

CURRICULUM VITAE

CV SECTION 1: Employment History/Awards

NAME

Suren Chen ([Personal Webpage](#) [Google Scholar](#))

ADDRESS

Department of Civil and Environmental Engineering
Colorado State University, Fort Collins, CO 80523

PHONE

970-491-7722

EDUCATION

2004 Ph.D., Civil Engineering (Structures), Louisiana State University, Baton Rouge, LA.
1997 Master of Science, Structural (Bridge) Eng., Tongji University, Shanghai, China.
1994 Bachelor of Science, Structural (Bridge) Eng., Tongji University, Shanghai, China.

PROFESSIONAL LICENSE AND CERTIFICATE

2004-present Professional Engineer License, Ohio (# 69741)
2006-2010 Certified Floodplain Manager (CFM) (# US-06-01890)

ACADEMIC POSITIONS

2018-present: Professor, Department of Civil and Environmental Engineering, Colorado State University

- Director, [Center for Sustainable & Intelligent Transportation Systems](#)
- Program Director, USDOT University Transportation Center - the [Mountain Plains Consortium](#)
- Program Coordinator, Structural Engineering and Structural Mechanics, Dept. of CEE, CSU
- Program Coordinator, Transportation System Engineering, Dept. of CEE, CSU

2015-present: SAU Faculty member, School of Global Environmental Sustainability, CSU

2012-2018: Associate Professor, Department of Civil and Environmental Engineering, CSU

2006-2012: Assistant Professor, Department of Civil and Environmental Engineering, CSU

OTHER POSITIONS

2004-2006: Engineer, Michael Baker Corporation, Jackson, Mississippi

SELECTED HONORS AND AWARDS

2018 Fellow, American Society of Civil Engineers (ASCE)
2011 Nominee, Moisseiff Award, American Society of Civil Engineers (ASCE)
2011 Nominee, Wellington Prize, American Society of Civil Engineers (ASCE)
2011 2010 ASCE Outstanding Reviewer, ASCE
2010 2009 ASCE Outstanding Reviewer, ASCE
2009 Collingwood Prize, American Society of Civil Engineers (ASCE)

CV SECTION 2: Publications/Scholarly Record

PUBLISHED WORKS

(The names of the current and former graduate advisees are underlined)

Refereed Journal Articles:

1. Yao, K. and **Chen, S.** (2023). “Percolation-based resilience modeling and active intervention of disrupted urban traffic network during snowstorm”, *ASCE J. of Transportation Engineering, Part A*, [10.1061/JTEPBS.TEENG-7364](https://doi.org/10.1061/JTEPBS.TEENG-7364)
2. Wu, Y. and **Chen, S.** (2022). “Resilience modeling and pre-hazard mitigation planning of transportation network to support post-earthquake emergency medical response”, *Reliability Engineering and System Safety*, 230, 108918. <https://doi.org/10.1016/j.ress.2022.108918>
3. Hou, G., **Chen, S.** and Bao, Y. (2022). “Development of travel time functions for disrupted urban arterials with microscopic traffic simulation”, *Physica A: Statistical Mechanics and its Applications*, <https://doi.org/10.1016/j.physa.2022.126961>
4. Yao, K. and **Chen, S.** (2022). “Resilience-based adaptive traffic signal strategy against disruption at single intersection”, *ASCE J. of Transportation Engineering, Part A*, 148(5): 04022018, <http://dx.doi.org/10.1061/JTEPBS.0000671>.
5. Knight, K., Hou, G., Bhaskar, A., **Chen, S.** (2021). “Assessing the use of dual-drainage modeling to determine the effects of green stormwater infrastructure on roadway flooding and traffic performance”, *Water*, 13(11), 1563.
6. Zou, Q. and **Chen, S.** (2021). “Resilience-based Recovery Scheduling of Transportation Network in Mixed Traffic Environment: A Deep-Ensemble-Assisted Active Learning Approach”, *Reliability Engineering and System Safety*, 107800.
7. Wu, Y., Hou, G. and **Chen, S.** (2021). “Post-earthquake resilience assessment and long-term restoration prioritization of transportation network”, *Reliability Engineering and System Safety*, 211, 107612, <https://doi.org/10.1016/j.ress.2021.107612>
8. Hou, G. and **Chen, S.** (2020). “Study of work zone traffic safety under adverse driving conditions with a microscopic traffic simulation approach”, *Accident Analysis and Prevention*, 145, 105698.
9. Zou, Q., Pool, K. and **Chen, S.** (2020). “Performance of suspension bridge handlers exposed to hazardous material fires considering wind effects”, *Advances in Bridge Engineering*, 1:2.
10. Xue, F., Han, Y., Zou, Y., He, X. and **Chen, S.** (2020). “Effects of wind-barrier parameters on dynamic responses of wind-road vehicle-bridge system”, *Journal of Wind Engineering and Industrial Aerodynamics*, 206, 104367.
11. He, X., Xue, F., **Chen, S.**, Zou, Y., Han, Y. (2020). “Wind tunnel tests on the aerodynamic characteristics of vehicles on highway bridges”, *Advances in Structural Engineering*, 23 issue: 13, page(s): 2882-2897
12. Hou, G. and **Chen, S.** (2020). “Probabilistic modeling of disrupted infrastructures due to fallen trees subjected to extreme winds in urban community”, *Natural Hazards*, 102:1323-1350.
13. Zou, Q. and **Chen, S.** (2020). “Simulation of Crowd Evacuation under Toxic Gas Incident Considering Emotion Contagion and Information Transmission”, *Journal of Computing in Civil Engineering, ASCE*, 34(3), 04020007.
14. Zou, Q. and **Chen, S.** (2020). “Resilience Modeling of Interdependent Traffic-Electric Power System Subject to Hurricanes”, *Journal of Infrastructure Systems, ASCE*, 26(1), 04019034
15. Chen, L., Zhou, Y. and **Chen, S.** (2020). “Hybrid nonlinear seismic analysis of bridges with moving traffic”, *J. of Aerospace Engineering, ASCE*, 33(1), 04019102.
16. Zou, Q., Fernandes, D. and **Chen, S.** (2019). “Agent-based evacuation simulation from subway train and platform”, *Journal of Traffic Safety and Security*, DOI: 10.1080/19439962.2019.1634661

17. **Hou, G., Chen, S.** and Chen, F. (2019). "Framework of simulation-based vehicle safety performance assessment of highway system under hazardous driving conditions", *Transportation Research Part C*, 105, 23-26.
18. **Zou, Q.** and **Chen, S.** (2019). "Enhancing Resilience of Interdependent Traffic-Electric Power System", *Reliability Engineering and System Safety*, 191, 106557.
19. **Hou, G., Chen, S.** and Han, Y. (2019). "Traffic performance assessment methodology of degraded roadway links following hazards", *Journal of Aerospace Engineering, ASCE*, 32(5): 04019055.
20. **Hou, G.** and **Chen, S.** (2019). "An improved cellular automaton model for work zone traffic simulation considering realistic driving behavior", *Journal of the Physical Society of Japan*, 88, 084001.
21. **Zhou, Y.** and **Chen, S.** (2019). "An interactive nonlinear cable shape and force finding technique of suspension bridges using elastic catenary configuration", *Journal of Engineering Mechanics, ASCE*, 2019, 145(5): 04019031.
22. **Wu, Y.** and **Chen, S.** (2019). "Resilience modeling of traffic network in post-earthquake emergency medical response considering interactions between infrastructures, people and hazard", *Journal of Sustainable and Resilient Infrastructure*, 4(2), 82-97.
23. Han, Y., Huang, J., Cai, C.S., **Chen, S.** and He, X. (2019), "Driving safety analysis of various types of vehicles on long-span bridges in crosswinds considering aerodynamic interference", *Wind and Structures*, 29 (4), 279-297.
24. Deng, Y., Li, A. **Chen, S.**, Feng, D (2018). "Serviceability assessment for long-span suspension bridge based on deflection measurement", *Structural Control and Health Monitoring*, e2254, <http://dx.doi.org/10.1002/stc.2254> .
25. Du, X., Jiang, B., Dai, C., Wang, G., and **Chen, S.** (2018). "Experimental study on wake-induced vibrations of two circular cylinders with two degrees of freedom", *Wind and Structures*, 26(2), 57-68. DOI: <http://dx.doi.org/10.12989/was.2018.26.2.057>
26. Deng, Y., Liu, Y., **Chen, S.** and Wang, D. (2018). "Investigation of Temperature Actions on Flat Steel Box Girders of Long-span Bridges with Temperature Monitoring Data", *Advances in Structural Engineering*, <https://doi.org/10.1177/1369433218766946>.
27. **Chen, F., Chen, S.** and **Ma, X.** (2018), "Analysis of Hourly Crash Likelihood using Unbalanced Panel Data Mixed Logit Model and Real-time Driving Environmental Big Data", *Journal of Safety Research*, 65:153-159.
28. **Zhou, Y.** and **Chen, S.** (2018). "Full-response prediction of the coupled long-span bridge and traffic system under spatially varying seismic excitations", *Journal of Bridge Engineering, ASCE*, 23(6): 04018031.
29. Han, Y., Li, K., He, X., **Chen, S.** and Xue, F. (2018). "Stress analysis of a long-span suspension bridge under combined action of random traffic and wind loads", *Journal of Aerospace Engineering, ASCE*, 31(3): 04018021.
30. **Zhou, Y.** and **Chen, S.** (2018). "Investigation of the live load effects on long-span bridges under traffic flows", *Journal of Bridge Engineering, ASCE*, 23(5): 04018021.
31. Dong, B., Ma, X., Chen, F. and **Chen, S.** (2018). "Investigating the differences of single-vehicle and multivehicle accident probability using mixed logit model", *Journal of Advanced Transportation*, 2018, 2702360.
32. Xiang, H., Li, Y., **Chen, S.** and **Hou, G.** (2018). "Experimental investigation of wind loads of moving vehicle on bridge with solid wind barrier", *Engineering Structures*, 156,188-196.
33. **Ma, X., Chen, S.** and Chen, F. (2017). "Correlated Random Parameter Marginalized Two-Part Model: An Application to Refined-Scale Longitudinal Crash Rate Data", *Journal of Transportation Engineering, Part A: Systems, ASCE*, 144 (2), 04017071.
34. **Chen, S., Zhou, Y., Hou, G.,** Chen, F. and Wu, J. (2017). "Research of long-span bridge and traffic system subjected to winds: a system and multi-hazard perspective", *International Journal of Transportation Science and Technology*, 6(3), 184-195.

35. Yin, X., Liu, Y., Kong, B. and **Chen, S.** (2017). "Experimental and Numerical Studies of a Damaged Bridge Considering Stochastic Traffic Flows and Road Roughness", *International Journal of Structural Stability and Dynamics*, 17 (8), 1750089.
36. Deng, Y., Liu, Y. and **Chen, S.** (2017). "Long-term in-service monitoring and performance assessment of main cable of long-span suspension bridge", *Sensors*, 17 (6), 1414; doi:10.3390/s17061414
37. Ma, X., **Chen, S.**, and Chen, F. (2017). "Multivariate Space-Time Modeling of Crash Frequencies by Injury Severity Levels". *Analytic Methods in Accident Research*, 15, 29-40.
38. Hou, G. and **Chen, S.** (2017). "Bent Connection Options for Curved and Skewed SMC Bridges in Low-to-Moderate Seismic Regions", *Practice Periodical on Structural Design and Construction*, ASCE, 22 (4), [http://dx.doi.org/10.1061/\(ASCE\)SC.1943-5576.0000331](http://dx.doi.org/10.1061/(ASCE)SC.1943-5576.0000331)
39. Hou, G., **Chen, S.**, Zhou, Y. and Wu, Jun (2017). "Framework of microscopic traffic flow simulation on highway infrastructure system under hazardous driving conditions", *Journal of Sustainable and Resilient Infrastructure*, 2 (3), 136-152.
40. Yin, X., Liu, Y. and **Chen, S.** (2017). "Assessment of ride safety based on wind-traffic-pavement-bridge coupled vibration", *Wind and Structures*, 24 (3), 287-306.
41. Xiang, H., Li, Y., **Chen, S.** and Li, C. (2017). "A wind tunnel test method on aerodynamic characteristics of moving vehicles under crosswinds", *Journal of Wind Engineering and Industrial Aerodynamics*, 163, 15-23.
42. Chen, F., **Chen, S.** and Ma, X. (2016), "Crash Frequency Analysis Using Hurdle Models with Random Effects Considering Short-term Panel Data", *International Journal of Environmental Research and Public Health*, 13(11), 1043.
43. Zhou, Y. and **Chen, S.** (2016). "Reliability Assessment Framework of the Long-Span Cable-Stayed Bridge and Traffic System Subjected to Cable Breakage Events", *Journal of Bridge Engineering*, ASCE, 10.1061/(ASCE)BE.1943-5592.0001000 , 04016133.
44. Ioannis Gidaris, Jamie E. Padgett, Andre R. Barbosa, **Suren Chen**, Daniel Cox, Bret Webb and Amy Cerato (2016). "Multiple-hazard fragility and restoration models of highway bridges for regional risk and resilience assessment in the U.S.: a state-of-the-art review", *Journal of Structural Engineering*, ASCE, 10.1061/(ASCE)ST.1943-541X.0001672, 04016188.
45. Chen, F., **Chen, S.** and Ma, X. (2016). "Crash frequency modeling using real-time environmental and traffic data and unbalanced panel data models", *International Journal of Environmental Research and Public Health*, 13(6), 609; doi:10.3390/ijerph13060609
46. Zhou, Y. and **Chen, S.** (2016). "Vehicle ride comfort analysis with whole-body vibration on long-span bridges subjected to crosswind", *Journal of Wind Engineering and Industrial Aerodynamics*, 155, 126-140.
47. Ma, X., **Chen, S.** and Chen, F. (2016). "Correlated random effects bivariate Poisson lognormal model to study single- and multi-vehicle crashes", *Journal of Transportation Engineering*, ASCE, 10.1061/(ASCE)TE.1943-5436.0000882 , 04016049.
48. Chen, Luke and **Chen, Suren** (2016), "Seismic fragility analysis of curved and skewed bridges in low-to-moderate seismic region", *Earthquake and Structures*, 10(4), 789-810.
49. Zhou, Y. and **Chen, S.** (2015). "Framework of nonlinear dynamic simulation of long-span cable-stayed bridges subjected to cable-loss incidents", *Journal of Structural Engineering*, ASCE, 10.1061/(ASCE)ST.1943-541X.0001440 , 04015160.
50. Zhou, Y. and **Chen, S.** (2015). "Numerical investigation of cable breakage events on long-span cable-stayed bridges under stochastic traffic and wind", *Engineering Structures*, 105, 299-315.
51. Wilson, Thomas, **Chen, Suren** and Mahmoud, Hussam (2015), "Analytical Case Study on the Seismic Performance of a Curved and Skewed Reinforced Concrete Bridge Under Vertical Ground Motion", *Engineering Structures*, 100, 128-136.
52. Zhou, Y. and **Chen, S.** (2015). "Fully coupled driving safety analysis of moving traffic on long-span bridge subjected to crosswind", *Journal of Wind Engineering and Industrial Aerodynamics*, 143, 1-18.
53. Ma, X., Chen, F. and **Chen, S.** (2015). "Modeling crash rates for a mountainous highway using refined-scale panel data", *Journal of Transportation Research Record*, 2515, 10-16.

54. Ma, X., Chen, F. and **Chen, S.** (2015). "Empirical Analysis of Crash Injury Severity on Mountainous and Non-Mountainous Interstate Highways", *Traffic Injury Prevention*, 16 (7), 715-723.
55. Han, Y., Liu, S., Cai, C. S., Zhang, J., **Chen, S.**, He, X. (2015) "The influence of vehicles on the flutter stability of a cable-stayed bridge", *Wind and Structures*, 20 (2), 275-292.
56. Cai, C.S., Hu, J. **Chen, S.**, Han, Y., Zhang, W., Kong, X. (2015) "A coupled wind-vehicle-bridge system and its applications: a review", *Wind and Structures*, 20 (2), 117-142.
57. Han, Wanshui, Ma, Lin, Cai, C. S., **Chen, Suren** and Wu, Jun (2015) "Nonlinear Dynamic Performance Simulation of Super-Long-Span Cable-stayed Bridge under Traffic and Wind", *Wind and Structures*, 20 (2), 249-274.
58. Zhou, Y. and **Chen, S.** (2015). "Dynamic simulation of long-span bridge/traffic system subjected to combined service and extreme loads", *Journal of Structural Engineering, ASCE*, 141(9), 04014215. [http://dx.doi.org/10.1061/\(ASCE\)ST.1943-541X.0001188](http://dx.doi.org/10.1061/(ASCE)ST.1943-541X.0001188)
59. Han, Yan, Cai, C.S., Zhang, Jianren, **Chen, Suren**, He, Xuhui (2014). "Effects of aerodynamic parameters on the dynamic responses of road vehicles and bridges under crosswinds", *Journal of Wind Engineering and Industrial Aerodynamics*, 134,78-95.
60. Chen, Feng, Ma, Xiaoxiang and **Chen, Suren** (2014). "Refined-scale panel data crash rate analysis using random-effects tobit model", *Accident Analysis and Prevention*, 2014 Sep 27;73C:323-332.
61. Han, Wanshui, Wu, Jun, Cai, C.S. and **Chen, Suren** (2014). "Characteristics and dynamic impact of overloaded extra-heavy trucks on typical highway bridges", *Journal of Bridge Engineering, ASCE*, 10.1061/(ASCE)BE.1943-5592.0000666, 05014011.
62. Wilson, Thomas, Mahmoud, Hussam and **Chen, Suren** (2014). "Seismic Performance of Skewed and Curved Reinforced Concrete Bridges in Mountainous States", *Engineering Structures*, 70, 158-167.
63. Zhou, Y. and **Chen, S.** (2014). "Time-progressive dynamic assessment of abrupt cable breakage events on cable-stayed bridges", *Journal of Bridge Engineering, ASCE*, 19(2), 159-171.
64. Du, XQ, Gu, M. and **Chen, S.** (2013). "Aerodynamic characteristics of an inclined and yawed circular cylinder with artificial rivulet", *Journal of Fluids and Structures*, 43, 64-82.
65. Chen, F. and **Chen, S.** (2013). "Probabilistic assessment of vehicle safety under various driving conditions: a reliability approach", *Procedia-Social and Behavioral Sciences*, Elsevier, 96, 2414-2424.
66. Chen, F. and **Chen, S.** (2013). "Differences in injury severity of accidents on mountainous highways and non-mountainous highways", *Procedia-Social and Behavioral Sciences*, Elsevier, 96, 1868-1879.
67. Cai, C. S., Zhang, W., Liu, X, **Chen, S. R.**, Han, Y., Hu, J. X. (2013) "Framework of wind-vehicle-bridge Interaction analysis and its applications", *Journal of Earthquake and Tsunami*, 7 (3), 1350020-1:27.
68. **Chen, S.**, Nelson, R., Chen, F. and Chowdhury, A. (2013) "Impact of Stochastic Traffic on Modified Cross-section Profiles of Slender Long-span Bridge - Wind Tunnel Experimental Investigation", *Journal of Engineering Mechanics, ASCE*, 139(3), 347-358.
69. Wu, J., Zhou, Y. and **Chen, S.** (2012) "Wind-induced Performance of Long-span Bridge with Modified Cross-section Profiles by Stochastic Traffic", *Engineering Structures*, 41, 464-476.
70. Wu, J., **Chen, S.** and van de Lindt, J. W. (2012) "Fatigue assessment of slender long-span bridges: A reliability approach", *Journal of Bridge Engineering, ASCE*, 17, 47-57. doi:10.1061/(ASCE)BE.1943-5592.0000232
71. Wu, J. and **Chen, S. R.** (2011). "Probabilistic dynamic behavior of long-span bridge under extreme events", *Engineering Structures*, 33, 1657-1665. doi:10.1016/j.engstruct.2011.02.002
72. **Chen, S. R.** and Wu, J. (2011). "Modeling stochastic live load for long-span bridge based on microscopic traffic flow simulation", *Computer & Structures*, 89, 813-824. doi:10.1016/j.compstruc.2010.12.017
73. Chen, F. and **Chen, S. R.** (2011). "Injury severities of truck drivers in single- and multi-vehicle accidents on rural highway", *Accident Analysis and Prevention*, 43, 1677-1688. doi:10.1016/j.aap.2011.03.026

74. **Chen, S. R., Chen, F. and Wu, J.** (2011). "Multi-scale traffic safety and operational performance study of large trucks on mountainous interstate highway", *Accident Analysis and Prevention*, 43, 535-544. doi:10.1016/j.aap.2010.09.013
75. **Chen, F. and Chen, S. R.** (2011). "Reliability-based assessment of vehicle safety under adverse driving conditions", *Transportation Research Part C: Emerging Technology*, 19, 156-168. doi:10.1016/j.trc.2010.05.003
76. Stone, A., van de Lindt, J.W. and **Chen, S.** (2010). "Design and Costs for Rolled Section Simple-Made-Continuous Steel Bridges: A Literature Review." *Practice Periodical on Structural Design and Construction, ASCE*, 15(3), 231-235. doi:10.1061/(ASCE)SC.1943-5576.0000045
77. **Chen, S. R. and Wu, J.** (2010). "Dynamic Performance Simulation of Long-Span Bridge under Combined Loads of Stochastic Traffic and Wind", *Journal of Bridge Engineering, ASCE*, 15(3), 219-230. doi:10.1061/(ASCE)BE.1943-5592.0000078
78. **Chen, S. R., Chen, F., Liu, j. H., Wu, J. and Bienkiewicz, B.** (2010). "Mobile mapping technology of wind velocity data along highway for traffic safety evaluation", *Transportation Research C: Emerging Technology*, 18, 507-518. doi:10.1016/j.trc.2009.10.003
79. **Chen, S. R. and Chen, F.** (2010). "Simulation-Based Assessment of Vehicle Safety Behavior under Hazardous Driving Conditions", *Journal of Transportation Engineering, ASCE*, 136 (4), 304-315. doi: 10.1061/(ASCE)TE.1943-5436.0000093
80. **Chen, S. R., Cai, C.S. and Wolshon, B.** (2009). "From normal operation to evacuation: single-vehicle safety under adverse weather, topographic and operational conditions", *Natural Hazards Review, ASCE*, 10 (2), 68-76. doi:10.1061/(ASCE)1527-6988(2009)10:2(68)
81. **Chen, S. R. and Wu, J.** (2008). "Performance Enhancement of Bridge Infrastructure system: Long-span Bridge, Moving Trucks and Wind with Tuned Mass Dampers", *Engineering Structures*, 30, 3316-3324. doi:10.1016/j.engstruct.2008.04.035
82. **Chen, S. R., Chang, C. C., Cai, C. S.** (2008). "Study on Stability Improvement of Suspension Bridge with High-sided Vehicles under Wind using Tuned-Liquid-Damper", *Journal of Vibration and Control*, 14, 711-730. doi: 10.1061/(ASCE)1527-6988(2009)10:2(68)
83. Shi, X.M., Cai, C.S. and **Chen, S. R.** (2008). "Vehicle induced dynamic behavior of short span slab bridges considering effect of approach span condition", *Journal of Bridge Engineering, ASCE*, 13(1), 83-92. doi: 10.1061/(ASCE)1084-0702(2008)13:1(83)
84. Cai, C. S., Shi, X. M., Araujo, M. and **Chen, S. R.** (2007). "Effect of approach span condition on vehicle-induced dynamic response of slab-on-girder bridges", *Engineering Structures*, 29, 3210-3226. doi:10.1016/j.engstruct.2007.10.004
85. **Chen, S. R., Cai, C. S.** (2007). "Equivalent wheel loading approach to assess cable-stayed bridge dynamic performance under traffic and wind", *Journal of Bridge Engineering, ASCE*, 12 (6), 755-764. doi: 10.1061/(ASCE)1084-0702(2007)12:6(755)
86. **Chen, S. R., Cai, C. S. and Levitan, M.** (2007). "Understand and improve dynamic performance of transportation system- A case study of Luling Bridge", *Engineering Structures*, 29, 1043-1051. doi:10.1016/j.engstruct.2006.07.019
87. **Chen, S. R., Cai, C. S.** (2006). "Unified approach to predict the dynamic performance of transportation system considering wind effects", *Structural Engineering & Mechanics*, 23(3), 279-292.
88. Cheng, J., Cai, C. S., Xiao, R. C. and **Chen, S. R.** (2005). "Flutter reliability analysis of suspension bridges", *Journal of Wind Engineering and Industrial Aerodynamics*, 93, 757-775. doi:10.1016/j.jweia.2005.08.003
89. **Chen, S. R., Cai, C.S.** (2004). "Accident assessment of vehicles on long-span bridges in windy environments", *Journal of Wind Engineering and Industrial Aerodynamics*, 92(12), 991-1024. doi:10.1016/j.jweia.2004.06.002
90. **Chen, S. R., Cai, C. S., Chang, C. C. and Gu, M.** (2004). "Modal Coupling Assessment and Approximated Prediction of Coupled Multimode Wind Vibration of Long-span Bridges", *Journal of Wind Engineering and Industrial Aerodynamics*, 92 (5), 393-412. doi:10.1016/j.jweia.2004.01.004

91. **Chen, S. R.**, Cai, C.S. (2004). "Coupled Vibration Control with Tuned Mass Damper for Long-span Bridges", *Journal of Sound and Vibration*, 278(1-2), 449-459. doi:10.1016/j.jsv.2003.11.056
92. Cai, C.S. and **Chen, S. R.** (2004). "Wind Hazard Mitigation of Long-span Bridges in Hurricanes", *Journal of Sound and Vibration*, 274 (1-2), 421-432. doi:10.1016/j.jsv.2003.09.013
93. Cai, C. S. and **Chen, S. R.** (2004). "Framework of Vehicle-Bridge-Wind Dynamic Analysis", *Journal of Wind Engineering and Industrial Aerodynamics*, 92 (7-8), 579-607. doi:10.1016/j.jweia.2004.03.007
94. **Chen, S. R.** and Cai, C. S. (2003). "Evolution of Wind-induced Vibration for Long-span Bridge-numerical simulation and discussion", *Computer & Structures*, 81(21), 2055-2066. doi:10.1016/S0045-7949(03)00261-X
95. **Chen, S. R.**, Cai, C. S., Gu, M. and Chang, C. C. (2003). "Optimal Variables of TMDs for Multi-mode Buffeting Control of Long-span Bridges", *Wind & Structures- An International Journal*, 6(5), 387-402.
96. Gu, M., **Chen, S.R.** and Chang, C.C. (2002). "Background Component of Buffeting Response of Cable-stayed Bridges", *Journal of Wind Engineering and Industrial Aerodynamics*, 90(12-15), 2045-2055. doi:10.1016/S0167-6105(02)00320-3
97. Gu, M., **Chen, S. R.** and Chang, C. C. (2002). "Control of Wind-induced Vibrations of Long-span Bridges by Semi-active Lever-type TMD", *Journal of Wind Engineering and Industrial Aerodynamics*, 90(2), 111-126. doi:10.1016/S0167-6105(01)00165-9
98. Gu, M., **Chen, S. R.** and Chang, C. C. (2001). "Parametric Study on Multiple Tuned Mass Dampers for Buffeting Control of Yangpu Bridge", *Journal of Wind Engineering and Industrial Aerodynamics*, 89(11-12), 987-1000. doi:10.1016/S0167-6105(01)00094-0
99. Gu, M., **Chen, S.R.** and Xiang, H.F. (1998). "MTMD Control of The Buffeting for YangPu Bridge", *Journal of Vibration Engineering*, 11(1), 1-8. (In Chinese)
100. Gu, M., **Chen, S. R.** and Xiang, H. F. (1997). "Study on the Characteristics of MTMD on Controlling Buffeting of Bridges", *Vibration and Shock*, 16(1), 1-7. (In Chinese)
101. Gu, M., **Chen, S. R.** and Xiang, H. F. (1997). "To Include the Background Response in the Buffeting Calculation of Suspension Bridges", *Journal of Chinese Civil Engineering*, 30(6), 18-24. (In Chinese)
102. Gu, M., **Chen, S. R.** and Xiang, H. F. (1997). "A Simplified Method in Including the Background Part of Buffeting for Cable Stayed Bridges", *Journal of Tongji University*, 25(5), 497-501. (In Chinese)
103. Gu, M., **Chen, S. R.** and Xiang, H. F. (1997). "Study on the Background Response of Buffeting for Cable Stayed Bridges", *Journal of Tongji University*, 25(1), 1-6. (In Chinese)

Non-Refereed Journal Articles/Chapters/Proceedings/Transactions:

1. Kalyani Joshi, Christofer M Harper, John Killingsworth, Suren Chen (2022), "Investigating Financial Risks Associated with Public-Private Partnerships for Transportation Project Delivery", Construction Research Congress 2022, 139-148.
2. Farhang Motallebiaraghi, Kaisen Yao, Aaron Rabinowitz, Christopher Hoehne, Venu Garikapati, Jacob Holden, Eric Wood, Suren Chen, Zachary Asher, Thomas Bradley (2022), "Mobility Energy Productivity Evaluation of Prediction-Based Vehicle Powertrain Control Combined with Optimal Traffic Management", SAE Technical Paper, 2022-01-0141.
3. Zhou, Y. and **Chen, S.** (2017). "Service functionality assessment of long-span bridges in wind-prone regions: probability-based approach", Proceeding of the 4th National Conference on Bridge Maintenance and Safety, Changsha, China, June 7-9, 2017.
4. Zhou, Y. and **Chen, S.** (2017). "Risk-informed service functionality assessment for long-span bridges in wind-prone regions", Proceeding of Structure Congress, April 6-8, 2017, Denver
5. Cai, C., Pan, F., Xu, G., Henry, A., **Chen, S.**, Han, Y., Zhang, W. and Hu, J.X. (2016) "Performance of coastal transportation infrastructure under wave and wind effects", May 12-14, 2016, Proceeding of the

Sixth US-Japan Workshop on Wind Engineering: Windstorm Hazard Reduction of Critical Infrastructure, Tokyo, Japan

6. Chen, Suren, Zhou, Yufen, Wu, Jun and Chen, Feng (2016). "Research of wind effects on long-span bridge and traffic system" May 12-14, 2016, Proceeding of The Sixth US-Japan Workshop on Wind Engineering: Windstorm Hazard Reduction of Critical Infrastructure, Tokyo, Japan.
7. Ma, Xiaoxiang, Chen, Feng and **Chen, Suren** (2015). "Empirical Analysis of Driver-Injury Severity on Mountainous and Non-Mountainous Interstate Highways: A Comparative Study", Proceeding of the 94th TRB annual conference, Jan 11-15, 2015.
8. Ma, Xiaoxiang, Chen, Feng and **Chen, Suren** (2015). "Modeling crash rates for a mountainous highway using refined-scale panel data", Proceeding of the 94th TRB annual conference, Jan 11-15, 2015.
9. Chen, Feng, Ma, Xiaoxiang and **Chen, Suren** (2015). "Crash Frequency Analysis Using Hurdle Models with Random Effects Considering Refined Panel Data", Proceeding of the 94th TRB annual conference, Jan 11-15, 2015.
10. Zhou, Yufen and **Chen, Suren** (2015). "Structural reliability assessment of long-span cable-stayed bridges subjected to cable loss". Proceedings of Structural Congress 2015, Apr. 23-25, 2015, Portland, OR.
11. Zhou, Yufen and **Chen, Suren** (2014). "A hybrid simulation strategy for the dynamic assessment of long-span bridges and moving traffic subjected to seismic excitations". Proceedings of the 13th International Symposium on Structural Engineering, ISSE-13, Oct. 24-27, 2014, Hefei, China.
12. Zhou, Yufen and **Chen, Suren** (2014). "Toward the design load characterization: Applicability of the AASHTO design live load on long-span cable-stayed bridges". Proceedings of the 13th International Symposium on Structural Engineering, ISSE-13, Oct. 24-27, 2014, Hefei, China.
13. Yufen Zhou and **Suren Chen** (2013). "Dynamic assessment of long-span cable-stayed bridges subjected to multiple service and hazardous loads", 12th American Conference on Wind Engineering, Seattle, June 16-20 2013.
14. Feng Chen and **Suren Chen** (2011). "Investigation of injury severities of truck drivers on rural highways", Proceeding of the 3rd International Conference on Road Safety and Simulation, September 14-16, 2011, Indianapolis, USA.
15. **Suren Chen** and Jun Wu (2010). "Scenario-based service load for fatigue analysis of long-span bridges", Proceeding of ASCE Engineering Mechanics Institute 2010, Los Angeles, August 8-11, 2010.
16. Jun Wu and **Suren Chen** (2010). "Dynamic performance of long-span bridges in extreme events", Proceeding of ASCE Engineering Mechanics Institute 2010, Los Angeles, August 8-11, 2010.
17. Feng Chen, **Suren Chen**, Juhua Liu and Jun Wu (2009). "Site-specific Wind Data Acquisition and Analysis with Geospatial Mobile Testing Technology", Proceeding of the 11th American Conference on Wind Engineering, Puerto Rico, June 22-26 2009.
18. Feng Chen and **Suren Chen** (2009). "Assessment of Vehicle Safety Behavior under Adverse Driving Conditions", Proceeding of the 11th American Conference on Wind Engineering, Puerto Rico, June 22-26 2009.
19. Jun Wu and **Suren Chen** (2009). "Traffic Flow Simulation on Bridge with Cellular Automaton Technique", Proceeding of the 88th Transportation Research Board Annual Meeting, Jan 13-17, 2009.
20. Feng Chen and **Suren Chen** (2008). "Advanced vehicle stability under wind gust", Proceeding of the 1st American Association of Wind Engineers workshop, Vail, Colorado, August 21-22, 2008.
21. **Suren Chen**, Juhua Liu, Feng Chen and Jun Wu (2008). "Mobile Testing Scheme about Wind Measurement, Vehicle Dynamic Monitoring and Geospatial Multimedia Technology", Proceeding of the 1st American Association of Wind Engineers workshop, Vail, Colorado, August 21-22, 2008.

- ## CONTRACTS & GRANTS

Externally Funded Projects as PI (\$4.3M-awarded + \$12.5M-pending)

Tier 1 University Transportation Center-Center for Sustainable Transportation and Resilient Systems
(Pending)

2022-2023	PI	Mountain-Plains Consortium, USDOT UTC	\$55K
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Framework of adaptive intersection traffic control strategy for urban traffic network subjected to disruptions

2021-2023	PI	Federal Motor Carrier Safety Administration, USDOT	\$166K
Hybrid data-driven and physics-based investigation on wind-induced crashes of commercial trucks in Colorado			
2020-2023	PI	Mountain-Plains Consortium, USDOT UTC	\$58K
Resilience-based recovery planning of transportation network following earthquakes			
2020-2023	PI	Mountain-Plains Consortium, USDOT UTC	\$58K
Modeling Disrupted Transportation Infrastructure System due to Multiple Hazards			
2019-2022	PI	Mountain-Plains Consortium, USDOT UTC	\$56K
Reliability-based traffic safety risk function of traffic system in hazardous driving conditions to promote community resilience			
2018-2022	PI	Mountain-Plains Consortium, USDOT UTC	\$60K
Traffic performance modeling and planning of emergency medical response in rural areas			
2017-2020	PI	Mountain-Plains Consortium, USDOT UTC	\$57K
Traffic performance assessment of disrupted roadway networks following earthquakes			
2016-2023	PI(CSU)	US Department of Transportation	\$13M (CSU portion \$2M)
USDOT Region 8 University Transportation Center, Center PI: Denver Tolliver			
2016-2018	PI	National Science Foundation (NSF)	\$10K
REU supplement Reliability-based analysis and design loads for slender cable-supported bridges subjected to cable loss			
2015-2018	PI	Mountain-Plains Consortium, USDOT UTC	\$79K
Interaction Analysis of Girder Bridges and Traffic System subjected to Earthquakes			
2014-2018	PI	Mountain-Plains Consortium, USDOT UTC	\$55K
Analytical modeling for progressive failure assessment of curved and skewed highway bridges subjected to seismic hazards			
2013-2018	PI	National Science Foundation (NSF)	\$261K
Reliability-based analysis and design loads for slender cable-supported bridges subjected to cable loss			
2013-2015	PI	Mountain-Plains Consortium, USDOT UTC	\$61K
Framework of performance-based earthquake design of curved and skewed bridges			
2012-2015	PI	Mountain-Plains Consortium, USDOT UTC	\$50K
Investigation of interactions between traffic law enforcement and driving behavior on rural highways in Colorado			
2012-2015	PI	Mountain-Plains Consortium, USDOT UTC	\$50K
Performance-based interaction analysis of damage on bridge expansion joints and heavy traffic			
2012-2015	PI	Colorado Department of Transportation	\$80K

Investigation of Optimal Seismic Design of Typical Bridges in Colorado. Co-PI: Hussam Mahmoud

2011-2014 **PI Colorado State Patrol** **\$149K**
Investigation of traffic crash, injury, and law enforcement on Colorado highways

2011-2013 **PI National Science Foundation (NSF)** REU supplement **\$6K**
Reliability-based analysis and design loads for slender long-span bridges

2010-2013 **PI Mountain-Plains Consortium, USDOT UTC** **\$52K**
Seismic vulnerability analysis of bridges in mountainous states

2009-2013 **PI National Science Foundation (NSF)** **\$242K**
Reliability-based analysis and design loads for slender cable-supported bridges. Co-PI: John van de Lindt

2009-2011 **PI Mountain-Plains Consortium, USDOT UTC** **\$32K**
Risk-based advisory prevention system for commercial trucks and hazardous conditions

2009-2011 **PI Mountain-Plains Consortium, USDOT UTC** **\$31K**
Reliability-based safety risk and cost prediction of large trucks on rural highways

2008-2011 **PI Mountain-Plains Consortium, USDOT UTC** **\$35K**
Feasibility study of mobile scanning technology for fast damage detection of rural bridge using wireless sensors

2008-2010 **PI Mountain & Plain Education and Research Center, Center of Disease Control** **\$20K**
GIS-based rollover crash risk map of large trucks on I-70 mountain corridor

2008-2010 **PI Colorado Department of Transportation** **\$53K**
Investigation of speed limits on the I-70 mountain corridor in Colorado

2007-2008 **PI Mountain-Plains Consortium, USDOT UTC** **\$25K**
Traffic safety vulnerability information platform (TS-VIP) for highways in mountainous areas using geospatial multimedia technology. Co-PI: Juhua Liu

Externally Funded Projects as CoPI and Key Senior Personnel (\$1.8M-Awarded)

2020-2022 **co-PI Mountain-Plains Consortium, USDOT UTC** **\$60K**
Crash modeling of high-profile moving vehicles under strong crosswinds based on computational fluid dynamics (CFD). PI: Venayagamoorthy, S. K.

2019-2021 **co-PI US Department of Energy** **\$1M**
Mobility and Energy Improvements Realized through Prediction-based Vehicle Powertrain Control and Traffic Management, PI: Tom Bradley (Chen's portion \$0.25M)

2018-2022 **co-PI Mountain-Plains Consortium, USDOT** **\$60K**
Mitigation of flooding-related traffic disruption with green infrastructure stormwater management. PI: Aditi Bhaskar

2015-2020 **Senior Personnel, National Institute of Standards and Technology (NIST)** **\$20M** (Chen's portion \$0.5M)

Center for Risk-Based Community Resilience Planning. PI: John van de Lindt

2010-2013 **co-PI Mountain-Plains Consortium, USDOT UTC** **\$52K**

Laboratory testing of innovative steel bridge design PI: Atadero, Rebecca.

2009-2013 **co-PI Colorado Department of Transportation** **\$70K**

Innovative and economical steel bridge design alternatives for Colorado: hybrid girders, double-composites, epoxy FRP covers plates and external post tensioning PI: Atadero, Rebecca

2007-2008 **co-PI Colorado Department of Transportation** **\$50K**

Development of steel design details and selection criteria for cost effective- an innovative steel bridges in Colorado (Disciplinary) PI: John van de Lindt

Internally Funded Awards

2021, COVID-19 Teaching & Research Student Employment Initiative, PI, CSU Provost Office **\$3,900**

2013, AGEP recruiting mini-grant, PI, Graduate School of CSU, **\$1,000**

2010, Sensors and data acquisition for the structure lab, co-PI (PI: Rebecca Atadero), Department of Civil and Environmental Engineering, **\$11,000**

2007, Vehicle-mounted wind, dynamic and multi-media field testing system, PI, Department of Civil and Environmental Engineering, **\$4,950**

PAPERS PRESENTED/SYMPOSIA/INVITED LECTURES/PROFESSIONAL MEETINGS/WORKSHOPS

Keynote and invited talks at conferences and universities

2022, **Invited Speaker**, "Resilient transportation infrastructure system research", Hong Kong University of Science and Technology-GZ (remote), November 14, 2022.

2022, **Invited Speaker**, "Multi-scale urban transportation infrastructure system resilience research", Oslo Metropolitan University, Norway, September 1, 2022.

2022, **Invited Speaker**, "Urban transportation system resilience research - from bridge to community network", University of Cincinnati (remote), March 11, 2022.

2021, **Invited Speaker**, "Urban transportation system resilience research", Tongji University, China (remote), November 9, 2021.

2019, **Invited Speaker**, "Resilience Modeling of Disrupted Urban Mobility Subjected to Hazards-From Infrastructure to System", The 19th COTA International Conference of Transportation Professional", July 6-8, 2019, Nanjing, China

2018, **Invited Speaker**, "Integrating emotion contagion and information transmission with emergency evacuation simulation under toxic gas incident", Workshop VIII: integration of the human dimension in product and process modeling in the creation of resilient and sustainable human-building ecosystems (SHBE), Sponsored by NSF, Carnegie Mellon University, May 17, 2018. 2018.

2018, **Invited Speaker**, "Probabilistic serviceability framework of long-span bridge to support community resilience in windy environments", University of Florida, March 28, 2018.

- 2017, **Invited Speaker**, “Multi-scale resilience modeling of disrupted transportation systems subjected to hazards”, Tongji University, Shanghai, China, December 20, 2017.
- 2017, **Keynote Speaker**, “Service functionality assessment of long-span bridges in wind-prone regions: probability-based approach”, 4th National Conference on Bridge Maintenance and Safety, Changsha, China, June 7-9, 2017.
- 2017, **Keynote Speaker**, “Transportation safety and resilience research on long-span bridge and traffic system”, 3rd International Symposium on Frontiers of Road and Airport Engineering (IFRAE), Shanghai, China, May 26-28, 2017.
- 2016, **Invited Speaker**, “Research on Transportation System Resilience Subjected to Hazards”, Changsha University of Technology, Changsha, December 13, 2016.
- 2016, **Invited Speaker**, “Seismic response prediction of the coupled long-span bridge and traffic system- a full-response strategy”, The Seventh Kwang-Hua Forum Dec 9-11, 2016 Tongji University, Shanghai, China.
- 2016, **Invited Speaker**, “Towards more resilient transportation system to multiple hazards”, The Hong Kong Polytechnic University, September 19, 2016.
- 2016, **Invited Speaker**, “Wind effects on long-span bridge and traffic system”, South China University of Technology, May 30 2016.
- 2016, **Invited Speaker**, “Research of wind effects on long-span bridge and traffic system” May 12-14, 2016, The Sixth US-Japan Workshop on Wind Engineering: Windstorm Hazard Reduction of Critical Infrastructure, Tokyo, Japan.
- 2015, **Invited Speaker**, “Safety and resilience of long-span bridge and traffic system subjected to multiple threats”, University of Colorado at Boulder, October 23, 2015.
- 2014, **Invited Speaker**, “Transportation infrastructure system under multiple threats”, Harbin Institute of Technology, Harbin, China, October 30, 2014.
- 2014, **Invited Speaker**, “Safety and reliability of bridge infrastructure system subjected to multiple threats”, Central South University, Changsha, October 22, 2014
- 2014, **Invited Speaker**, “Research on transportation infrastructure system subjected to multiple hazards”, Hunan University, Changsha, October 21, 2014
- 2014, **Invited Speaker**, “Introduction of research on transportation infrastructure system subjected to multiple hazards”, Changsha University of Technology, Changsha, October 20, 2014
- 2014, **Invited Speaker**, “Safety and sustainability of transportation infrastructure system under multiple threats”, Changan University, Xi’an, October 16, 2014
- 2014, **Invited Speaker**, “Safety and sustainability of transportation infrastructure system under multiple threats”, Southwest Jiaotong University, Chengdu, China, October 13, 2014
- 2014, **Invited Speaker**, “Multi-hazard research of transportation infrastructure system”, Zhejiang University of Technology, Hangzhou, September 28, 2014
- 2014, **Invited Speaker**, “Research on transportation infrastructure system subjected to multiple hazards (threats)”, Tongji University, Shanghai, China, September 20, 2014.
- 2009, **Invited Speaker**, “Research on wind impacts on transportation infrastructure”, Wall of Wind Workshop, Florida International University, Jan 2-4, 2009.
- 2008, **Invited Speaker**, “Research on transportation infrastructure system and its relationship to injury studies”, Colorado Injury Control Research Center, Fort Collins, Feb 28, 2008.
- 2006, **Invited Speaker**, “Safety of Transportation Infrastructure System in Natural Environment”, Department of Civil and Environmental Engineering, Colorado State University, Fort Collins, Colorado, April 5, 2006.
- 2006, **Invited Speaker**, “Safety of Transportation Infrastructure System in Windy Environment”, Department of Civil, Construction and Environmental Engineering, University of Alabama, Tuscaloosa, Alabama, Jan 30, 2006.
- 2005, **Invited Speaker**, “Dynamic performance of bridge and vehicles under wind”, Department of Civil Engineering, Johns Hopkins University, Baltimore, Maryland, April 4, 2005.

- 2005, **Invited Speaker**, “Assessment and suppression of long-span bridges under wind”, Department of Civil and Environmental Engineering, Tufts University, Boston, Massachusetts, April 5, 2005.
- 2005, **Invited Speaker**, “Assessment of bridge and traffic performance under wind”, Department of Civil and Environmental Engineering, University of Connecticut, Storrs, Connecticut, March 18, 2005.
- 2004, **Invited Speaker**, “Long-span bridge dynamics and its control under strong wind”, Department of Civil and Environmental Engineering, University of Massachusetts, Lowell, Massachusetts, May 8, 2004.
- 2004, **Invited Speaker**, “Vehicle-bridge-wind interactions and traffic safety”, Department of Civil and Environmental Engineering, Florida International University, Miami, Florida, February 4, 2004.

Other Invited Participation

- 2022, **Invited Participant**, NSF MsRI-EW Workshop: Concepts for a Tornado-Downburst-Gust Testing Facility to Study Wind/Debris Impact on Civil Infrastructure, Chicago, October 20-21, 2022.
- 2018, **Invited Participant**, NSF RCN-SEES Workshop on integration of the human dimension in product and process modeling, Pittsburgh, May 16-May 18, 2008.
- 2015, **Invited Participant**, NSF NHERI site visit: Florida International University, Dec 2-3, 2015.
- 2015, **Invited Participant**, NSF NHERI site visit: University of Florida, Dec 2-3, 2015.
- 2010, **Invited Participant**, International workshop on wind engineering research and practices: current state-of-the-art and future needs/plans/policies, May 28-29, 2010, Chapel Hill, NC
- 2009, **Invited Participant**, Wall of Wind Workshop, Florida International University, Jan 2-4, 2009.

Advisory/Technical/Scientific/Organizational Committees of International Conferences

- 2022, **Scientific Committee Member**, 14th Americas Conference on Wind Engineering, Lubbock, TX, May 17-19, 2022.
- 2020, **Scientific Committee Member**, 9th International Colloquium on Bluff Body Aerodynamics and Applications, Birmingham, UK., July 20-23, 2020.
- 2019, **International Academic Committee Member**, 19th COTA International Conference of Transportation Professionals, Nanjing, China, July 6-8, 2019.
- 2018, **Scientific Committee Member**, 7th International Symposium on Computational Wind Engineering (CWE2018), Seoul, Korea, June 18-22, 2018.
- 2017, **Technical Committee Member**, 4th National Conference on Bridge Maintenance and Safety, Changsha, China, June 7-9, 2017.
- 2017, **Technical Committee Member**, 3rd International Symposium on Frontiers of Road and Airport Engineering (IFRAE), Tongji University, Shanghai, China, May 26-28, 2017.
- 2017, **Scientific Committee Member**, Transportation Research Congress, Beijing, China, May 23-25, 2017.
- 2017, **Scientific Committee Member**, 13th American Conference on Wind Engineering, University of Florida, May 21-24, 2017.
- 2016, **Scientific Committee Member**, 8th International Colloquium on Bluff Body Aerodynamics and Applications, Northeastern University, Boston, USA, June 7-11, 2016.
- 2016, **Organizing Committee Member**, Transportation Research Congress, Beijing, China, June 6-8, 2016.
- 2015, **International Scientific Committee Member**, The 2nd International Symposium on Life-cycle performance of bridges and structures, Changsha, China, Dec 18-20, 2015.
- 2014, **Technical Program Committee Member**, 2014 Disaster Prevention and Mitigation (DPM2014) Conference, Wuhan, China, Sept. 12-14, 2014.
- 2010, **International Advisory Committee Member**, International Symposium on Life-cycle Performance of Bridges and Structures, Changsha, China, June 27-29, 2010.

2008, **International Advisory Committee Member**, The fourth International Conference on Advances in Wind and Structures (AWAS08), South Korea, May 29-31, 2008.

Organizer (chair) of Workshop, Symposium and Session at Major Conferences

- 2017, **Session Chair**, 3rd International Symposium on Frontiers of Road and Airport Engineering (IFRAE), Tongji University, Shanghai, China, May 26-28, 2017.
- 2017, **Session Chair**, 13th American Conference on Wind Engineering, University of Florida, May 21-24, 2017.
- 2017, **Co-organizer**, Symposium: Analytical and experimental investigations on hazard assessment and mitigation of critical infrastructure, ASCE EMI 2017 Conference, ASCE Engineering Mechanics Institute (EMI), University of California at San Diego, CA, June 4-7, 2017.
- 2016, **Co-organizer**, Symposium: Analytical and experimental investigations on hazard assessment and mitigation of critical infrastructure, ASCE EMI 2016 Conference, ASCE Engineering Mechanics Institute (EMI), Vanderbilt University, TN, May 22-25, 2016.
- 2015, **Co-organizer**, Symposium: Vehicle bridge coupled vibration modeling, analysis, computation and test, International Conference on Computational & Experimental Engineering and Sciences, Reno, USA, July 20 - 24, 2015.
- 2015, **Co-organizer**, Symposium: Analytical and experimental investigations on hazard assessment and mitigation of critical infrastructure, ASCE EMI 2015 Conference, ASCE Engineering Mechanics Institute (EMI), Stanford University, CA, June 16-19, 2015.
- 2015, **Session Chair**, The 2nd International Symposium on Life-cycle Performance of Bridges and Structures, Dec 18-20 2015, Changsha, China.
- 2015, **Session Chair**, ASCE EMI 2015 Conference, ASCE Engineering Mechanics Institute (EMI), Stanford University, CA, June 16-19, 2015.
- 2014, **Co-organizer**, Symposium: Experimental, numerical, and analytical studies on wind engineering to promote sustainable civil infrastructures, ASCE EMI 2014 Conference, ASCE Engineering Mechanics Institute (EMI), McMaster University, Canada, August 5-8, 2014.
- 2014, **Session Chair**, ASCE EMI 2014 Conference, ASCE Engineering Mechanics Institute (EMI), McMaster University, Canada, August 5-8, 2014.
- 2013, **Session Chair**, 12th American Conference on Wind Engineering, Seattle, June 16-20 2013.
- 2012, **Co-organizer**, Symposium: Experimental, numerical and analytical studies on wind engineering to promote sustainable civil infrastructures, ASCE EMI 2012 Conference, ASCE Engineering Mechanics Institute (EMI), South Bend, IL, June 17-20, 2012.
- 2011, **Co-organizer**, Symposium: Workshop on State of the art experimental approaches for wind engineering and wind energy, ASCE EMI 2011 Conference, ASCE Engineering Mechanics Institute (EMI), Boston, MA, June 1-4, 2011.
- 2011, **Session co-chair**, Symposium: Workshop on State of the art experimental approaches for wind engineering and wind energy-building session, EMI 2011 Conference, ASCE Engineering Mechanics Institute, Boston, MA, June 1-4, 2011.
- 2010, **Session chair**, Dynamics session, EMI 2010 Conference, ASCE Engineering Mechanics Institute 2010, Los Angeles, August 8-11, 2010.
- 2008, **Co-organizer**, Bridge aerodynamics session. The fourth international conference on advances in wind and structures (AWAS08), South Korea, 2008.
- 2008, **Co-organizer**, Symposium: Performance evaluation and mitigation of bridge dynamic effects. First American Academy of Mechanics Conference, New Orleans, June 17-20, 2008.
- 2008, **Session chair**, three sessions of the symposium “Performance evaluation and mitigation of bridge dynamic effects”, First American Academy of Mechanics Conference, New Orleans, June 17-20, 2008.
- 2008, **Session chair**, Structural control and health monitoring session, Inaugural International Conference of the Engineering Mechanics Institute (EM08), ASCE, May 18-21, 2008.

2008, **Session chair**, Bridge engineering session, Inaugural International Conference of the Engineering Mechanics Institute (EM08), ASCE, May 18-21, 2008.
2007, **Session chair**, Bridges-flutter session, 12th International Conference on Wind Engineering, Cairns, Australia, July 1-7, 2007
2007, **Session co-chair**, Dynamics session, 18th Engineering Mechanics Division Conference, ASCE, Blacksburg, Virginia, June 3-6, 2007

CV SECTION 3: EVIDENCE OF TEACHING AND ADVISING EFFECTIVENESS

TEACHING:

CIVE 508 Bridge Engineering (2010-present)
CIVE 507 Transportation Engineering (2011-present)
CIVE 566 Intermediate Structural Analysis (Matrix Analysis) (2009-present)
CIVE 303 Infrastructure and Transportation System (2007-present)
CIVE 367 Structural Analysis (2007-2012)
CIVE 261 Dynamics (2006-2009)
CIVE 260 Statics (2010)

ADVISING:

GRADUATE SUPERVISION

Current Graduate Advisees:

Ziluo Xiong, PhD (expected to graduate August 2025)
Kaisen Yao, PhD (expected to graduate August 2023)
Yangyang Wu, PhD (expected to graduate May 2023)
Chia-Gee Chen, PhD (expected to graduate May 2023)

Graduate Degrees Completed Under Your Supervision:

2021, Chotiman Yukpan, Master
2021, Wei Xia, Master
2021, Lavanakumar Srinivas Deshetty, Master
2020, Dr. Qiling Zou, PhD (Postdoctoral Fellow at Carnegie Mellon University).
2020, Yu-An Chen, Master
2020, Sngghyuk Kim, Master
2019, Dr. Guangyang Hou, PhD (Postdoctoral Fellow at University of Oklahoma)
2019, Shangbo Tong, Master
2019, Po-han Shen, Master
2019, Prateek Jain, Master
2018, Xiaowei Zhang, Master
2018, Shending Pei, Master
2017, Kaisen Yao, Master
2016, Dr. Xiaoxiang Ma, PhD (Associate Professor, Southwest Transportation University, China)
2016, Dr. Yufen Zhou, PhD (Wind Engineer, SOH Wind Engineering LLC, Vermont)

2013, Thomas Wilson, Master (Advisor. co-advisor: Hussam Mahmoud)
2013, Salem Abdalmageed, Master
2013, Matt Hardman, Master
2011, Dr. Feng Chen, PhD (Professor, Tongji University, China)
2010, Dr. Jun Wu, PhD (Associate Professor, Chang'an University, China)
2010, Ryan Nelson, Master

POSTDOCTORAL STUDENTS/RESEARCH ASSOCIATES:

Postdoctoral fellow

Dr. Yufen Zhou, July 2016-July 2017, Postdoctoral Fellow
Dr. Feng Chen, July 2011- Aug 2012, Postdoctoral Fellow
Dr. Jun Wu, Dec 2010-May 2011, Postdoctoral Fellow
Dr. Guangyang Hou, Dec 2019-March 2020, Postdoctoral Fellow

Visiting professors

Dr. Huoyue Xiang from Southwest Jiaotong University, China (2016-2017)
Dr. Yang Deng from Changsha University of Science and Technology, (2016-2017).
Dr. Yuan Zhang from China University of Petroleum, China (2014-2015).
Dr. Xinjun Zhang from Zhejiang University of Technology, China (2015-2016).
Dr. Xiongjiang Wang from Wuhan University of Technology, China (2013-2014).
Dr. Jingshuai Yang from Chang'an University, China (2013-2014).
Dr. Xiaoqing Du from Shanghai University, China (2011-2012).

Visiting students

Zhi Liu (Southeastern University), 2018
Yulong Bao (Southwestern Jiaotong University), 2019
Fanrong Xue (Central South University), 2020

CV SECTION 4: Evidence of Outreach/Service

COMMITTEES

University Committee

Member, Faculty Council, 2012-2015

College Committee

Member, Dean's Think Tank, 2007-2008
Member, College Internal Advisory Committee, 2007-2008

Department Committee

Member, Promotion Committee (by election), 2019-2022
Member, Tenure Committee (by election), 2015-2020
Member, Graduate Education Committee, 2015-2020
Member, Faculty Search Committee, 2015-2016
Member, Faculty Search Committee, 2012-2013
Chair, Graduate Admission Committee, 2010-2012
Member, Graduate Admission Committee, 2007-2010

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Memberships in professional societies

Fellow, American Society of Civil Engineers (ASCE), 2018-present; Member (2006-2018)
Member, Engineering Mechanics Institute (EMI), 2006-present
Member, American Association for Wind Engineering (AAWE), 2006-present
Member, Association of State Floodplain Managers, 2006-2012

Office in professional societies

University representative (2007-present), Transportation Research Board (TRB)
Past Chair (2016-2017): Experimental Analysis and Instrumentation Committee, ASCE
Chair (2014-2016): Experimental Analysis and Instrumentation Committee, ASCE
Vice chair (2013-2014): Experimental Analysis and Instrumentation Committee, ASCE
Control member (2012-2013): Experimental Analysis and Instrumentation Committee, ASCE
Committee Member: Civil Infrastructure and lifeline Systems committee, Emerging Technologies Committee of ASCE Infrastructure Resilience Division; Wind Effects Committee, Dynamics Committee, Structural Health Monitoring and Control Committee of ASCE Engineering Mechanics Institute
Member, TRB AHD35 Bridge Management Committee (2018-2022)

Editorial boards

Associate Editor, ASCE Journal of Bridge Engineering, 2011-present
Associate Editor, Frontiers in Built Environment: wind engineering and science, 2019-present
Editorial Advisory Board Member, Analytic Methods in Accident Research (Elsevier), 2019-present
Editorial Board Member, Advances in Bridge Engineering, 2020-present.
Editorial Board Member, China Journal of Highway and Transport, 2014-present
Associate Editor, Advances in Structural Engineering - An International Journal, 2014-2019
Editorial Board Member, The Scientific World Journal, 2011-2014.