

Keegan J. Moore

Assistant Professor
College of Engineering Teaching Fellow
Department of Mechanical and Materials Engineering
University of Nebraska–Lincoln

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EDUCATION

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| 2018 | Ph.D. in Mechanical Engineering, University of Illinois at Urbana-Champaign, Urbana, IL
Dissertation: “Data-Driven System Identification of Strongly Nonlinear Modal Interactions and Model Updating of Nonlinear Dynamical Systems”
Advisors: Alexander F. Vakakis, Lawrence A. Bergman, D. Michael McFarland
National Science Foundation Graduate Research Fellowship Recipient |
| 2014 | B.Sc. in Mechanical Engineering, University of Akron, Akron, OH |

PROFESSIONAL EMPLOYMENT

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| 2018– | Assistant Professor, Department of Mechanical and Materials Engineering, University of Nebraska-Lincoln, Lincoln, NE |
| 2015–
2018 | National Science Foundation Graduate Research Fellow, University of Illinois at Urbana-Champaign, Urbana, IL |
| 2018 | Research Assistant, University of Illinois at Urbana-Champaign, Urbana, IL |
| 2015–
2018 | Teaching Assistant, University of Illinois at Urbana-Champaign, Urbana, IL |
| 2015 | Summer Graduate Research Intern, Sandia National Laboratories, Albuquerque, NM |
| 2014 | Predocctoral Fellow, University of Illinois at Urbana-Champaign, Urbana IL |

GRANTS & FELLOWSHIPS

Awarded Research Grants (Total: \$793,264, **My Total: \$774,849**)

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| 2022–
2025 | 9. AFOSR, Young Investigator Program , “Digital Engineering the Test and Modeling Process: Autonomous Methods for Reconciling Test and Model Results,” PI: K.J. Moore , Total Amount: \$404,621, Award Number: FA9550-22-1-0295, 2022-2025. https://www.afrl.af.mil/News/Article/2835114/afosr-awards-grants-to-36-scientists-and-engineers-through-its-young-investigat/ |
| 2022–
2025 | 8. NSF Disabilities and Rehabilitation Engineering Program , “Collaborative Research: Detecting Gait Phases with Raised Metabolic Cost using Robotic Perturbations and System Identification for Enabling Targeted Rehabilitation Therapy,” PI: K.J. Moore in collaboration with P. Malcolm (University of Nebraska Omaha [UNO]), UNL Amount: \$235,290, Award Number: 2203144, 2022-2025. https://www.nsf.gov/awardsearch/showAward?AWD_ID=2203144&HistoricalAwards=false |

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| 2022-2023 | 7. Cruze Distribution LLC dba ARYSE under AFOSR STTR Phase II, "STTR: Performance Knee Brace," PI: K.J. Moore , Total Amount: \$44,954, Award Number: 145106, 2022-2023 |
| 2021-2022 | 6. NASA Nebraska EPSCoR, NASA, "Understanding the Nonlinear Dynamics Governing Vertical-Lift Vehicles with Variable-speed, Fixed Rotors," PI: K.J. Moore , Total Amount: \$15,000, 2021. |
| 2021-2022 | 5. University of Nebraska Preliminary Data and Application Grant, "Detecting the Walking Phases with Raised Oxygen Costs for Targeted Therapy," PI: P. Malcolm (UNO), Co-PI: K.J. Moore , Total Amount: \$38,399, UNL Amount: \$19,984, 2021-2022. |
| 2021-2022 | 4. NSF Nebraska EPSCoR, "The How, Why, and When of Unwanted Disassembly: Inexpensive Dynamical Models for Loosening of Bolted Joints," PI: K.J. Moore , Total Amount: \$25,000, Grant Number: OIA-1557417, 2021-2022. |
| 2021-2022 | 3. UNL Faculty Seed Grant, "Determining the Interactions Between Bolts During Unwanted Loosening," PI: K.J. Moore , Total Amount: \$10,000, 2021-2022. |
| 2020-2021 | 2. NASA Nebraska EPSCoR, NASA, "Design of Nonlinear Vibration Absorbers to Enhance Aeroelastic Performance of High-aspect-ratio Wings in Commercial Aircraft," PI: K.J. Moore , Total Amount: \$15,000, Grant Number: 80NSSC19M0065, 2019-2020. |
| 2019-2020 | 1. NASA Nebraska Space Grant, NASA, "Manipulating Nonlinear Absorbers to Enhance Vibration Suppression in Ultra-high-aspect-ratio Wings," PI: K.J. Moore , Total Amount: \$5,000, Grant Number: NNX15AI09H, 2019-2020. |

Fellowships & Awards - University of Nebraska-Lincoln (Total:\$117,548)

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| 2022 | 11. Office of Naval Research Summer Faculty Research Program, "Capability Expansion of Hardware-in-the-Loop Simulations for SHM Applications," (\$20,000), 2022. |
| 2022 | 10. Henry Y. Kleinkauf Family Distinguished New Faculty Teaching Award, College of Engineering, University of Nebraska-Lincoln (\$2,500), 2022. |
| 2022 | 9. University of Nebraska-Lincoln CAREER Club (\$10,000), 2022. |
| 2021 | 8. University of Nebraska-Lincoln, College of Engineering Teaching Fellow (\$2,000), 2021-2022. |
| 2021 | 7. Air Force Summer Faculty Fellowship, "Concrete Sled Testing," Air Force Office of Scientific Research, PI (\$24,048), 2021. |
| 2021 | 6. University of Nebraska-Lincoln CAREER Club (\$10,000), 2021. |
| 2020 | 5. Air Force Summer Faculty Fellowship, "Research on Wave Interaction in Stacked Concrete Slabs," Air Force Office of Scientific Research, PI (\$18,000), 2020. |
| 2019 | 4. Faculty Fellowship Program in Israel (\$10,000), Jewish National Fund, 2019-2020. |
| 2019 | 3. University of Nebraska-Lincoln CAREER Club (\$10,000), 2019-2020. |
| 2019 | 2. University of Nebraska-Lincoln Peer Review of Teaching Fellowship (\$1,000), 2019-2020. |
| 2018 | 1. University of Nebraska-Lincoln Research Development Fellows Program (\$10,000), 2018-2019. |

Fellowships & Awards - University of Illinois at Urbana-Champaign

- 2015 | 5. NSF Graduate Research Fellowship Program, “Nonlinear System Identification, Reduced Order Modeling, and Model Updating of the Effects of Mechanical Joints on Structural Dynamics,” Total Amount: \$138,000, Grant Number: DGE-1144245, 2015-2018.
- 2015 | 4. MechSE Travel Scholarship, University of Illinois at Urbana-Champaign, 2015–2016.
- 2014 | 3. George A. Costello Memorial Fellowship, University of Illinois at Urbana-Champaign, 2014.
- 2014 | 2. Thomas J. and Virginia Fisher Dolan Fellowship, University of Illinois at Urbana-Champaign, 2014.
- 2014 | 1. Henry L. Langhaar Memorial Fellowship, University of Illinois at Urbana-Champaign, 2014.

JOURNAL PUBLICATIONS

Supervised by Dr. Moore: ¹Undergraduate student, ²Masters student, ³Ph.D. student, ⁴Postdoctoral scholar

- UR | 30. C. López³, **K.J. Moore**, “Enhanced Adaptive Weighted Signal Preprocessing Technique for Bearings Health Monitoring,” *IEEE Transactions on Reliability* [IF: 5.883], under review (submitted October 11, 2022).
- UR | 29. C. Wang³, J.D. Brown¹, A. Singh³, **K.J. Moore**, “A Two-dimensional Nonlinear Vibration Absorber Using Elliptical Impacts and Sliding,” *Mechanical Systems and Signal Processing* [IF: 8.934], under review (submitted September 15 2022).
- 2022 | 28. C. Wang³, G. Yañez González, C. Wittich, **K.J. Moore**, “Energy Isolation in a Multi-floor Nonlinear Structure Under Harmonic Excitation,” *Nonlinear Dynamics* [IF: 5.741], 2022. <http://dx.doi.org/10.1007/s11071-022-07744-5>.
- 2022 | 27. C. Wang³, E. Krings, A.T. Allen¹, E.J. Markvicka, **K.J. Moore**, “Low-to-High Frequency Targeted Energy Transfer Using a Nonlinear Energy Sink with Quasi-zero Stiffness,” *International Journal of Non-linear Mechanics* [IF: 3.336], 147:104194, 2022. <http://dx.doi.org/10.1016/j.ijnonlinmec.2022.104194>
- 2022 | 26. A. Singh³, **K.J. Moore**, “An Open-source, Scalable, Low-cost Automatic Modal Hammer for Studying Nonlinear Dynamical Systems,” *Experimental Techniques* [IF: 1.700], 46:775-792, 2022. <http://dx.doi.org/10.1007/s40799-021-00516-7>
- 2022 | 25. C. López³, Á. Naranjo, **K.J. Moore**, “Hidden Markov Model based Stochastic Resonance and Its Application to Bearing Fault Diagnosis,” *Journal of Sound and Vibration* [IF: 4.761], 528:116890, 2022. <http://dx.doi.org/10.1016/j.jsv.2022.116890>
- 2022 | 24. S. Aldana², **K.J. Moore**, “Dynamic Interactions Between Two Axially Aligned Threaded Joints Undergoing Loosening,” *Journal of Sound and Vibration* [IF: 4.761], 520:116625, 2022. <http://dx.doi.org/10.1016/j.jsv.2021.116625>
- 2022 | 23. M. Jin, G. Kosova, M. Cenedese, W. Chen, A. Singh³, D. Jana, M.R.W. Brake, C.W. Schwingshackl, **K.J. Moore**, J.P. Noël, “Measurement and Identification of the Nonlinear Dynamics of a Jointed Structure Using Full-Field Data; Part II - Nonlinear System Identification,” *Mechanical Systems and Signal Processing* [IF: 8.934], 166:108402, 2022. <http://dx.doi.org/10.1016/j.ymsp.2021.108402>
- 2022 | 22. W. Chen, D. Jana, A. Singh³, M. Jin, M. Cenedese, G. Kosova, M.R.W. Brake, C.W. Schwingshackl, **K.J. Moore**, J.P. Noël, “Measurement and Identification of the Nonlinear Dynamics of a Jointed Structure Using Full-Field Data; Part I – Measurement of Nonlinear Dynamics,” *Mechanical Systems and Signal Processing* [IF: 8.934], 166:108401, 2022. <http://dx.doi.org/10.1016/j.ymsp.2021.108401>

- 2022 21. C. López³, D. Wang, Á. Naranjo, **K.J. Moore**, “Box-Cox-Sparse-Measures-Based Blind Filtering: Understanding the Difference between the Maximum Kurtosis Deconvolution and the Minimum Entropy Deconvolution,” *Mechanical Systems and Signal Processing* [IF: 8.934], 165:108376, 2022. <http://dx.doi.org/10.1016/j.ymssp.2021.108376>
- 2022 20. A. Singh³, **K.J. Moore**, “Component-Scaled Signal Reconstruction for Enhanced Noise Filtration,” *Journal of Vibration and Control* [IF: 2.633], 2022. <http://dx.doi.org/10.1177/10775463211051461>
- 2021 19. A. Singh³, **K.J. Moore**, “Identification of Multiple Local Nonlinear Attachments Using a Single Measurement,” *Journal of Sound and Vibration* [IF: 4.761], 513:116410, 2021. <http://dx.doi.org/10.1016/j.jsv.2021.116410>
- 2021 18. J.D.E. Dalisay, **K.J. Moore**, L.A. Bergman, A.F. Vakakis, “Local nonlinear stores induce global modal interactions in the steady-state dynamics of a model airplane,” *Journal of Sound and Vibration* [IF: 4.761], 500:116020, 2021. <http://dx.doi.org/10.1016/j.jsv.2021.116020>
- 2021 17. C. Wang³, **K.J. Moore**, “On Nonlinear Energy Flows in Nonlinearly Coupled Oscillators with Equal Mass,” *Nonlinear Dynamics* [IF: 5.741], 103:343-366, 2021. <http://dx.doi.org/10.1007/s11071-020-06120-5>
- 2020 16. A. Singh³, **K.J. Moore**, “Characteristic Nonlinear System Identification of Clearance Nonlinearities in Local Attachments,” *Nonlinear Dynamics* [IF: 5.741], 102:1667-1684, 2020. <http://dx.doi.org/10.1007/s11071-020-06004-8>
- 2020 15. J.D.E. Dalisay, **K.J. Moore**, L.A. Bergman, A.F. Vakakis, “Effects of Nonlinear Stores on the Dynamics of a Computational Model Airplane,” *Journal of Aircraft* [IF: 1.348], 57(5):938-957, 2020. <http://dx.doi.org/10.2514/1.C035736>
- 2019 14. **K.J. Moore**, “A Reduced-order Model for Loosening Mechanics of Axial Joints,” *ASME Journal of Applied Mechanics* [IF: 2.794], 86(12):121007, 2019. <http://dx.doi.org/10.1115/1.4044813>
- 2019 13. **K.J. Moore**, “Characteristic Nonlinear System Identification: A Data-driven Approach for Local Nonlinear Attachments,” *Mechanical Systems and Signal Processing* [IF: 8.934], 131:335-347, 2019. <http://dx.doi.org/10.1016/j.ymssp.2019.05.066>
- 2019 12. **K.J. Moore**, A. Mojahed, L.A. Bergman, A.F. Vakakis, “Local Nonlinear Stores Induce Global Effects in the Dynamics of an Experimental Model Airplane,” *AIAA Journal* [IF: 2.295], 57(11):4953-4965, 2019. <http://dx.doi.org/10.2514/1.J058311>
- 2019 11. **K.J. Moore**, M. Kurt, M. Eriten, D.M. McFarland, L.A. Bergman, A.F. Vakakis, “Direct Detection of Nonlinear Modal Interactions From Time Series Measurements,” *Mechanical Systems and Signal Processing* [IF: 8.934], 125:311-329, 2019. <http://dx.doi.org/10.1016/j.ymssp.2017.09.010>
- 2019 10. **K.J. Moore**, M. Kurt, M. Eriten, D.M. McFarland, L.A. Bergman, A.F. Vakakis, “Time-Series Based Nonlinear System Identification of Modal Interactions Caused by Strongly Nonlinear Attachments,” *Journal of Sound and Vibration* [IF: 4.761], 438:13-32, 2019. <http://dx.doi.org/10.1016/j.jsv.2018.09.033>
- 2018 9. A. Mojahed, **K.J. Moore**, L.A. Bergman, A.F. Vakakis, “Strong Geometric Softening-Hardening Nonlinearities in an Oscillator Composed of Linear Stiffness and Damping Elements,” *International Journal of Non-linear Mechanics* [IF: 3.336], 11:94-111, 2018. <http://dx.doi.org/10.1016/j.ijnonlinmec.2018.09.004>
- 2018 8. **K.J. Moore**, A.F. Vakakis, “Wave Non-Reciprocity at a Nonlinear Structural Interface,” *Acta Mechanica* [IF: 2.645], 229(10):4057-4070, 2018. <http://dx.doi.org/10.1007/s00707-018-2212-5>
- 2018 7. **K.J. Moore**, M. Kurt, M. Eriten, D.M. McFarland, L.A. Bergman, A.F. Vakakis, “Wavelet-Bounded Empirical Mode Decomposition for Vibro-Impact Analysis,” *Nonlinear Dynamics* [IF: 5.741], 93(3):1559-1577, 2018. <http://dx.doi.org/10.1007/s11071-018-4276-0>

- 2018 6. J. Bunyan, **K.J. Moore**, A. Mojahed, M.D. Fronk, S. Tawfick, M. Leamy, A.F. Vakakis, “Acoustic Non-reciprocity in a Lattice Incorporating Nonlinearity, Asymmetry and Internal Scale Hierarchy: Experimental Study,” *Physical Review E* [IF: 2.707], 97(5):052211, 2018. <http://dx.doi.org/10.1103/PhysRevE.97.052211>
- 2018 5. **K.J. Moore**, J. Bunyan, S.H. Tawfick, O.V. Gendelman, S. Li, M. Leamy, A.F. Vakakis, “Non-Reciprocity in the Dynamics of Coupled Oscillators with Nonlinearity, Asymmetry and Scale Hierarchy,” *Physical Review E* [IF: 2.707], 97(1):012219, 2018. <http://dx.doi.org/10.1103/PhysRevE.97.012219>
- 2018 4. **K.J. Moore**, M. Kurt, M. Eriten, D.M. McFarland, L.A. Bergman, A.F. Vakakis, “Wavelet-Bounded Empirical Mode Decomposition for Measured Time Series Analysis,” *Mechanical Systems and Signal Processing* [IF: 8.934], 99:14–29, 2018. <http://dx.doi.org/10.1016/j.ymssp.2017.06.005>
- 2017 3. **K.J. Moore**, M. Kurt, M. Eriten, J.C. Dodson, J.R. Foley, J.C. Wolfson, D.M. McFarland, L.A. Bergman, A.F. Vakakis, “Nonlinear Parameter Identification of a Mechanical Interface Based on Primary Wave Scattering,” *Experimental Mechanics* [IF: 2.872], 57(9):1495–1508, 2017. <http://dx.doi.org/10.1007/s11340-017-0320-0>
- 2017 2. M. Kurt, **K.J. Moore**, M. Eriten, D.M. McFarland, L.A. Bergman, A.F. Vakakis, “Nonlinear model updating applied to the IMAC XXXII Round Robin benchmark system,” *Mechanical Systems and Signal Processing* [IF: 8.934], 88:111–122, 2017. <http://dx.doi.org/10.1016/j.ymssp.2016.10.016>
- 2015 1. Y. Zhang, **K.J. Moore**, D.M. McFarland, A.F. Vakakis, “Targeted energy transfers and passive acoustic wave redirection in a two-dimensional granular network under periodic excitation,” *Journal of Applied Physics* [IF: 2.710], 118(23):234901, 2015. <http://dx.doi.org/10.1063/1.4937898>

CONFERENCE PROCEEDINGS AND PRESENTATIONS

Supervised by Dr. Moore: ¹Undergraduate student, ²Masters student, ³PhD student, ⁴Postdoctoral scholar

- 2023 55. C. López³, A. Singh³, **K.J. Moore**, “Data-driven Euler-Lagrange Approach for Time Series Analysis,” *International Modal Analysis Conference XLI*, Austin, TX, February 13–16, 2023.
- 2023 54. J.D. Brown¹, **K.J. Moore**, “Experimental Verification of Nonlinear Energy Sinks for Diminishing Vibrations in High-aspect Ratio Wings,” *International Modal Analysis Conference XLI*, Austin, TX, February 13–16, 2023.
- 2023 53. I. Lawal, M.R. Haberman, **K.J. Moore**, “Simulating Nonlinear Beating Phenomena Induced by Dry-Friction in Dynamic Systems,” *International Modal Analysis Conference XLI*, Austin, TX, February 13–16, 2023.
- 2023 52. T. Kinnard, D. McMullan, K. Pane, G.S. Flynn, T. Thompson, **K.J. Moore**, “Designing Accelerated Vibration Tests using Model-Based Equivalent Damage Prediction,” *International Modal Analysis Conference XLI*, Austin, TX, February 13–16, 2023.
- 2022 51. C. Wang³, **K.J. Moore**, “Breaking Reciprocity to Realize Extreme Energy Isolation in Coupled Oscillators,” *Acoustical Society of America*, Denver, CO, May 23–27, 2022.
- 2022 50. C. López³, Á. Naranjo, **K.J. Moore**, “Hidden Markov Model based Stochastic Resonance and its Application to Bearing Fault Diagnosis,” *International Modal Analysis Conference XL*, Orlando, FL, February 7–10, 2022.
- 2022 49. A. Singh³, **K.J. Moore**, “Data-Driven Identification of Multiple Local Nonlinear Attachments Installed on a Single Primary Structure,” *International Modal Analysis Conference XL*, Orlando, FL, February 7–10, 2022.

- 2022 48. A. Singh³, **K.J. Moore**, “An Open-source, Automatic Modal Hammer for Studying Nonlinear Dynamical Systems,” *International Modal Analysis Conference XL*, Orlando, FL, February 7–10, 2022.
- 2022 47. C. Wang³, **K.J. Moore**, “Applying Quasi-zero Stiffness Introduced by Elastic Strut Elements to Achieve Energy Isolation and Dissipation,” *International Modal Analysis Conference XL*, Orlando, FL, February 7–10, 2022.
- 2022 46. C. Wang³, J.D. Brown¹, **K.J. Moore**, “Energy Isolation by Introducing 2-D Nonlinear Energy Sink with Impact and Sliding on An Elliptical Frame,” *International Modal Analysis Conference XL*, Orlando, FL, February 7–10, 2022.
- 2022 45. J.D. Brown¹, **K.J. Moore**, “Using Nonlinear Energy Sinks to Diminish Vibrations in High-aspect Ratio Wings,” *International Modal Analysis Conference XL*, Orlando, FL, February 7–10, 2022.
- 2021 44. S.A. Aldana², **K.J. Moore**, “Dynamic Wave Interactions in Axial Rods With Multiple Threaded Interfaces,” *ASME International Design Engineering and Technical Conference*, Virtual Conference, August 17–20, 2021.
- 2021 43. J.D. Brown¹, **K.J. Moore**, “Investigation of Vibration Mitigation in High-aspect-ratio Wings Using Multi-directional Clearance Nonlinearities,” *ASME International Design Engineering and Technical Conference*, Online Virtual Conference, August 17–20, 2021.
- 2021 42. A. Singh³, **K.J. Moore**, “An Open-Source, Low-Cost Automatic Modal Hammer for Studying Nonlinear Dynamical Systems,” *ASME International Design Engineering and Technical Conference*, Online Virtual Conference, August 17–20, 2021.
- 2021 41. A. Singh³, **K.J. Moore**, “Data-Driven Identification of Multiple Local Nonlinear Attachments,” *ASME International Design Engineering and Technical Conference*, Online Virtual Conference, August 17–20, 2021.
- 2021 40. C. Wang³, A.T. Allen¹, E. Krings, E.J. Markvicka, **K.J. Moore**, “Energy Isolation Study by Utilizing Quasi-zero Stiffness Introduced by Buckling in Elastic Strut Elements,” *ASME International Design Engineering and Technical Conference*, Online Virtual Conference, August 17–20, 2021.
- 2021 39. G.M. Eymael¹, **K.J. Moore**, “The Effect of Store-to-store Energy Transfers On the Global Dynamics of Aircraft,” *ASME International Design Engineering and Technical Conference*, Online Virtual Conference, August 17–20, 2021.
- 2021 38. L. Wang, B. Beamer, **K.J. Moore**, K. Krainc, “Case Study - Lesson Plan for Noise Control Engineering Concepts for use in ABET Accredited Engineering Programs,” *Inter-Noise 2021*, Virtual Conference, August 1–5, 2021.
- 2021 37. J.D.E. Dalisay, **K.J. Moore**, L.A. Bergman, A.F. Vakakis, “Vibro-impacts Originating in Wing Attachments Induce Global Chaotic Effects in the Steady-state Dynamics of a Model Airplane,” *NM 2021*, Ascona, Switzerland, July 6–9, 2021.
- 2021 35. J.D. Brown¹, **K.J. Moore**, “Using Nonlinear Vibration Absorbers to Mitigate Unwanted Motion in High-aspect-ratio Wings,” *AIAA Region V Student Conference*, Virtual Conference, April 2–3, 2021.
- 2021 34. C. Wang³, **K.J. Moore**, “Energy Isolation in a Multi-floor Nonlinear Structure under Harmonic Excitation,” *International Modal Analysis Conference XXXIX*, Virtual Conference (Originally in Orlando, FL), February 8–11, 2021.
- 2021 33. A. Singh³, **K.J. Moore**, “Joint Interface Contact Area Predictions Using Surface Strain Measurements,” *International Modal Analysis Conference XXXIX*, Virtual Conference (Originally in Orlando, FL), February 8–11, 2021.

- 2021 32. S.A. Aldana², **K.J. Moore**, “Wave Interactions and Modeling of Loosening in Axial Rods with Multiple Threaded Interfaces,” *International Modal Analysis Conference XXXIX*, Virtual Conference (Originally in Orlando, FL), February 8–11, 2021.
- 2020 31. H.A. Van Heuveln¹, **K.J. Moore**, “Strong Vibration Mitigation in High-Aspect-Ratio Wings Using a Nonlinear Energy Sink With Elliptic Clearance,” *ASME International Design Engineering and Technical Conference*, St. Louis, MO, August 16–19, 2020.
- 2020 30. **K.J. Moore**, “Reduced-order Modeling of Loosening Mechanics in Axially Oriented Threaded Joints,” *ASME International Design Engineering and Technical Conference*, St. Louis, MO, August 16–19, 2020.
- 2020 29. **K.J. Moore**, “A New Data-Driven System Identification Method for Local Attachments with Smooth and Non-smooth Nonlinearities,” *ASME International Design Engineering and Technical Conference*, St. Louis, MO, August 16–19, 2020.
- 2020 28. C. Wang³, **K.J. Moore**, “Breaking Dynamic Reciprocity Allows for Strong Vibration Isolation in a Multi-floor Nonlinear Structure,” *ASME International Design Engineering and Technical Conference*, St. Louis, MO, August 16–19, 2020.
- 2020 27. **K.J. Moore**, “The Characteristic Nonlinear System Identification: A Method for Local, Nonlinear Attachments,” *International Modal Analysis Conference XXXVIII*, Houston, TX, February 10–13, 2020.
- 2020 26. H.A. Van Heuveln¹, **K.J. Moore**, “Manipulating Nonlinear Absorbers to Enhance Vibration Suppression in Ultra-high-aspect-ratio Wings,” *International Modal Analysis Conference XXXVIII*, Houston, TX, February 10–13, 2020.
- 2020 25. A. Singh³, **K.J. Moore**, “Enhancing Noise Filtration Through Linear Combinations of Intrinsic Mode Functions,” *International Modal Analysis Conference XXXVIII*, Houston, TX, February 10–13, 2020.
- 2020 24. C. Wang³, **K.J. Moore**, “Targeted Vibration Isolation through Breaking Dynamic Reciprocity in a Multi-floor Nonlinear Structure,” *International Modal Analysis Conference XXXVIII*, Houston, TX, February 10–13, 2020.
- 2020 23. M. Miller, C. Johnson, N. Sonne, J. Mersch, R. Kuether, J. Smith, J. Ortiz, G. Castelluccio, **K.J. Moore**, “Bolt Preload Loss Due to Modal Excitation of a C-Beam Structure,” *International Modal Analysis Conference XXXVIII*, Houston, TX, February 10–13, 2020.
- 2020 22. G. Kosova, M. Jin, M. Cenedese, W. Chen, A. Singh³, D. Jana, M.R.W. Brake, C.W. Schwingshackl, **K.J. Moore**, J.P. Noël, “Nonlinear System Identification of a Jointed Structure Using Full-field Data: Part II Analysis,” *International Modal Analysis Conference XXXVIII*, Houston, TX, February 10–13, 2020.
- 2020 21. A. Singh³, W. Chen, D. Jana, M. Jin, G. Kosova, M. Cenedese, M.R.W. Brake, C.W. Schwingshackl, **K.J. Moore**, J.P. Noël, “Nonlinear System Identification of a Jointed Structure Using Full-field Data: Part I Experimental Investigation,” *International Modal Analysis Conference XXXVIII*, Houston, TX, February 10–13, 2020.
- 2019 20. J.D. Dalisay, **K.J. Moore**, L.A. Bergman, A. F. Vakakis, “Computational Simulation of the Effects of Local Nonlinear Stores on the Global Dynamics of an Experimental Model Plane,” *ASME International Design Engineering and Technical Conference*, Anaheim, CA, August 18–21, 2019.
- 2019 19. **K.J. Moore**, “A Reduced-order Model for Axial Joint Loosening Mechanics,” *Tribomechanics Conference*, Houston, TX, July 31–August 2, 2019.
- 2019 18. M. Cenedese, G. Kosova, M. Jin, W. Chen, A. Singh³, D. Jana, M.R.W. Brake, C.W. Schwingshackl, **K.J. Moore**, J.P. Noël, “Nonlinear System Identification of a Jointed Structure Using Full Field Data; Part 2: Analysis,” *Tribomechanics Conference*, Houston, TX, July 31–August 2, 2019.

- 2019 17. D. Jana, A. Singh³, W. Chen, M. Jin, G. Kosova, M. Cenedese, M.R.W. Brake, C.W. Schwing-shackl, **K.J. Moore**, J.P. Noël, “Nonlinear System Identification of a Jointed Structure Using Full Field Data; Part 1: Experiments,” *Tribomechadynamics Conference*, Houston, TX, July 31–August 2, 2019.
- 2019 16. **K.J. Moore**, A. Mojahed, J. Dalisay, L.A. Bergman, A.F. Vakakis, “Experimental Study of Global Response of a Model Airplane with a Strongly Nonlinear Store on Each Wing,” *7th International Conference on Nonlinear Vibrations, Localization and Energy Transfer*, Marseille, France, July 1–4, 2019.
- 2019 15. **K.J. Moore**, L.A. Bergman, A.F. Vakakis, “Influence of Local Nonlinearities on Global System Dynamics and Nonlinear System Identification,” *Engineering Mechanics Institute Conference*, California Institute of Technology, Pasadena, CA, June 18–21, 2019.
- 2019 14. **K.J. Moore**, A. Mojahed, L.A. Bergman, A.F. Vakakis, “Local Nonlinear Attachments Induce Global Effects in Airplane Dynamics,” *International Modal Analysis Conference XXXVII*, Orlando, FL, January 28–31, 2019.
- 2018 13. J. Bunyan, **K.J. Moore**, A. Mojahed, M. D. Fronk, M. Leamy, S. Tawfick, A.F. Vakakis, “Acoustic Non-reciprocity in a Lattice with Nonlinearity, Asymmetry and Internal Scale Hierarchy,” *ASME International Design Engineering Technical Conference*, Quebec City, Quebec, Canada, August 26–29, 2018.
- 2018 12. **K.J. Moore**, J. Bunyan, A. Mojahed, S. Tawfick, O.V. Gendelman, S. Li, M. Leamy, A.F. Vakakis, “Non-reciprocal Acoustics of Lattices with Nonlinearity, Asymmetry and Scale Hierarchy,” *U.S. National Congress for Theoretical and Applied Mechanics (18th USNC TAM)*, Chicago, IL, June 4–9, 2018.
- 2018 11. **K.J. Moore**, M. Kurt, M. Eriten, D.M. McFarland, L.A. Bergman, A.F. Vakakis, “Time-series Based System Identification of Nonlinear Attachments,” *International Modal Analysis Conference (International Modal Analysis Conference XXXVI)*, Orlando, FL, February 12–15, 2018.
- 2017 10. **K.J. Moore**, M. Kurt, M. Eriten, D.M. McFarland, L.A. Bergman, A.F. Vakakis, “Direct Detection of Nonlinear Modal Interactions for Model Updating Using Measured Time Series,” *ASME International Design Engineering and Technical Conference*, Cleveland, OH, 2017.
- 2017 9. **K.J. Moore**, C.A. Herrera, M. Kurt, M. Eriten, D.M. McFarland, L.A. Bergman, A.F. Vakakis, “Reduced-order Modeling of Strongly Nonlinear Systems Using Measured Time Series,” *9th European Nonlinear Dynamics Conference*, Budapest, Hungary, June 25–30, 2017. <http://congressline.hu/enoc2017/abstracts/65.pdf>
- 2017 8. **K.J. Moore**, C.A. Herrera, M. Kurt, M. Eriten, D.M. McFarland, L.A. Bergman, A.F. Vakakis, “Reduced-order Modeling of Strongly Nonlinear Systems Using Measured Time Series,” *International Modal Analysis Conference (International Modal Analysis Conference XXXV)*, Garden Grove, CA, January 30–February 2, 2017.
- 2016 7. **K.J. Moore**, M. Kurt, M. Eriten, D.M. McFarland, L.A. Bergman, A.F. Vakakis, “Nonlinear System Identification of Mechanical Interfaces Based on Wave Propagation,” in: J.M. Floryan (eds) *Contributions to the Foundations of Multidisciplinary Research in Mechanics: Papers presented during the 24th International Congress of Theoretical and Applied Mechanics*, International Congress of Theoretical and Applied Mechanics, Montreal, August 22–26, 2016. http://iutam.org/publications/ictam-proceedings/ictam_2016
- 2016 6. **K.J. Moore**, C.A. Herrera, M. Kurt, M. Eriten, D.M. McFarland, L.A. Bergman, A.F. Vakakis, “Estimation of the Natural Frequencies of Strongly Nonlinear Systems from Time-Domain Response Data,” *ISWAV 2016: 4th International Symposium and Workshop on Acoustics and Vibration*, Harbin, China, July 26–29, 2016.

- 2016 5. **K.J. Moore**, M. Kurt, M. Eriten, D.M. McFarland, L.A. Bergman, A.F. Vakakis, “Nonlinear System Identification of Mechanical Interfaces Based on Wave Propagation,” *Proceedings: International Conference on Nonlinear Vibrations, Localization and Energy Transfer*, Liège, Belgium, July 4–8, 2016. <http://www.nnm2016liege.com/en/download>
- 2016 4. M.R.W. Brake, **K.J. Moore**, “A Heuristic Model of Force-Displacement Curves for the Failure of Mechanical Bolts in Tension,” *ASME International Design Engineering Technical Conference*, Charlotte, NC, August 21–24, 2016.
- 2016 3. R.C. Flicek, **K.J. Moore**, G.M. Castelluccio, M.R.W. Brake, T. Truster, C.I. Hammetter, “Stress Waves Propagating Through Bolted Joints,” In: Allen M., Mayes R., Rixen D. (eds) *Dynamics of Coupled Structures, Volume 4. Conference Proceedings of the Society for Experimental Mechanics Series*. Springer, 2016. http://dx.doi.org/10.1007/978-3-319-29763-7_49
- 2016 2. **K.J. Moore**, M. Kurt, M. Eriten, D.M. McFarland, L.A. Bergman, A.F. Vakakis, “Nonlinear System Identification of Mechanical Interfaces Based on Wave Scattering,” In: Allen M., Mayes R., Rixen D. (eds) *Dynamics of Coupled Structures, Volume 4. Conference Proceedings of the Society for Experimental Mechanics Series*, Springer, 2016. http://dx.doi.org/10.1007/978-3-319-29763-7_32
- 2015 1. M. Kurt, **K.J. Moore**, M. Eriten, D.M. McFarland, L.A. Bergman, A.F. Vakakis, “Nonlinear Model Updating Methodology with Application to the International Modal Analysis Conference XXXIII Round Robin Benchmark Problem,” In: G. Kerschen, editor. *Nonlinear Dynamics, Volume 1. Conference Proceedings of the Society for Experimental Mechanics Series 5*, Springer International Publishing, 2015. http://dx.doi.org/10.1007/978-3-319-15221-9_31

OTHER PRESENTATIONS AND POSTERS

Supervised by Dr. Moore: ¹Undergraduate student, ²Masters student, ³PhD student, ⁴Postdoctoral scholar

- 2022 9. J.D. Brown¹, **K. J. Moore**, “Using Nonlinear Vibration Absorbers to Mitigate Unwanted Motion in High-aspect-ratio Wings,” *Purdue Engineering Virtual Graduate Showcase*, Online Virtual Conference, September 26, 2022
- 2022 8. G.M. Eymael¹, **K. J. Moore**, “The Effect of Store-to-store Energy Transfers On the Global Dynamics of Aircraft,” *Nebraska Research Days – Undergraduate Student Research and Creative Activities Exhibition*, April 11, 2022.
- 2022 7. Stephanie Vavra¹, Micah Busboom¹, Alea Stanford¹, **K. J. Moore**, “Understanding the Nonlinear Dynamics Governing Vertical-Lift Vehicles with Variable-speed, Fixed Rotors,” *Nebraska Research Days – Undergraduate Student Research and Creative Activities Exhibition*, April 11, 2022.
- 2022 6. J.D. Brown¹, **K. J. Moore**, “Using Nonlinear Vibration Absorbers to Mitigate Unwanted Motion in High-aspect-ratio Wings,” *Nebraska Research Days – Undergraduate Student Research and Creative Activities Exhibition*, April 11, 2022. ***Awarded Best Poster***
- 2021 5. J.D. Brown¹, **K. J. Moore**, “Using Nonlinear Vibration Absorbers to Mitigate Unwanted Motion in High-aspect-ratio Wings,” *Nebraska Academy of Sciences (NAS) Aeronautics and Space Sciences Section*, Online Virtual Conference, April 23, 2021
- 2021 4. S. Vavra¹, **K.J. Moore**, “Targeted Vibration Isolation of Airline Interior Cabins From External Disturbances,” *Nebraska Research Days – Undergraduate Student Research and Creative Activities Exhibition*, April 16, 2021.
- 2021 3. G.M. Eymael¹, **K.J. Moore**, “Multi-harmonic Vibration Mitigation Through Exploitation of Structural Instability,” *Nebraska Research Days – Undergraduate Student Research and Creative Activities Exhibition*, April 16, 2021.

- 2020 2. A. Allen¹, **K.J. Moore**, “Multi-harmonic Vibration Mitigation Through Exploitation of Structural Instability,” *Nebraska Summer Research Virtual Symposium*, August 6, 2020.
- 2019 1. J.J. Broadway¹, **K.J. Moore**, “Investigation of Digital Image Correlation as a Method of Measuring Bolted Joint Pressure Distribution,” *Nebraska Summer Research Symposium*, August 8, 2019.

INVITED TALKS

- 2022 12. “Data-driven Nonlinear System Identification, Physics-based Reduced-order Modeling, and Vibration Reduction of Mechanical Structures,” University of Nebraska-Omaha, Omaha, NE, November 4, 2022.
- 2022 11. “Digital Engineering the Test and Modeling Process: Autonomous Methods for Reconciling Test and Model Results,” *WeaponONE Technical Interchange Meeting*, Niceville, FL, October 6, 2022.
- 2022 10. “Data-driven Nonlinear System Identification, Physics-based Reduced-order Modeling, and Applications to Hardware-in-the-loop Structural Health Monitoring,” *FY23 NSWC Carderock Summer Faculty Seminar Series*, Naval Surface Warfare Center Carderock Division, Bethesda, MD, August 10, 2022.
- 2022 9. “Digital Engineering the Test and Modeling Process: Autonomous Methods for Reconciling Test and Model Results” *AFTC and AFOSR Agile Science of Test & Evaluation Strategic Alignment*, Edwards Air Force Base, CA, July 13, 2022.
- 2022 8. “The Loosening of Bolts and How to Model Them,” University of Nebraska-Lincoln, Lincoln, NE, April 26, 2022.
- 2021 7. “Data-driven Approaches to Modeling Warhead Penetration and New Directions Towards Digital Engineering of T&E,” Virtual Seminar, Air Force Research Laboratory, Eglin Air Force Base, Eglin, FL, August 26, 2021.
- 2021 6. “Reduced-order Modeling of the Loosening of Bolted Joints: Application to Axially Aligned Joints,” *DigiTwin Online Workshop* hosted by Swansea University, June 11, 2021.
- 2020 5. “Sunday with a Scientist: Vibrations,” Virtual Sunday with a Scientist Seminar, University of Nebraska State Museum, Lincoln, NE, 2020.
- 2020 4. “Reduced-order Modeling of Warhead Penetration in Single and Stacked Concrete Slabs,” Virtual Seminar, Air Force Research Laboratory, Eglin Air Force Base, Eglin, FL, 2020.
- 2019 3. “Reduced-order Modeling of Loosening in Bolted Joints Subjected to Axial Shock Excitation,” Sandia National Laboratories, Albuquerque, NM, 2019.
- 2017 2. “Methods for the Detection of Nonlinear Modal Interactions from Measured Time Series,” University of Akron, Akron, OH, 2017.
- 2016 1. “Nonlinear Identification Tools and Methods,” *m+p Modal Analysis Seminar* held at *International Modal Analysis Conference XXXIV*, Orlando, FL, 2016.

CHAPTERS IN BOOKS

- 2018 | 2. **K.J. Moore**, A. Mojahed, M. Kurt, M. Eriten, D.M. McFarland, L.A. Bergman, A.F. Vakakis, “Advanced Nonlinear System Identification for Modal Interactions in Nonlinear Structures: A Review,” In: I. Andrianov, A. Manevich, Y. Mikhlin, O. Gendelman (eds) *Problems of Nonlinear Mechanics and Physics of Materials*. Advanced Structured Materials, vol 94. Springer, Cham, 2018. http://dx.doi.org/10.1007/978-3-319-92234-8_7
- 2018 | 1. **K.J. Moore**, M. Kurt, M. Eriten, D.M. McFarland, L.A. Bergman, A.F. Vakakis, “Elements of a Nonlinear System Identification Methodology of Broad Applicability with Application to Bolted Joints,” In: M.R. Brake (eds) *The Mechanics of Jointed Structures*, Springer International Publishing, 2018. <http://dx.doi.org/10.1007/978-3-319-56818-8>

GOVERNMENT REPORTS

- 2015 | 2. **K.J. Moore**, R.C. Flicek, G.M. Castelluccio, C. Hammetter, T.J. Truster, M.R.W. Brake, “Stress Waves Propagating Through Jointed Connections,” SAND2015-6042D, Sandia National Laboratories, Albuquerque, NM, 2015. <https://www.osti.gov/biblio/1339225>
- 2015 | 1. **K.J. Moore**, M.R.W. Brake, “A Reduced Order Model of Force Displacement Curves for the Failure of Mechanical Bolts in Tension,” SAND2015-10871, Sandia National Laboratories, Albuquerque, NM, 2015. <https://www.osti.gov/scitech/biblio/1234813>

TEACHING EXPERIENCE

Assistant Professor, University of Nebraska-Lincoln

- 2023 | 10. Engineering Acoustics (Graduate & Undergraduate Elective), Spring, 2022.
- 2022 | 9. Advanced Vibrations (Graduate Only), Fall, 2022.
- 2022 | 8. Engineering Acoustics (Graduate & Undergraduate Elective), Spring, 2022 (Rated 4.59/5.00).
- 2021 | 7. Engineering Dynamics (Core Undergraduate), Fall, 2021 (Rated 4.72/5.00).
- 2021 | 6. Engineering Acoustics (Graduate & Undergraduate Elective), Spring, 2021 (Rated 4.68/5.00)
- 2021 | 5. Data-driven Science and Engineering (Graduate & Undergraduate Elective), Spring, 2021 (Individually rated 3.98/5.00). Co-taught with Drs. P. Rao, E. Marvicka, and P. Grover.
- 2020 | 4. Advanced Vibrations (Graduate Only), Fall, 2020 (Rated 4.62/5.00).
- 2020 | 3. Engineering Acoustics (Graduate & Undergraduate Elective), Spring, 2020 (Rated 4.69/5.00).
- 2019 | 2. Engineering Dynamics (Core Undergraduate), Fall, 2019 (Rated 4.33/5.00).
- 2019 | 1. Engineering Acoustics (Graduate & Undergraduate Elective), Spring, 2019 (Rated 4.39/5.00).

Teaching Assistant, University of Illinois at Urbana-Champaign

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| 2018 | 4. Intermediate Dynamics, Spring, 2018. |
| 2017 | 3. Introduction to Nonlinear Dynamics and Vibrations, Spring, 2017. |
| 2016 | 2. Experimental Stress Analysis, Spring, 2016. |
| 2015 | 1. Introductory Dynamics, Spring, 2015. |

ADVISING

Doctoral Students (2 Graduated To Date)

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|------|--|
| 2026 | 6. Mohammad Nasr (UNL), “Autonomous Testing of Vibrating Structures,” 2026 (expected). |
| 2025 | 5. Javier Arroyo (UNL), “Autonomous Updating and Validation of Digital Models,” 2025 (expected). |
| 2025 | 4. Manal Mustafa (UNL), “The Effects Loosening on the Dynamics of Bolted Joints,” 2025 (expected). |
| 2025 | 3. Cristian López (UNL), “Synchronous Autonomous Measurement and Modeling Frameworks,” 2025 (expected). |
| 2022 | 2. Chengen Wang (UNL), “Achieving Energy Guiding and Isolation by Utilizing Nonlinearities and Asymmetry in Structures,” August 2022. https://digitalcommons.unl.edu/dissertations/AAI29323232/ |
| 2022 | 1. Aryan Singh (UNL), “Towards Data-Driven Identification of Nonlinear Dynamical Systems for Building Interpretable Mathematical Models,” August 2022. https://digitalcommons.unl.edu/dissertations/AAI29323206/ |

Masters Students

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| 2021 | 1. Sandro A. Aldana, “Reduced-order Modeling of Loosening in Bolted Joints and Dynamic Interactions Between Axially Aligned Threaded Joints,” 2021. https://digitalcommons.unl.edu/mechengdiss/172/ |
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Undergraduate Researchers

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| 2022- | 18. Thomas Ramsey, “Digital Engineering the Test and Modeling Process: Autonomous Methods for Reconciling Test and Model Results,” funded by AFOSR YIP Award, Fall 2022-present. |
| 2022- | 17. Emma Soukup, “Reciprocity-Breaking Suspension Devices For Isolation in Harsh Environments,” funded by UNL UCARE and John Woollam Scholars Fellowship, 2022-present. |
| 2021- | 16. Alea Stanford, “Understanding the Nonlinear Dynamics Governing Vertical-Lift Vehicles with Variable-speed, Fixed Rotors,” funded by NASA Nebraska EPSCoR Grant and UNL UCARE, 2021-present. |
| 2021- | 15. Micah Busboom, “Autonomous Testing and Synchronization of Multiple Automatic Modal Hammers,” funded by NASA Nebraska EPSCoR Grant and UNL UCARE, 2021-present. |
| 2020- | 14. Judith Brown, “Design of Nonlinear Vibration Absorbers to Enhance Aeroelastic Performance of High-aspect-ratio Wings in Commercial Aircraft,” funded by NASA Nebraska EPSCoR Grant, John Woollam Scholars Fellowship, and UNL UCARE, 2020-present. |
| 2021-2022 | 13. Sean Griffin, “Employing Video-game Physics Engines to Create Virtual Dynamics Experiments,” funded by UNL FYRE Award, 2021–2022. |

2021-2022	12. Aden Hester, "Employing Video-game Physics Engines to Create Virtual Dynamics Experiments," funded by UNL FYRE Award, 2021–2022.
2021-2022	11. Anika Dujakovich, "Dynamic Interactions Between Multiple Joints and Bolts Undergoing Loosening," funded by NSF Nebraska EPSCoR Grant and UNL UCARE, 2021–2022.
2020-2022	10. Stephanie Vavra, "Targeted Vibration Isolation of Airline Interior Cabins from External Disturbances," funded by UNL UCARE and John Woollam Scholars Fellowship, 2020-2022.
2020-2022	9. Guilherme Eymael, "Nonlinear Interactions Between Nonlinear Stores on Fighter Jets," funded by UNL UCARE and John Woollam Scholars Fellowship, 2020-present.
2021	8. Sejal Soni, "Dynamic Interactions Between Multiple Joints and Bolts Undergoing Loosening," funded by UNL UCARE, 2021.
2020	7. Thomas Vierk, "Design of Nonlinear Vibration Absorbers to Enhance Aeroelastic Performance of High-aspect-ratio Wings in Commercial Aircraft," funded by NASA Nebraska EPSCoR Grant, Summer-Fall 2020.
2020	6. Rachael Stanek, "Manipulating Nonlinear Absorbers to Enhance Vibration Suppression in Ultra-high-aspect-ratio Wings," funded by NASA Nebraska Mini-grant, Summer 2020.
2019-2020	5. Ben Franco, "Reduced-order Modeling of Bolted Joint Loosening: Torque-Stiffness and Torque Loss Modeling," funded by UNL UCARE, Summer and Fall 2019.
2019-2020	4. Austin Hajek, "Investigation Into Energy Flows of Nonlinear Structures," supported through independent study, 2019-2020.
2019-2020	3. Anna Boothe, "Nonlinear Vibration Mitigation Using a Bunyan-Tawfick Spring," funded by UNL UCARE, Fall 2019 and Summer 2020.
2019-2020	2. Heath Van Heuveln, "Manipulating Nonlinear Absorbers to Enhance Vibration Suppression in Ultra-high-aspect-ratio Wings," funded by NASA Nebraska Mini-grant, 2019-2020.
2019	1. Joseph Broadway, "Experimental Investigation of Pressure Distributions Induced by Bolted Joints in Complex Geometries," funded by UNL UCARE, Summer 2019.

Graduate Student Committee Membership

2021-2023	2. S. Mohammadreza Farooghi Mehr, (Civil Engineering, expected May 2023): Advisor: C. Wittich
2022	1. Aniruddha Gaikwad, (Mechanical Engineering, Defended July 2022): Advisor: P.K. Rao

SERVICE

Department Service

2020-2021	1. Member, MME Research Strategic Planning Committee
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Conference Organization

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| 2023 | 7. Co-Chair, Sessions on Utilizing Nonlinearity, <i>International Modal Analysis Conference XLI</i> , Houston, TX, February 13–16, 2022. |
| 2022 | 6. Co-Chair, Mini-Symposium on Reduced-Order Modeling and System Identification, <i>European Nonlinear Oscillations Conference</i> , Lyon, France, July 5–10, 2022 (Delayed due to Covid-19 Pandemic) |
| 2022 | 5. Co-Chair, Sessions on Utilizing Nonlinearity, <i>International Modal Analysis Conference XL</i> , Orlando, FL, February 7–10, 2022. |
| 2021 | 4. Co-Chair, Sessions on Geometric Nonlinearity, <i>International Modal Analysis Conference XL</i> , Orlando, FL, February 7–10, 2022. |
| 2020 | 3. Co-Chair, Sessions on Exploiting Nonlinearity, <i>International Modal Analysis Conference XXXIX</i> , Orlando, FL, February 8–11, 2021. |
| 2020 | 2. Co-Chair, Sessions on Experimental Nonlinear Dynamics, <i>International Modal Analysis Conference XXXIX</i> , Orlando, FL, February 8–11, 2021. |
| 2019 | 1. Co-Chair, Sessions on Nonlinear Vibration Mitigation, <i>International Modal Analysis Conference XXXVIII</i> , Houston, TX, February 10–13, 2020. |

Service for Academic Journals

- | | |
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| 2015– | Reviewer (average 25 papers per year): Mechanical Systems and Signal Processing, Journal of Sound and Vibration, ASME Journal of Vibration and Acoustics, Meccanica, International Journal of Non-Linear Mechanics, Nonlinear Dynamics, Journal of Engineering Mechanics, Communications in Nonlinear Science and Numerical Simulation, Digital Signal Processing, ASME Journal of Applied Mechanics, Energy, Chaos |
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PROFESSIONAL MEMBERSHIPS

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|------|---|
| 2019 | 4. American Institute of Aeronautics and Astronautics, Associate Member, 2019–present |
| 2015 | 3. Society of Experimental Mechanics, Member, 2015–present. |
| 2012 | 2. American Society of Mechanical Engineers, Member, 2013–present. |
| 2011 | 1. Society of Automotive Engineers, Member, 2011–2013. |