Proceedings, Sharm El-Sheikh Bridge Engineering Conference*, Sinai, Egypt, March 2000. 10 pages.

C5. Makris, N. and **Zhang, J**., "Rocking Response and Overturning of Anchored Blocks Under Pulse-Type Motions", *Proceedings, 14th ASCE Engineering Mechanics Division Conference*, Austin, TX, May 2000. 6 pages.

C6. **Zhang, J**. and Makris, N., "Rocking Response and Overturning of Free-Standing Blocks Under Cycloidal Pulses", *Proceedings, 14th ASCE Engineering Mechanics Division Conference*, Austin, TX, May 2000. 6 pages.

C7. **Zhang, J**. and Makris, N., "Seismic Response Analysis of Highway Overcrossings Including Soil-Structure Interaction", *Proceedings, 16th US-Japan Workshop*, Reno, NV, October 2000. 15 pages.

C8. Makris, N. and **Zhang, J**., "Rocking Response of Free-Standing and Anchored Blocks Under Pulse-Type Motions", *Symposium, Recent Advances in Applied Mechanics (Honorary Volume for Professor A.N. Kounadis)*, pp. 220-228, National Technical University, Athens, Greece, November 2000. 9 pages.

C9. **Zhang, J**. and Makris, N., "Earthquake Response Analysis of Highway Overcrossings With Soil-Structure Interaction", *Proceedings, 15th ASCE Engineering Mechanics Division Conference*, New York, NY, June 2002. 8 pages.

C10. **Zhang, J**. and Makris, N., "Evaluation of Supplemental Energy Dissipation Devices in Protecting Highway Bridges With Soil-Structure Interaction", *Proceedings, International Conference on Advances and New Challenges in Earthquake Engineering Research,* Harbin and Hong Kong, China, August 2002. 8 pages.

C11. Makris, N. and **Zhang, J**., "Seismic Response Analysis of Highway Overcrossings Equipped With Elastomeric Bearings and Fluid Dampers", *fib-Symposium: Concrete Structures in Seismic Regions*, Athens, Greece, May 2003. 12 pages.

C12. Agrawal, A.K., Tan, P., Nagarajaiah, S., **Zhang, J**., "Benchmark Structural Control Model For a Highway Bridge", *International Symposium on Network and Center-Based Research for Smart Structure Technology and Earthquake Engineering*, Osaka, Japan, June 2004. 6 pages.

C13. Ramachandran, J. and **Zhang, J**., "Kinematic Response of Nonlinear Pile under Vertical Shear Waves", *Structure Congress'05*, New York, NY, April 2005. 12 pages.

C14. Brown, P., Ji, J., Oyen, P., Sterns, A., Lehman, D.E., Lowes, L.N., Kuchma, D. and **Zhang, J**., "Investigation of the Seismic Behavior and Analysis of Reinforced Concrete Structural Walls", *100th Anniversary Earthquake Conference*, San Francisco, CA, April 2006. 10 pages.

C15. Agrawal, A.K., Tan, P., Nagarajaiah, S., **Zhang, J**., "Benchmark Structural Control Problem For a Seismically Excited Highway Bridge", *Structure Congress '06*, St. Louis, MO, May 2006. 10 pages.

C16. **Zhang, J**. and Tang, Y., "Evaluating Radiation Damping of Shallow Foundations on Nonlinear Soil Medium for Soil-Structure Interaction Analysis of Bridges", *22nd US-Japan Bridge Engineering Workshop, Seattle, WA, October 2006*. 13 pages.

C17. **Zhang, J**. and Tang, Y., "Finite Element Modeling of Shallow Foundations on Nonlinear Soil Medium", *Structure Congress'07*, Long beach, May 2007. 10 pages.

C18. Kuchma, D., Lehman, D.E., Lowes, L.N. and **Zhang, J**., "Investigation of the Seismic Behavior and Analysis of Reinforced Concrete Structural Walls Using the UIUC NEES Facility", *Structure Congress'07*, Long Beach, CA, May 2007. 5 pages.

C19. **Zhang, J**. and Tang, Y., "Radiation Damping of Shallow Foundations on Nonlinear Soil Medium", *4th International Conference on Earthquake Geotechnical Engineering*, Thessaloniki, Greece, June 2007. 12 pages.

C20. **Zhang, J**. and Huo, Y., "Fragility Functions of Base-Isolated Highway Bridges", *Structure Congress'08*, Vancouver, Canada, April 2008. 16 pages.

C21. **Zhang, J**. and Tang, Y., "Dimensional Analysis of Linear Soil-Foundation-Structure System Subjected to Near-Fault Ground Motions", *Structure Congress'08*, Vancouver, Canada, April 2008. 14 pages.

C22. Brandenberg, S.J., Kashighandi, P., **Zhang, J**., Huo, Y. and Zhao, M., "Sensitivity Study of a Non-Seismically Designed bridge Subjected to Lateral Spreading", *4th Geotechnical Earthquake Engineering and Soil Dynamics Conference*, Sacramento, CA, May 2008. 10 pages.

C23. **Zhang, J**. and Tang, Y., "Dimensional Analysis of Soil-Foundation-Structure System Subjected to Near Fault Ground Motions", *4th Geotechnical Earthquake Engineering and Soil Dynamics Conference, Sacramento*, CA, May 2008. 10 pages.

C24. **Zhang, J**. and Xu, S-Y., "Seismic Response Simulations of Bridges Considering Shear-Flexural Interaction of Columns", *4th International Conference on Advances in Structural Engineering and Mechanics*, Jeju, Korea, May 2008. 13 pages.

C25. Tang, Y. and **Zhang, J**., "Inertial Soil-Structure Interaction Effects of Structures on Rocking Foundation From Dimensional Analysis", *4th International Conference on Advances in Structural Engineering and Mechanics*, Jeju, Korea, May 2008. 15 pages.

C26. **Zhang, J**. and Xu S-Y., "Seismic Response Simulations of Bridges Considering Shear-Flexural Interaction of Columns", *6th National Seismic Conference on Bridges and Highways*, Charleston, South Carolina, July 2008. 13 pages.

C27. **Zhang, J**., Huo, Y., Kashighandi, P. and Brandenberg, S.J., "Effects of Structural Characterization on Fragility Functions of Bridges Subjected to Seismic Shaking and Lateral Spreading", *6th National Seismic Conference on Bridges and Highways*, Charleston, South Carolina, July 2008. 13 pages.

C28. Kashighandi, P., Brandenberg, S.J., **Zhang, J**., Huo, Y. and Zhao, M., "Fragility of Older-Vintage Continuous California Bridges to Liquefaction and Lateral Spreading", *14th World Conference on Earthquake Engineering*, Beijing, China, October 2008. 8 pages.

C29. **Zhang, J**., Huo, Y., Brandenberg, S.J. and Kashighandi, P., "Fragility Functions of Different Bridge Types Subject to Seismic Shaking and Lateral Spreading", *14th World Conference on Earthquake Engineering*, Beijing, China, October 2008. 8 pages.

C30. Xu S-Y. and **Zhang, J**., "Hysteretic Models for Reinforced Concrete Columns Considering Axial-Shear-Flexural Interaction", *14th World Conference on Earthquake Engineering*, Beijing, China, October 2008. 8 pages.

C31. **Zhang, J**. and Huo, Y., "Optimum Isolation Design for Highway bridges Using Fragility Function Method", *14th World Conference on Earthquake Engineering*, Beijing, China, October 2008. 8 pages.

C32. **Zhang, J**. and Tang, Y., "Evaluating Soil-Structure Interaction Effects Using Dimensional Analysis", *14th World Conference on Earthquake Engineering*, Beijing, China, October 2008. 8 pages.

C33. Tang, Y. and **Zhang, J**., "Probabilistic Seismic Demand Analysis of RC Shear Walls Considering Soil-Structure Interaction Effects", *Structure Congress'10*, Orlando, FL, May 2010. 11 pages.

C34. **Zhang, J**., Xu S-Y. and Tang, Y., "Drift Demand Model for Bridge Columns Considering Shear-Flexure Interaction", *Structure Congress'10*, Orlando, FL, May 2010. 13 pages.

C35. Huo, Y. and **Zhang, J**., "Effects of Pounding and Skewness on Seismic Responses of Multi-Span Highway Bridges Using Fragility Function Method", *9th US National and 10th Canadian Conference on Earthquake Engineering: Reaching Beyond Borders*, Toronto, Canada, July 2010. 10 pages.

C36. Xu S-Y. and **Zhang, J**., "Axial-Shear-Flexure Interaction Hysteretic Model for RC Bridge Columns under Combined Actions", *9th US National and 10th Canadian Conference on Earthquake Engineering: Reaching Beyond Borders*, Toronto, Canada, July 2010. 10 pages.

C37. Tang, Y. and **Zhang, J**., "Probabilistic Seismic Demand Analysis of RC Shear Walls Considering Soil-Structure Interaction Effects", *International symposium on Reliability Engineering and Risk Management (ISRERM 2010)*, Shanghai, China, September 2010. 6 pages.

C38. Zirakian, T. and **Zhang, J**., "Elastic Lateral-Distortional Buckling of Singly Symmetric I-Beams: The 2005 AISC Specification", *SDSS'Rio 2010 Stability and Ductility of Steel Structures*, Rio de Janeiro, Brazil, September 2010. 6 pages.

C39. **Zhang, J**. and Xi, W., "Optimal Nonlinear Damping for Inelastic Structures Using Dimensional Analysis", *Structure Congress'12*, Chicago, IL, March 2012. 10 pages.

C40. Zirakian, T. and **Zhang, J**., "Modified PFI Model for SPSWs with Moderate and Stocky LYP Steel Infill Plates", *2012 SSRC Stability Annual Conference*, Grapevine, TX, April 2012. 11 pages.

C41. Ozdagli, A.I., Xi, W., Ding, Y., **Zhang, J**., Dyke, S.J. and Wu, B., "Verification of Real-Time Hybrid Simulation with Shake Table Tests: Phase 1 - Modeling of Superstructure", International Conference on Earthquake Engineering Research Challenges in the 21st Century, Harbin, China, May 2012. 8 pages.

C42. Ozdagli, A.I., Dyke, S.J., Xi, W., **Zhang, J**., Ding, Y. and Wu, B., "Verification of Real-Time Hybrid Simulation with Shake Table Tests: Phase 2 - Development of Control Algorithms", *15th World Conference on Earthquake Engineering*, Lisbon, Portugal, September 2012. 8 pages.

C43. **Zhang, J**., Xi, W., Dyke, D.J., Ozdagli, A.I., Wu, B., "Seismic Protection Design of Nonlinear Structures Using Hybrid Simulation", *15th World Conference on Earthquake Engineering*, Lisbon, Portugal, September 2012. 10 pages.

C44. Zirakian, T. and **Zhang, J**., "Structural Performance of SPSWs with Unstiffened Slender, Moderate, and Stocky LYP Steel Infill Plates", *15th World Conference on Earthquake Engineering*, Lisbon, Portugal, September 2012. 10 pages.

C45. Xi, W. and **Zhang, J**., "Optimal Design of Supplemental Damping Devices for Nonlinear MDOF Structures Based on a Novel Nonlinear Damping Index", *10th US National Conference on Earthquake Engineering*, Anchorage, AL, July 2014. 11 pages.

C46. **Zhang, J**. and Zirakian, T., "Seismic Responses of Structures Retrofitted With SPSW Systems using LYP Steel Infill Plates", *10th US National Conference on Earthquake Engineering*, Anchorage, AL, July 2014. 11 pages.

C47. Xie, Y. and **Zhang, J**., "Evaluating Effectiveness and Optimal Design of Isolation Bearings and Fluid Dampers for a Highway Bridge Using Fragility Function Method and Genetic Optimization", *Geotechnical & Structure Engineering Congress'16*, Phoenix, AZ, February 2016. 14 pages.

C48. Xie, Y., **Zhang, J.** and Wu, G., "Simplified Seismic Response Predictions of Controlled Rocking Columns for Bridges", *Engineering Mechanics Institute Conference,* San Diego, CA, June 2017 (abstract & presentation)

C49. Peng, Y., **Zhang, J.**, Xie, Y. and Wu, G., "Seismic Performance Enhancement of Structures Using Rocking Components", *Engineering Mechanics Institute Conference,* Boston, MA, May 2018 (abstract & presentation)

C50. Xie, Y. and **Zhang, J**., "Optimization of Seismic Protective Devices for Highway Bridges Based on Probabilistic Repair Cost Ratio: A Case Study", *11th US National Conference on Earthquake Engineering*, Los Angeles, CA, June 2018. 10 pages.

C51. Xie, Y. and **Zhang, J**., "Probabilistic Seismic Evaluation of Bridges with Rocking Column-Foundation", *11th US National Conference on Earthquake Engineering*, Los Angeles, CA, June 2018. 10 pages.

C52. Shu, Z., Dong, H. and **Zhang, J.**, "Peak and Residual Drift Estimations for SDOF Bilinear Systems Against Impulsive Earthquakes", *11th US National Conference on Earthquake Engineering*, Los Angeles, CA, June 2018. 9 pages

C53. Sun, Z.Y.*, Li, M., Zhou, J. K., Wu, G. and **Zhang, J.,** "Deformation Behavior of Concrete Beams Reinforced by Steel-FRP Composite Bar", *11th US National Conference on Earthquake Engineering*, Los Angeles, CA, June 2018. 4 pages

Patent

P1. Patent #201620788419.2 & #201610595410.4 (pending): Ye Z., Wu G., Zhang J. and Wu J. "Self-adjusting isolated top story construction module for building structures", China.

DATASETS

D1. Ali Ozdagli, Wang Xi, Bo Li, Shirley Dyke, Bin Wu, Jian Zhang, Yong Ding (2013). "Preliminary Hammer Test on 3DOF Structure after Structural Modification", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D3R785N6W

D2. Ali Ozdagli, Wang Xi, Bo Li, Guoshan Xu, Shirley Dyke, Jian Zhang, Bin Wu (2013). "Shake Table Test on 3DOF Structure", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D3VQ2S97T

D3. Ali Ozdagli, Wang Xi, Bo Li, Guoshan Xu, Shirley Dyke, Jian Zhang, Bin Wu (2013). "Magneto-Rheological Damper Characterization Tests at HIT", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D35717N6S

D4. Ali Ozdagli, Wang Xi, Bo Li, Guoshan Xu, Shirley Dyke, Jian Zhang, Bin Wu (2013). "Actual Hammer Test on 3DOF Structure after Structural Modification", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D3QZ22H32

FUNDED RESEARCH PROJECTS

- NSFC: Development and Seismic Assessment of Rocking Structures with Controllable Damage (PI), National Science Foundation China, #51528802, 01/01/2016-12/31/2017, RMB 200,000.
- Supplement to NEESR-SG: Performance-Based Design and Real-Time Large-Scale Testing to Enable Implementation of Advanced Damping Systems (Co-PI), National Science Foundation, 05/24/2011-08/31/2014, $75,000, PI: Shirley Dyke (Purdue University).
- NEESR-SG: Development of Next Generation Adaptive Seismic Protection (Co-PI), National Science Foundation, CMMI-0830391, 09/01/2008-8/31/2012, $1,591,082, PI: Satish Nagarajaiah (Rice University).
- NEESR-SG: Seismic Simulation and Design of Bridge Columns under Combined Actions, and Implications on System Response (Co-PI), National Science Foundation, CMMI-0530737, 9/2005-9/2011, $1,420,000, PI: David Sanders (University of Nevada, Reno).
- NEESR-SG: Behavior, Design and Analysis of Complex Wall Systems (Co-PI), National Science Foundation, CMMI-0421577, 10/2004-10/2009, $1,537,231, PI: Laura N. Lowes (University of Washington).
- Simulation and Assessment of Global Bridge Response to Permanent Ground Deformations (Co-PI), Pacific Earthquake Engineering Research Center (PEER), Transportation Systems Research Program, 1/1/2009-12/31/2010, $173,052, PI: Scott Brandenberg (UCLA).
- Fragility Functions for Liquefaction Screening of Caltrans Bridge Structures (Co-PI), Caltrans through PEER Lifelines, 10/1/2006-9/30/2008, $213,745, PI: Scott Brandenberg (UCLA).
- DS-3 Response Analysis Tools (PI), National Science Foundation/Mid-America Earthquake Center, 10/2003-10/2006, $210,000 (resigned from project because of moving to UCLA)

- Evaluation of Aluminum Highway Sign Truss Design Details and Review of Traffic Structure Standards (Co-PI), Illinois Department of Transportation, 1/2004-1/2006, $253,804, PI: Douglas A. Foutch (UIUC).

GRADUATE STUDENTS ADVISING

Ph.D. Students Graduated (7 total)

- Yuchuan Tang (2009), *Soil-Structure Interaction and Its Role in Performance-Based Seismic Analysis of Shear Wall Structures*, currently Associate Professor, Southeast University.
- Shi-Yu Xu (2010), *Modeling Axial-Shear-Flexure Interaction of RC Columns for Seismic Response Assessment of Bridges,* currently Assistant Professor, City University of Hong Kong.
- Yili Huo (2011), *Seismic Response Assessment and Improvement of Highway Bridges Using Fragility Function Method*, currently at Bentley Systems Inc., Carlsbad, CA.
- Tadeh Zirakian (2013), *Seismic Performance and Design of Steel Plate Shear Walls with Low Yield Point Steel Infill Plates,* Outstanding Ph.D. Award, currently Assistant Professor, California State University Northridge.
- Wang Xi (2014), *Performance Based Implementation of Seismic Protective Devices for Structures*, currently at Gouvis Engineering, Newport Beach, CA.
- Zhan Shu (2014), *Seismic Response and Protection of building Systems Using PBEE Methodology,* currently Associate Professor, Tongji University, China.
- Yazhou Xie (2017), *Seismic Modeling, Quantifying and Protection of Highway Bridges Considering Shaking and Lateral Spreading,* currently Postdoctoral Researcher, Rice University, Houston, TX.

Ph.D. Students Currently Advising (2 total)

- Dong Wang (2014 - present), Advanced to Candidacy December, 2016
- Yi Peng (2015 - present), Advanced to Candidacy September, 2017

M.S. Students Graduated (96 total)

- Yuchuan Tang (2005), University of Illinois, Urbana-Champaign.
- 2007 (**3**): Reid Nishimura, Amandine Chaillous, Manuel Armando Perez; 2008 (**9**): Lih Wei Wong, Barry Chan, Ralph Abinader, Eugene E. Del Valle, Sahil Jain, Karen Keal, Marcia Karen Monzon Castaneda, Helbert Moradian, Zhan Shu; 2009 (**1**): Noah Lenahan; 2010 (**7**): Dewei Zhou, Ian An Ling, Brendan Angeles Ramos, Wan Yi Tam, Melineh Zomorrodian, Nima Patel, Xiaomi Gong; 2011 (**8**): Kenan Piao, Sujean Wu, Logan Lee, Marjan Shenasi , Chao Lian Guan, Jennifer Dang, Augustin Jr. Barajas, David Lopez; 2012 (**11**): Arineh Arzmanians, Gibin George, Barr Levy, Charles Ma, Arash Mangoli, Soo Min Park, Chunhui Shao, Chi-Ru Yeh, Kunqi Zhang, Jianqiao Cui, Edward Liao; 2013 (**8**): Carl Abinader, Sean Cullenward, Alexander Chon, Ka Yeung Cheung, Xuesong Leng, Shiliang Li, Wei Long, Ronald Yu; 2014(**6**): Charles A Cummings, Andrew Huang, Jennifer Huynh, Ilias Khoukhi, Ryan P. Vantine, Dong Wang; 2015(**13**): Erica Brizuela, Xiangnan Dong, Yiping Gu, Zizhao He, Ann Christie Jiras, Xueni Luo, Andy Luu, Mingxin Meng, Kyle Tomita, Qian Dong, Kaicheng Liu, Reisa M. Soedarsono, Joshua Pan Yu; 2016 (**5**): Claudio Coletta, Andrew Kao, Christopher Lee, Nathan Rolfes, Dong Xiong; 2017(**10**): Kevin Adamson, Sok Chhay, Hemanth Kotaru, Cheok Hei Lei, Lang Li, Yunzhu Li, Heather Tran, Jian Xiao, Hongrui Yang, Yunji Zhang; 2018 (**14**): Ross Burk, Huiyao Huang, Aruj Kaushik, Pok Lai Alexander Law, Alexandre Matout, Vasu Rajeshkumar Mevawala, Duy Nguyen, Farsak Fredy Palia, Daniel Phelan, Arvind Ramesh, Shreyans Rathod, Siddharth Mathurbhai Rudani, Yifeng Shao, Margareth Sunyoto.; 2019 (**2**): Leonard Garber, Xitong Zhou. **Total: 97 at UCLA**.

Ph.D. Student Defense Committee (37 total)

- Ali Ozdagli (1/2015), Purdue University
- Vis Chen (10/2017), University of Auckland

- Seijin Oh (9/2007), Prechaporn Suwatnodom (12/2007), Christine Goulet (3/2008), Fariborz Tehrani (5/2008), Pai-Chen Guan (11/2008), Salih Tileylioglu (11/2008), Kuo-Yao Yuan (12/2008), Pirooz Kashighandi (06/2009), Keiji Yanase (08/2009), Yuchuan Tang (10/2009), David A. Naish (5/2010), Aysegul Gogus (5/2010), Tim Ancheta (7/2010), Shi-Yu Xu (11/2010), Minxing Zhao (5/2011), Yili Huo (7/2011), Luis Antonio Dominguez-Ramirez (5/2012), Zeynep Tuna (8/2012), Thien Tran (9/2012), Tadeh Zirakian (5/2013), Emel Seyhan (5/2013), Kristijan Kolozvari (8/2013), Yukai Wang (9/2013), Yi Wu (11/2013), Wang Xi (12/2013), Zhan Shu (3/2014), Dong Youp Kwak (5/2014), Seongwon Hong (5/2014), Cheng-wen Chuang (11/2014), Igor Stubailo (3/2015), Richard Gash (5/2015), Elnaz Esmaeilzadeh Seylabi (8/2016), Yazhou Xie (03/2017), Mehrdad Shokrabadi (07/2018), Arastoo Dasmeh (01/2019). **Total 35 at UCLA**.

Ph.D. Student Prospectus Exam Committee (42 total)

- John Lewis Bignell (3/2004), Xiang Ding (10/2004), University of Illinois, Urbana-Champaign
- Ali Ozdagli (5/2012), Purdue University
- Pai-Chen Guan (9/2005), Christine Goulet (9/2005), Prechaporn Suwatnodom (9/2005), Kuo-Yao Yuan (3/2006), Salih Tileylioglu (9/2006), Yuchuan Tang (3/2007), Fariborz Tehrani (4/2007), Keiji Yanase (6/2007), Shi-Yu Xu (9/2007), Pirooz Kashighandi (9/2007), Yu-Kai Wang (9/2007), Tim Ancheta (12/2007), Yili Huo (9/2008), Minxing Zhao (9/2008), Aysegul Gogus (9/2008), Wang Xi (12/2009), Luis Antonio Dominguez-Ramirez (3/2010), David Naish (3/2010), Zeynab Tuna (8/2010), Tien Tran (8/2010), Yi Wu (9/2010), Zhan Shu (12/2010), Emel Seyhan (5/2011), Kristijan Kolozvari (8/2011), Tadeh Zirakian (4/2012), Chung-Wen Chuang (8/2012), Igor Stubailo (6/2014), Yazhou Xie (9/2014), Richard Gash (10/2014), Mehrdad Shokrabadi (9/2015), Arastoo Dasmeh (12/2015), Hao Zhang (8/2016), Yinghui Zhu (8/2016), Dong Wang (12/2016), Yi Peng (9/2017), Henan Mao (9/2017), Peng-Yu Chen (12/2017), Zhengxiang Yi (9/2018), Yufeng Dong (12/2018). **Total 39 at UCLA**.

M.S. Thesis Committee (5 total)

- Sarah Taylor Lange (6/2008), Marisol Salas (6/2008), Alessandro Paglia (9/2008), Jordan Terry (3/2009), Crystal Xie (6/2009), Harish Thangavel (3/2019), **Total 6 at UCLA**.

TEACHING ACTIVITIES

- CEE 108: Introduction to Mechanics of Deformable Solids (average enrollment 35.7, teaching evaluation 8.25/9.0)
- CEE 142: Design of Reinforced Concrete Structures (average enrollment 56.5, teaching evaluation 7.99/9.0)
- CEE 232: Theory of Plates and Shells (average enrollment 10.8, teaching evaluation 8.53/9.0)
- CEE 247: Earthquake Hazard Mitigation (average enrollment 21.4, teaching evaluation 8.11/9.0)

DEPARTMENT AND UNIVERSITY SERVICES

- Representative, Academic Senate Legislative Assembly, UCLA, 2018-2021
- Faculty Advisor, ASCE Student Chapter, 2013-2018
- Faculty Advisor, EERI Student Chapter, 2006-2016
- Engineering School Awards Committee (HSSEAS), member, 2008, 2010, 2014
- Engineering School Faculty Executive Committee, member, 2013-2015
- Engineering School Tech Forum Committee (HSSEAS), member, 2010
- Member, UCLA-China CDC workshop on China Earthquake Relief accompanying Chancellor Gene Block, June 18-20, 2008
- Course & Curriculum Committee (CEE@UCLA), 2007-2008

- Department Merit Increase Committee (CEE@UCLA), 2012-2015
- Department Awards Committee (CEE@UCLA), 2005-2007, 2009-2015
- Member, Ad Hoc Committee for Promotion Cases, 2007, 2008, 2012, 2016, 2017
- Member, Ad Hoc Committee of Faculty Recruitment, 2016

INVITED LECTURES, SEMINARS & WEBINARS

1. City University of London, "Seismic Protection of Highway Bridges Using Performance based Design and Optimization", December 2018
2. Keynote Speaker, Chinese Association of Civil Engineering Graduate Student Summer School & Southeast University, Nanjing, China, July 2018.
3. Tsinghua University, "Performance Based Assessment of Bridges", Beijing, China, July 2018
4. Beijing University of Technology, "Performance Based Assessment of Bridges", Beijing, China, July 2018
5. Beijing University of Technology, "Seismic Protection of Highway Bridges Using Performance-Based Design and Optimization", Beijing, China, July 2018
6. Lanzhou University of Technology, "Seismic Analysis of Bridges Considering Shaking and Liquefaction Induced Lateral Spreading", Lanzhou, China, July 2018.
7. Lanzhou University of Technology, "Seismic Protection of Highway Bridges Using Performance-Based Design and Optimization", Lanzhou, China, July 2018.
8. Tianjin University, "Seismic performance and design of steel plate shear walls with low yield point steel infill plates", Tianjin, China, May 2017
9. Hebei University of Technology, "Performance Based Assessment of Bridges", Tianjing, China, May 2017
10. Hangzhou University of Technology, "Performance Based Assessment of Bridges", Hangzhou, China, May 2017
11. Nanjing Tech University, "Seismic Protection of Highway Bridges Using Performance Based Design and Optimization", Nanjing, China, May 2017
12. Nanjing Tech University, "Performance Based Assessment of Bridges", Nanjing, China, April 2017
13. Keynote Speaker, 5th National Forum on Safety and Disaster Prevention in Civil Engineering, "Optimization of Seismic Protective Devices Based on Probabilistic Repair Cost Ratio", Nanjing, China, April 2017
14. Keynote Speaker, 5th International Conference on Seismic Technology for Building Structures, "Optimal Design of Seismic Protective Devices for Highway Bridges Using Performance Based Methodology", Nanjing, China, July 2016.
15. 7th Chinese Association of Civil Engineering Graduate Student Summer School & Southeast University, "Performance Based Assessment, Design and Protection of Bridges - State of Art", Nanjing, China, July 2016.
16. China Railway Eryuan Engineering Group Co., "Performance Based Assessment, Design and Protection of Bridges - State of Art", Chengdu, China, July 2016.
17. Southwest Jiaotong University, "Performance Based Assessment, Design and Protection of Bridges - State of Art", Chengdu, China, July 2016.
18. Tianjin University, "Optimal Seismic Protection of Bridges Using Hybrid Simulation", Tianjin, China, November 2014.
19. Tianjin University, "Modeling Axial-Shear-Flexure Interaction of RC Columns for Seismic Response Assessment of Bridges", Tianjin, China, November 2014.

20. 5th US-China Workshop for Disaster Evolution & Resilience of Civil Infrastructure and Urban Environment, "Seismic Protection Design of Nonlinear Structures Using Numerical Hybrid Simulation", Anchorage, AK, July 2014.
21. NEES/EERI Research-to-Practice Webinar: Adaptive Passive Stiffness Shaping and Apparent Weakening for Seismic Protection (S. Nagarajaiah, A.M. Reinhorn, M.C. Constantinou, M. Symans, D. Taylor, J. Zhang), March 2014.
22. Invited Speaker, ACI Fall Convention 2012, "Performance-Based Assessment and Protection of Bridges", Toronto, Canada, October 2012.
23. 2012 New Millennium Yuelu International Forum on Advanced Construction Technologies & Hunan University, "Inelastic Displacement Demand of Bridge Columns Considering Shear-Flexure Interaction", Changsha, China, September 2012.
24. Keynote Speaker, International Conference on Advances in Civil Infrastructure Engineering, "Seismic Response and Assessment of Bridges Using Fragility Functions", Changsha, China, September 2012.
25. Lanzhou University of Technology, "Modeling Axial-Shear-Flexure Interaction of RC Columns for Seismic Response Assessment of Bridges", Lanzhou, China, September 2012.
26. Lanzhou University of Technology, "Seismic Response Assessment and Protection of Bridges using Fragility Functions", Lanzhou, China, September 2012.
27. Tongji University, "Modeling Axial-Shear-Flexure Interaction of RC Columns for Seismic Response Assessment of Bridges", Shanghai, China, September 2012.
28. 3rd US-China Workshop for Disaster Evolution & Resilience of Civil Infrastructure and Urban Environment, "Hybrid Simulation for Structural Control", Berkeley, CA, August 2012.
29. 3rd Chinese Association of Civil Engineering Graduate Student Summer School & Southeast University, "Performance-Based Response Assessment and Protection of Structures", Nanjing, China, July 2012.
30. 2nd US-China Workshop for Disaster Evolution & Resilience of Civil Infrastructure and Urban Environment, "Hybrid Simulation for Structural Control", Shanghai, China, December 2011.
31. Optimum Isolation Design for Highway Bridges Using Fragility Function Method, Harbin Institute of Technology, Harbin, China, July 2011.
32. Seismic Response Assessment and Protection of Bridges, 2nd Chinese Association of Civil Engineering Graduate Student Summer School, Southeast University, Nanjing, China, July 2011.
33. Quake Summit 2010 (NEES & PEER Annual Meeting), "Coupled Axial-Shear-Flexure Interaction Hysteretic Model for Seismic Response Assessment of Bridges", San Francisco, CA, October 2010.
34. US-China Workshop for Disaster Evolution & Resilience of Civil Infrastructure and Urban Environment, "Needs and Challenges of Hybrid Simulation", West Lafayette, IN, August 2010.
35. NEES/E-Defense Research Coordination Meeting, "Seismic Simulation of Bridge System Responses Under Combined Actions - Analytical Investigation", Osaka, Japan, September 2007.
36. Invited Speaker, ACI Spring Convention 2007, "Modeling Nonlinear Behavior of Shallow Foundations for Soil-Structure Interaction Analysis of Bridges", Atlanta, GA, April 2007.
37. 22nd US-Japan Bridge Engineering Workshop, "Evaluating Radiation Damping of Shallow Foundations on Nonlinear Soil Medium for Soil-Structure Interaction Analysis of Bridges", Seattle, WA, October 2006.
38. University of Southern California, "Seismic Analysis and Protection of Highway Overcrossings Including Soil-Structure Interaction", April 2006.
39. University of California, San Diego, "Seismic Analysis and Protection of Highway Overcrossings Including Soil-Structure Interaction", November 2005.
40. University of California at Los Angeles, "Seismic Analysis and Protection of Highway Overcrossings Including Soil-Structure Interaction", February 2005.

41. California Institute of Technology, "Seismic Analysis and Protection of Highway Overcrossings Including Soil-Structure Interaction", May 2004.
42. University of Tokyo, "Seismic Analysis and Protection of Highway Overcrossings Including Soil-Structure Interaction", June 2003.
43. National Science Foundation, "How to Get Most Out of EASI Program", April 2003.
44. Washington Un i veri sty, "Seismic Analysis and Protection of Highway Overcrossings Including Soil-Structure Interaction", February 2003.
45. Ohio State University, "Seismic Analysis and Protection of Highway Overcrossings Including Soil-Structure Interaction", May 2002.
46. University of Illinois, Urbana-Champaign, "Seismic Analysis and Protection of Highway Overcrossings Including Soil-Structure Interaction", April 2002.
47. University of Miami, "Seismic Analysis and Protection of Highway Overcrossings Including Soil-Structure Interaction", April 2002.
48. University of Cincinnati, "Seismic Analysis and Protection of Highway Overcrossings Including Soil-Structure Interaction", March 2002.
49. Princeton University, "Seismic Analysis and Protection of Highway Overcrossings Including Soil-Structure Interaction", February 2002.
50. University of California, Berkeley, SEMM seminar series, "Rocking Response of Free-Standing Blocks Under Cycloidal Pulses", October 1999.

PRESENTATIONS AT CONFERENCES

1. **Xie, Y.** and Zhang, J., "Optimization of Seismic Protective Devices for Highway Bridges Based on Probabilistic Repair Cost Ratio: A Case Study", *11th US National Conference on Earthquake Engineering*, Los Angeles, CA, June 2018.
2. **Xie, Y.** and Zhang, J., "Probabilistic Seismic Evaluation of Bridges with Rocking Column-Foundation", *11th US National Conference on Earthquake Engineering*, Los Angeles, CA, June 2018.
3. **Shu, Z.**, Dong, H. and Zhang, J., "Peak and Residual Drift Estimations for SDOF Bilinear Systems Against Impulsive Earthquakes", *11th US National Conference on Earthquake Engineering*, Los Angeles, CA, June 2018.
4. **Sun, Z.Y.***, Li, M., Zhou, J. K., Wu, G. and Zhang, J.**,** "Deformation Behavior of Concrete Beams Reinforced by Steel-FRP Composite Bar", *11th US National Conference on Earthquake Engineering*, Los Angeles, CA, June 2018.
5. Peng, Y., **Zhang, J**., Xie. Y. and Wu, G., "Seismic Performance Enhancement of Structures Using Rocking Components", *Engineering Mechanics Institute Conference*, Cambridge, MA, May 2018.
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