Siyuan (Simon) Xing

Curriculum Vitae

September 2025

Department of Mechanical Engineering
California Polytechnic State University, San Luis Obispo, CA, 93407.
+618-616-5796
sixing@calpoly.edu

Education

2016-2019 *Southern Illinois University Carbondale*, Illinois, USA
• Ph.D. in Engineering Science.
2013-2016 *Southern Illinois University Edwardsville*, Illinois, USA
• M.S. in Mechanical Engineering.
2009-2013 *Sichuan University*, Sichuan, China
• B.S. in Electrical Engineering.

Employment History

09/2025-Present Associate Professor, *California Polytechnic State University*, California, USA
09/2019-09/2025 Assistant Professor, *California Polytechnic State University*, California, USA

Research Interests

Nonlinear dynamics; Bifurcation theory; Scientific machine learning; Structural vibrations; Multi-objective optimization; Controller design; Mechatronics; Bio-inspired robotics.

Awards and Honors

2023 Best Face to Face Presentation Award, *International Conference on Nonlinear Science and Complexity, Turkey, Istanbul, July 10-15, 2023.*
2023 Lockheed Endowed Professorship, *College of Engineering, California Polytechnic State University*.
2023 Chrones Endowed Professorship, *Department of Mechanical Engineering, California Polytechnic State University*
2023 Bentley Professor, *Department of Mechanical Engineering, California Polytechnic State University*.
2016 Outstanding Teaching Assistant Award, *Southern Illinois University Edwardsville*.
2016 Outstanding Graduate Award, *Southern Illinois University Edwardsville*.
2013 Outstanding Undergraduate Cadres, *Sichuan University*.
2012 Honorable Mention, *Mathematical Contest In Modeling*.
2012 National Second Prize, *China Undergraduate Mathematical Contest In Modeling*.

Books

1. Siyuan Xing and Albert C.J. Luo, *Sequential Bifurcation Trees to Chaos in Nonlinear Time-delay Systems*. Springer, Cham, 2021. DOI: 10.1007/978-3-031-79669-2.

Book Chapters

1. Siyuan Xing and Albert C.J. Luo, "A sequential order of periodic motions in a 1-d, delayed, nonlinear dynamical system," in *Nonlinear Dynamics, Chaos, and Complexity: In Memory of Valentin Afraimovich (1945–2018)* (Understanding Complex Systems), Dimitri Volchenkov, Ed., Understanding Complex Systems. Springer, Cham, 2021, pp. 95–112. DOI: 10.1007/978-981-15-9034-4_7.
2. Albert C.J. Luo and Siyuan Xing, "Bifurcation trees of period-3 motions to chaos in a time-delayed duffing oscillator," in *Regularity and Stochasticity of Nonlinear Dynamical Systems*, Dimitri Volchenkov and Xavier Leoncini, Eds. Springer, Cham, 2018, vol. 21, pp. 247–262. DOI: 10.1007/978-3-319-58062-3_10.
3. Albert C.J. Luo and Siyuan Xing, "Time-delay effects on periodic motions in a duffing oscillator," in *Chaotic, Fractional, and Complex Dynamics: New Insights and Perspectives.* (Understanding Complex Systems), Mark Edelman, Elbert E. N. Macau, and Miguel A. F Sanjuan, Eds., Understanding Complex Systems. Springer, Cham, 2018, pp. 77–100. DOI: 10.1007/978-3-319-68109-2_5.

Refereed Journal Papers **(students with *)**

1. Siyuan Xing, Qingyu Han, and Efstathios Charalampidis, "Combopnet: A neural-network accelerator for sindy," *Journal of Vibration Testing and System Dynamics*, 9, 1–20, 1 2025. DOI: 10.5890/JVTSD.2025.03.001.
2. W. Yu, Y. Xu, X. Wang, L. Hong, J. Jiang, and S. Xing, "Sparse separable gaussian neural network for interpretable learning of stationary solutions of fokker–planck–kolmogorov equations," *Nonlinear Dynamics*, 2025. DOI: 10.1007/s11071-025-11602-5.
3. Xi Wang*, Siyuan Xing, Jun Jiang, Ling Hong, and Jian-Qiao Sun, "Separable gaussian neural networks for high-dimensional nonlinear stochastic systems," *Probabilistic Engineering Mechanics*, 76, 103594 (12 pages), 2024. DOI: 10.1016/j.probengmech.2024.103594.
4. Siyuan Xing and Efstathios G Charalampidis, "Learning traveling solitary waves using separable gaussian neural networks," *Entropy*, 26, 5 2024. DOI: 10.3390/e26050396.
5. Anni Zhao, Siyuan Xing, Xi Wang, and Jian-Qiao Sun, "Radial basis function neural networks for optimal control with model reduction and transfer learning," *Engineering Applications of Artificial Intelligence*, 136, 108899, 2024.
6. Jordan Kochavi* and Siyuan Xing, "Mathematical modeling and system identification of a piezo-actuated, cantilever beam with interferometric measurement," *Journal of Vibration Testing and System Dynamics*, 7, 447–461, 4 2023. DOI: 10.5890/JVTSD.2023.12.004.

7. Marisa. M. Lee*, Efstathios G. Charalampidis, Siyuan Xing, Chris Chong, and Panayotis Kevrekidis, "Breathers in lattices with alternating strain-hardening and strain-softening interactions," *Physical Review E*, 107, 054208, 5 2023. DOI: 10.1103/PhysRevE.107.054208.
8. Siyuan Xing and Albert C.J. Luo, "Period-1 motions to twin spiral homoclinic orbits in the rössler system," *Journal of Computational and Nonlinear Dynamics*, 18, 081008 (8 pages), 8 2023. DOI: 10.1115/1.4062201.
9. Siyuan Xing and Albert C.J. Luo, "Spikes adding to infinity on period-1 orbits to chaos in the rössler system," *International Journal of Bifurcation and Chaos*, 33, 2330033 (16 pages), 13 2023. DOI: 10.1142/S0218127423300331.
10. Siyuan Xing and Jianqiao Sun, "Impulse response of an elastic rod with a mass-damper-spring termination," *Journal of Vibration Testing and System Dynamics*, 7, 169–186, 2 2023. DOI: 10.5890/JVTSD.2023.06.005.
11. Siyuan Xing and Jianqiao Sun, "Separable gaussian neural networks: Structure, analysis, and function approximations," *Algorithm*, 16, 453 (19 pages), 10 2023. DOI: 10.3390/a16100453.
12. Siyuan Xing, Bradley Kwan*, and Pengji Duan, "Modeling and control of the locomotion of a monopod robot mounted to a vertical slider," *Journal of Vibration Testing and System Dynamics*, 6, 413–430, 4 2022. DOI: 10.5890/JVTSD.2022.12.005.
13. Siyuan Xing and Albert Luo, "On an origami structure of period-1 motions to homoclinic orbits in the rössler system," *Chaos: An Interdisciplinary Journal of Nonlinear Science*, 32, 123121 (13 pages). 12 2022. DOI: 10.1063/5.0131970.
14. Siyuan Xing and Albert C.J. Luo, "Periodic cutting motions in a vibration-assisted, regenerative, nonlinear orthogonal turning system," *International Journal of Dynamics and Control*, 10, 1–12, 2022. DOI: 10.1007/s40435-021-00779-3.
15. Siyuan Xing and Jianqiao Sun, "Multi-objective optimization of an elastic rod with viscous termination," *Mathematical and Computational Applications*, 27, 94 (13 pages). 6 2022. DOI: 10.3390/mca27060094.
16. Siyuan Xing and Albert C.J. Luo, "Sequential periodic motions in a vibration-assisted, regenerative, nonlinear turning-tool system," *International Journal of Bifurcation and Chaos*, 31, 2150186, 12 2021. DOI: 10.1142/S0218127421501868.
17. Siyuan Xing and Albert C.J. Luo, "Understanding dynamics of infinite-equilibrium systems via a quadratic nonlinear system," *Journal of Vibration Testing and System Dynamics*, 5, 131–147, 2 2021. DOI: 10.5890/JVTSD.2021.06.003.
18. Leilei Chen*, Siyuan Xing, and Xingzhong Xiong, "On the analytical modeling of a resonant fatigue testing rig," *Journal of Vibration Testing and System Dynamics*, 4, 389–399, 4 2020. DOI: 10.5890/JVTSD.2020.12.007.
19. Siyuan Xing and Albert C.J. Luo, "On period-1 motions to chaos in a 1-dimensional, time-delay, nonlinear system," *International Journal of Dynamics and Control*, 44–50, 8 2020. DOI: 10.1007/s40435-019-00546-5.
20. Siyuan Xing and Albert C.J. Luo, "Bifurcation trees of period-1 motions in a periodically excited, softening duffing oscillator with time-delay," *International Journal of Dynamics and Control*, 7, 842–855, 3 2019. DOI: 10.1007/s40435-019-00520-1.

21. Siyuan Xing and Albert C.J. Luo, "On a global sequential scenario of bifurcation trees to chaos in a first-order, time-delayed system," *International Journal of Bifurcation and Chaos*, 29, 1950141 (39 pages), 10 2019. DOI: 10.1142/S0218127419501414.
22. Siyuan Xing and Albert C.J. Luo, "Periodic motions to chaos in a 1-dimensional, time-delay, nonlinear system," *The European Physical Journal Special Topics*, 228, 1747–1765, 9 2019. DOI: 10.1140/epjst/e2019-800243-y.
23. Siyuan Xing and Albert C.J. Luo, "On possible infinite bifurcation trees of period-3 motions to chaos in a time-delayed, twin-well duffing oscillator," *International Journal of Dynamics and Control*, 6, 1429–1464, 4 2018. DOI: 10.1007/s40435-018-0418-y.
24. Albert C.J. Luo and Siyuan Xing, "Bifurcation trees of period-3 motions to chaos in a time-delayed duffing oscillator," *Nonlinear Dynamics*, 88, 2831–2862, 4 2017. DOI: 10.1007/s11071-017-3415-3.
25. Albert C.J. Luo and Siyuan Xing, "Time-delay effects on periodic motions in a periodically forced, time-delayed, hardening duffing oscillator," *Journal of Vibration Testing and System Dynamics*, 1, 73–91, 1 2017. DOI: 10.5890/JVTSD.2017.03.006.
26. Siyuan Xing and Albert C.J. Luo, "Towards infinite bifurcation trees of period-1 motions to chaos in a time-delayed, twin-well duffing oscillator," *Journal of Vibration Testing and System Dynamics*, 1, 353–392, 4 2017. DOI: 10.5890/JVTSD.2017.12.006.
27. Albert C.J. Luo and Siyuan Xing, "Analytical predictions of period-1 motions to chaos in a periodically driven quadratic nonlinear oscillator with a time-delay," *Mathematical Modeling of Natural Phenomena*, 11, 75–88, 2016. DOI: 10.1051/mmnp/201611206.
28. Albert C.J. Luo and Siyuan Xing, "Multiple bifurcation trees of period-1 motions to chaos in a periodically forced, time-delayed, hardening duffing oscillator," *Chaos, Solitons & Fractals*, 89, 405–434, 2016. DOI: 10.1016/j.chaos.2016.02.005.
29. Albert C.J. Luo and Siyuan Xing, "On frequency responses of period-1 motions to chaos in a periodically forced, time-delayed quadratic nonlinear system," *International Journal of Dynamics and Control*, 5, 466–476, 3 2016. DOI: 10.1007/s40435-015-0222-x.
30. Albert C.J. Luo and Siyuan Xing, "Symmetric and asymmetric period-1 motions in a periodically forced, time-delayed, hardening duffing oscillator," *Nonlinear Dynamics*, 85, 1141–1166, 2 2016. DOI: 10.1007/s11071-016-2750-0.

Refereed Conference Papers

1. Siyuan Xing and Jianqiao Sun, "Time-embedding grbfnn: Learning transient response of stochastic dynamical systems," in *International Design Engineering Technical Conference & Computer & Information*, Washington, D.C., USA., Aug. 2024. DOI: 10.1115/DETC2024-143365.
2. Jordan Kochavi and Siyuan Xing, "Mathematical modelling of a piezo-actuated cantilever beam with interferometer feedback," in *International Mechanical Engineering Congress and Exposition*, Columbus, OH, USA., Nov. 2022. DOI: 10.1115/IMECE2022-95819.

3. Siyuan Xing and Albert C.J. Luo, "Coexisting unstable periodic motions in the rössler system," in *International Mechanical Engineering Congress and Exposition*, Columbus, OH, USA., Nov. 2022. DOI: 10.1115/IMECE2022-95826.
4. Siyuan Xing and Albert C.J. Luo, "Period-1 motions to homoclinic orbits in the rössler system," in *International Design Engineering Technical Conference & Computer & Information*, St. Louis, MO, USA., Aug. 2022. DOI: 10.1115/DETC2022-91029.
5. Siyuan Xing and Albert C.J. Luo, "Controlling the dynamics of a quadratic oscillator using infinite equilibria," in *International Mechanical Engineering Congress and Exposition*, Online, USA., Aug. 2021. DOI: 10.1115/IMECE2021-71998.
6. Jianzhe Huang, Xilin Fu, Zhongliang Jing, and Siyuan Xing, "Discontinuous dynamics and bifurcation for morphing aircraft switching on the velocity boundary system," in *International Design Engineering Technical Conference & Computer & Information*, Online, USA., Aug. 2020. DOI: 10.1115/DETC2020-22008.
7. Siyuan Xing, Albert C.J. Luo, and Jianzhe Huang, "On the dynamics of a quadratic-oscillator-based, infinite-equilibrium system," in *International Design Engineering Technical Conference & Computer & Information*, Online, USA., Aug. 2020. DOI: 10.1115/DETC2020-22233.
8. Siyuan Xing and Albert C.J. Luo, "Period-1 motions in a periodically forced, nonlinear, machine-tool system," in *International Mechanical Engineering Congress and Exposition*, Salt Lake City, Utah, USA., Nov. 2019. DOI: 10.1115/IMECE2019-10771.
9. Siyuan Xing and Albert C.J. Luo, "Regenerative cutting dynamics for a periodically forced machine-tool system," in *International Design Engineering Technical Conference & Computer & Information*, Anaheim, California, USA., Aug. 2019. DOI: 10.1115/DETC2019-97262.
10. Siyuan Xing and Albert C.J. Luo, "Periodic motions in a first-order, time-delayed, nonlinear system," in *International Mechanical Engineering Congress and Exposition*, Pittsburgh, Pennsylvania, USA., Nov. 2018. DOI: 10.1115/IMECE2018-86824.
11. Albert C.J. Luo and Siyuan Xing, "Analytical prediction of period-1 motions in a time-delayed, softening duffing oscillator," in *International Mechanical Engineering Congress and Exposition*, Tampa, Florida, USA., Nov. 2017. DOI: 10.1115/IMECE2017-70824.
12. Albert C.J. Luo and Siyuan Xing, "Period-3 motions in a periodically forced, damped, double-well duffing oscillator with time-delay," in *International Design Engineering Technical Conference & Computer & Information*, Cleveland, Ohio, USA., Aug. 2017. DOI: 10.1115/DETC2017-67210.
13. Albert C.J. Luo and Siyuan Xing, "On complex periodic motions in a time-delayed, double-well duffing oscillator with strong excitation," in *International Design Engineering Technical Conference & Computer & Information*, Charlotte, NC, USA., Aug. 2016. DOI: 10.1115/DETC2016-59343.
14. Albert C.J. Luo and Siyuan Xing, "On time-delay effects on period-1 motions in a periodically forced, time-delayed, duffing oscillator," in *International Mechanical Engineering Congress and Exposition*, Phoenix, NC, USA., Nov. 2016. DOI: 10.1115/IMECE2016-66198.

15. Albert C.J. Luo and Siyuan Xing, "Bifurcation trees of period-1 motions to chaos in a quadratic nonlinear oscillator with time-delayed displacement," in *International Mechanical Engineering Congress and Exposition*, Houston, TX, USA., Nov. 2015. DOI: 10.1115/IMECE2015-50029.

Presentations and Posters

1. Siyuan Xing, "Separable Gaussian neural networks and their applications in solving fpk equations," 2024, the Online Conference on Days of Applied Nonlinearity and Complexity.
2. Siyuan Xing, "Bifurcation trees of period-1 to period-2 motions in a rossler system with multiple delays," 2021, Second Online Conference on Nonlinear Dynamics and Complexity, ISEP, Porto, Portugal.
3. Siyuan Xing and Albert C.J. Luo, "On the quantitative analysis of periodic motions in a time-delayed, softening, duffing oscillator," in *4st Annual Meeting of SIAM Central States Section*, Norman, OK, USA., Oct. 2018.
4. Siyuan Xing and Albert C.J. Luo, "Periodic motion to chaos in a first-order, time-delayed, nonlinear dynamical system," Aug. 2018, Poster presented at *7th International Conference on Nonlinear Science and Complexity*, San Luis Potosí, México.
5. Albert C.J. Luo and Siyuan Xing, "Complete routes of period-1 motions to chaos in a time-delayed duffing oscillator," in *6th International Conference on Nonlinear Science and Complexity*, Sao Jose dos Campos, Brazil., May 2016.
6. Albert C.J. Luo and Siyuan Xing, "From period-1 motions to chaos in a time-delayed, quadratic nonlinear oscillator," in *1st Annual Meeting of SIAM Central States Section*, Rolla, MO, USA., Apr. 2015.
7. Albert C.J. Luo and Siyuan Xing, "On bifurcation trees for period-1 motion to chaos in a periodically forced quadratic nonlinear oscillator with time delay," in *6th International Conference on Nonlinear Science and Complexity*, La Manga, Spain., May 2015.

Invited Talks

1. Siyuan Xing, "On an origami structure of period-1 motions to homoclinic orbits in the rössler system," Jul. 2023, Invited talk at Hybrid International Conference on Nonlinear Science and Complexity, Istanbul, Turkey.
2. Siyuan Xing, "Biparametric folding-fan structures of periodic motions in the rossler system," Sep. 2022, Invited talk at 2022 Conference in Nonlinear Dynamics and Complexity, Thessaloniki, Greece.
3. Siyuan Xing, "The implicit mapping method for the prediction of periodic motions in nonlinear systems," Nov. 2021, Invited talk at Shan Dong Normal Univerisity, Shan Dong, China.
4. Siyuan Xing, "Periodic motions to chaos in a time-delayed, double-well duffing oscillator with strong excitation," Oct. 2019, Invited talk at California Polytechnic State University, San Luis Obispo, CA, USA.

5. Albert C.J. Luo and Siyuan Xing, “An analytical prediction of period-1 motions to chaos in a time-delayed, duffing nonlinear oscillator through implicit mappings,” Dec. 2015, Invited talk at Sichuan University of Science & Engineering, Zigong, Sichuan, China.
6. Albert C.J. Luo and Siyuan Xing, “Analytical predictions of period-1 motions to chaos in a periodically driven duffing nonlinear oscillator with a time-delay displacement,” Dec. 2015, Invited talk at Southwest Jiaotong University, Chengdu, Sichuan, China.

Funding

In total: $586,574.62; external funding: $429,934; internal funding: $156,640.62.

1. "Integration of Quanser’s Qube Servo into Cal Poly’s ME 418 and 419 control courses". $72,527 (equipment donation), *Comcast*, 2024/09.
2. "Lockheed Endowed Professorship: Reinforcement Learning Control for Legged Robots". (PI), $30,000, *College of Engineering, California Polytechnic State University*, 2023/06-2024/06.
3. "Chrones Endowed Professorship". (PI), $50,000, *Department of Mechanical Engineering, California Polytechnic State University*, 2023/07-2025/07.
4. "I. Gait control of legged robots; II. Dynamic analysis of MEMS electrostatic energy harvesters". (PI), 12 WTU, approximately $30,000, *Donald E. Bently Center for Engineering Innovation, Department of Mechanical Engineering, California Polytechnic State University*, 2023/06-2024/06.
5. "Simulating and Controlling the Locomotion of a Legged Robot in Real-Time". (PI), *Cal Poly CENG*. Approximately $7,000, 2022/06-2022/09.
6. "Motion Prediction and Control of Legged Robots". (PI). *Donal E. Bently Center for Engineering Innovation, Cal Poly*. 9 WTUs assigned time, 2022/09-2023/06.
7. "Controller Design for Vibration-assisted Machining using Interferometer Feedback". (PI). *Cal Poly CENG R-IDC*. $4,000, 2022/04-2023/06.
8. "8 Degrees of Freedom Quadruped Senior Project". (PI). *Cal Poly CENG CPConnect*. $3,611, 2022/03-2022/07.
9. "Tune Expert". (PI). *Keysight Technologies, Inc*. $357,407 (donation: $57,407), 2021/01-2022/06.
10. "Analytical and Experimental Study on a Single-leg Robot". (PI). *Cal Poly CENG*. $2,700, 2021/03-2022/03.
11. "Validation and Analysis of a Single-leg Hopping Robot". (Co-PI). *Cal Poly CENG*. $3,329.62, 2021/04-2021/07.
12. "A Roadmap to Energy Harvesting using Granular Crystal Chains". (Co-PI). RSCA, *Cal Poly*. $18,000, 2020/06-2021/06.
13. "Study the Locomotion of a Hopping Robot using Stateflow". (PI). SURP, *Cal Poly CENG*. $8,000 (total costs inclusive of student and faculty stipends), 2020/06-2020/09.

Course Developed

Assistant Professor *California Polytechnic State University*
Implementation of Mechanical Controls (ME 418)

Course Taught

Assistant Professor *California Polytechnic State University*
Engineering Dynamics (ME 212)
Intermediate Dynamics (ME 326)
Mechanical Vibrations (ME 318)
Implementation of Mechanical Controls (ME 418)
Mechanical Control Systems (ME 422)

Teaching Assistant *Southern Illinois University Edwardsville*
Numerical simulation (ME354)
Dynamic system modeling laboratory (ME356L)
Stress laboratory (ME380L)

Teaching Workshop Participated

2022 NETI-1 Course Design and Student Engagement, *National Effective Teaching Institute.*

Master Thesis Committees

1. Peyton Ulrich, *Design of a Three-phase Brushless DC Motor Control System*, 2021
2. Jashua T. Castle, *Design of a Printed Circuit Board for a Sensorless Three-Phase Brushless DC Motor Control System*, 2020

Advised Students

Graduate Students

1. Jack Butler, MS, 2023 Fall - now
2. Jeremy Stephen West, MS, 2023 Fall - now
3. Connor Curtis Getz, MS, 2023 Fall - 2024 Spring
   Design and optimization of transmission lines of loudspeakers
4. Andrew Donald Maas, MS, 2022 Winter - 2024 Winter
   Modeling and System Identification of an elastic beam with a piezoelectric patch with hysteresis
5. Scott Dunn, MS, 2022 Winter - now

6. John Bennett, MS, 2022 Winter - 2024 Summer
   Simulation and Real-time Control of a Single Legged Robot
7. Tyler Jordan McCue, MS, 2022-2023
   Reinforcement Learning Control of a 8-Dof Quadruped Robot
8. Jordan Kochavi, MS, 2021-2022
   System Identification of a Piezo-actuated Cantilever Beam with Interferometer Feedback Using Adaptive Filters
9. Patrick John Ward, MS, 2021-2022
   Modeling and Control of an 8-DOF Quadruped Robot
10. Craig Kimball, MS, 2021-2022
    Design of a Proprioceptive Actuator Utilizing a Cycloidal Gearbox
11. Bradley Yuki Nakamoto Kwan, MS, 2020-2021
    Modeling and Control of a Vertical Hopping Robot

Undergraduate Students

1. Jack Butler, 2022-2023 Spring
2. Baxter James Bartlett, 2022-2023 Spring
3. Phillip Alexander Shafik, 2022-2023 Spring
4. Tarun Sreesaila Ganamur, 2022-2023 Spring
5. Sean Robert Wahl, 2022 Summer
6. Clayton Turner Elwell, 2021-2022
7. Tim Jain, 2021-2022

Community Service

Judge	Senior design Expo, Department of Mechanical Engineering, 2023
Judge	Senior design Expo, Department of Mechanical Engineering, 2022
Judge	NSF Student Poster Competition, *International Mechanical Engineering Congress & Exposition*, 2019
Course Coordinator	ME-418 Implementation of Mechanical Controls, since Fall 2022
Member	Events Committee, *Department of Mechanical Engineering, California Polytechnic State University*, 2024
Member	Hiring Committee, *Department of Mechanical Engineering, California Polytechnic State University*, 2023
Member	Research Support Task Force, *Department of Mechanical Engineering, California Polytechnic State University*, since 2023
Member	Computing Committee, *Department of Mechanical Engineering, California Polytechnic State University*, since 2021
Member	Advancement of Scholarship Task Force, *Department of Mechanical Engineering*, *California Polytechnic State University*, 2019

Professional Service

- Editorship
  - Associate Editor, *Discontinuity, Nonlinearity, and Complexity*, since 2021.
  - Associate Editor, *Journal of Environmental Accounting and Management*, since 2022.
  - Young Editorial Board, *International Journal of Dynamics and Control*, since 2022.
- Technical Program Committees
  - *Days of Applied Nonlinearity and Complexity* , Online Conference hosted by the Physics Department, Aristotle University of Thessaloniki, January 12-14, Greece, 2024.
  - *Hybrid Conference on Nonlinear Science and Complexity*, July 10-15, Istanbul, Turkey, 2023.
  - *Online Conference in Nonlinear Dynamics and Complexity*, September 26-29, Greece, 2022.
  - *The 2nd Online Conference on Nonlinear Dynamics and Complexity*, Online, Central Time Zone, October 4-6, 2021.
  - *The 1st Online Conference on Nonlinear Dynamics and Complexity*, Online, Central Time Zone, November 23-25, 2020.
- Organization of Conferences
  - Conference program chair, *Nonlinear Science and Complexity*, August 5-10, Yibin, Sichuan, China, 2024.
  - Chair of the symposium "Nonlinear dynamics of engineering systems", *Hybrid Conference on Nonlinear Science and Complexity*, July 10-15, Istanbul, 2023.
  - Co-chair of the mini-symposium "Nonlinear Dynamics in Neural and High Dimensional Systems", *2022 Conference in Nonlinear Dynamics and Complexity*, September 26-29, Greece, 2022.
  - Chair of the mini-symposium "Nonlinear Vibrations and Waves", *The 2nd Online Conference on Nonlinear Dynamics and Complexity*, Greenwich Mean Time, October 4-6, Portugal, 2021.
  - Co-organizer of the mini-symposium "Vibration and Time-delay Systems", *The 1st Online Conference on Nonlinear Dynamics and Complexity*, Online, Central Time Zone, November 23-25, 2020.
  - Conference co-organizer, *The 1st Online Conference on Nonlinear Dynamics and Complexity*, Online, Central Time Zone, November 23-25, 2020.
  - Co-organizer of the session "Time-delay Systems and Discontinuous Dynamical Systems", *International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, Anaheim, California, August 18-21, USA, 2019.

➤ Referee for Scientific Journals and Books

- *Journal of Computational Physics*, (1), since 2024
- *Nonlinear Dynamics*, (4), since 2023
- *Nonlinear Dynamics, Chaos, and Complexity: In Memory of Valentin Afraimovich (1945-–2018)*. Ed. by D Volchenkov. Springer, 2021. (3 Chapters)
- *Journal of Sound and Vibration*, (4), since 2023
- *Chaos: An Interdisciplinary Journal of Nonlinear Science* (3), since 2022
- *Mathematics* (2), since 2022
- *Electronics* (1), since 2022
- *Entropy* (1), since 2021
- *Applied Sciences* (1), since 2021
- *Journal of Computational and Nonlinear Dynamics* (3), since 2021
- *International Journal of Bifurcation and Chaos* (15), since 2020
- *International Journal of Dynamics and Control* (5), since 2020
- *ISA Transactions*, (1), Since 2020
- *Journal of Applied Nonlinear Dynamics* (22), since 2016
- *Journal of Vibration Testing and System Dynamics* (14), since 2019
- *The European Physics Journal Special Topics* (2), since 2019

➤ Referee for Conference Papers

- *International Design Engineering Technical Conferences & Computers and Information in Engineering Conference*, (5), since 2019
- *International Mechanical Engineering Congress & Exposition*, (10), since 2019

Professional membership

Member American Society of Mechanical Engineers (ASME), since 2015