Kostas Kalfas, Assistant Professor in Civil Engineering
Civil Engineering Program, ***Texas State University***
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Google Scholar: Citations 588, h-index 12, i10-index 14; **Scopus**: Citations 473, h-index 11
Google Scholar Scopus ORCID

Personal Details Nationality: Greek

Academic qualifications

2019-2023	**Southern Methodist University, Dallas, TX, USA** Doctor of Philosophy (**Ph.D.**) in Civil Engineering Advisor: Professor Nicos Makris
2018	**City, University of London, UK** Introductory Certificate in Academic Practice
2014-2015	**University of Surrey, UK** Master of Science (**M.S.**) in Bridge Engineering with Distinction Advisor: Associate Professor Stergios A. Mitoulis
2006-2012	**National Technical University of Athens (NTUA), Greece** **5-year Diploma** (integrated **M.S.**) in Civil Engineering with specialization in Structural Engineering Advisor: Assistant Professor Tasos Avraam

Academic and professional experience

Aug 2025 – Present	**Assistant Professor**, Texas State University • Fall 2025 CE 2350: Structural Analysis (36 enrollments) • Spring 2026 CE 4351: Design of Steel Infrastructure (31 enrollments)
Aug 2023 – Aug 2025	**Assistant Professor**, The University of Texas at Tyler • Fall 2023, Fall 2024 CENG 3306: Mechanics of Materials (24, 22 enrollments) - CENG 3434 (Lecture & Lab): Civil Engineering Materials, Codes & Specifications (25, 26 enrollments) • Spring 2024; Spring 2025 CENG 3325: Structural Analysis (25, 22 enrollments) • Spring 2025 CENG 5350 (M.S. Course): Structural Dynamics (10 enrollments)
Jun – Aug 2023	**Postdoctoral Research Fellow**, Southern Methodist University, TX, USA Supervisor: Professor Nicos Makris
2022 – 2025	**ATLSS Engineering Research Center, Lehigh University, Bethlehem, PA, USA** Visiting Researcher Designed and built two pressurized sand dampers (PSD) to conduct characterization testing for the assessment of the PSD in harsh environments; Real-Time Hybrid Simulation testing with two physical PSD to assess the seismic response of cross-laminated timber (CLT) rocking walls, bridges and buildings; and physical large-scale testing of a one-storey mass timber building with CLT rocking wall with supplemental damping via the PSD at the ATLSS Engineering Research Center at Lehigh University. Supervision: Professor J. Ricles; Professor N. Makris
Sep 2019 – May 2023	**Southern Methodist University**, Lyle School of Engineering, Dept. of Civil and Environmental Engineering, Dallas, TX, USA Graduate Research Assistant & Teaching Assistant • BSc in Civil Engineering CEE 4350: Design of Steel Structures - CEE 1302: Introduction to Civil and Environmental Engineering - CEE 1331: Meteorology - CEE 3310: Computational

Methods for Engineering Applications - CEE 2142: Fluid Mechanics Laboratory - CEE 2342: Fluid Mechanics Lectures
- FE instructor: Geotechnical engineering, Transportation, Dynamics, Mechanics

Mar 2017 – Aug 2019 **City, University of London**, School of Mathematics, Computer Science and Engineering, London, UK
Adjunct Lecturer, Laboratory demonstrator
- MSc in Structural Engineering
  EPM707: Finite Element Methods - EPM712: Design of Steel Structures
- MSc in Temporary Works and Construction Method Engineering
  EPM717: Advanced Structural Analysis and Stability of Structures
- BEng in Civil Engineering
  ET1080: Solid Mechanics - ET2080: Structural Mechanics/ Analysis
- Foundation year engineering laboratories
  Elastic and plastic behaviour of materials

Apr 2016 – Feb 2017 **COSTAIN Engineering & Construction Limited**
Site Bridge Engineer, London Bridge Station Redevelopment Project, London, UK

Sep 2015 – Jul 2016 **OPUS International Consultants (UK) Ltd**
Graduate Bridge Engineer, Hertford, UK

Mar – Aug 2014 **Georginas Architekten**
Site Engineer, Frankfurt am Main, Germany

Aug 2013 – Feb 2014 **Apax Constructions**
Site Engineer, Athens, Greece

Nov 2012 – Jul 2013 **Hellenic Army (Compulsory)**
Site Engineer, Xanthi, Greece

Apr – Oct 2012 **University of Thessaly**
Assistant Site Engineer, Volos, Greece

Apr – Jun 2011 **TO.P.P.O.S. Consulting Engineers S. A.**
Assistant consultant engineer, Intern, Athens, Greece

Publications

Refereed Journal Publications

J13. **KN Kalfas**, and D Forcellini. A closed-form approach to assess the mutual effects between base isolation (BI) and soil-structure interaction (SSI), *Soil Dynamics & Earthquake Engineering,* **207**, pp: 110317, doi: https://doi.org/10.1016/j.soildyn.2026.110317

J12. **KN Kalfas**, L Cao, U El Shamy, JM Ricles, and N Makris (2026). Behavior of pressurized sand dampers in harsh environments: Extreme temperatures and humidity. *ASCE, Journal of Structural Engineering,* **152(7)**, pp: 04026070, doi: https://doi.org/10.1061/JSENDH.STENG-1515

J11. D Forcellini, **KN Kalfas**, and HH Tsang (2026). 3-D numerical modeling of geotechnical seismic isolation system for mitigating liquefaction-induced damage potential. *ASCE, International Journal of Geomechanics,* **26(4)**, pp: 04026044, doi: https://doi.org/10.1061/IJGNAI.GMENG-12709

J10. D Forcellini, and **KN Kalfas** (2025). A framework to quantify the impact of deterioration on the seismic resilience of structures. *Structure and Infrastructure Engineering,* doi: https://doi.org/10.1080/15732479.2025.2591824

J9. **KN Kalfas**, N Vaiana, and N Makris (2025). A rate-independent phenomenological model for the characterization of pressurized sand dampers. *ASCE, Journal of Engineering Mechanics*, **151(4)**, pp: 04025007, doi: 10.1061/JENMDT/EMENG-7959

J8. M Karimipetanlar, U El Shamy, **KN Kalfas**, and N Makris (2024). The influence of particle shape on crushing pattern and energy dissipation within a pressurized sand damper. *Computers and Geotechnics,* **166**, pp: 106020, doi: https://doi.org/10.1016/j.compgeo.2023.106020

J7. M Karimipetanlar, U El Shamy, **KN Kalfas**, and N Makris (2024). Numerical simulations of particle behavior and breakage within a pressurized sand damper subjected to cyclic loading. *ASCE, Journal of Engineering Mechanics,* **150(1)**, pp: 04023106, doi: https://doi.org/10.1061/JENMDT.EMENG-7365

J6. **KN Kalfas**, N Makris, and U El Shamy (2023). Assessment of the design parameters of pressurized sand dampers from component testing. *ASCE, Journal of Engineering Mechanics,* **149(10)**, pp: 04023072, doi: https://doi.org/10.1061/JENMDT.EMENG-7013

J5. D Forcellini, and **KN Kalfas** (2022). Inter-story seismic isolation for high-rise buildings. *Engineering Structures*, **275**, pp. 115175, doi: https://doi.org/10.1016/j.engstruct.2022.115175

J4. **KN Kalfas**, N Ghorbani Amirabad, and D Forcellini (2021). The role of shear modulus on the mechanical behavior of elastomeric bearings when subjected to combined axial and shear loads. *Engineering Structures*, **248**, pp. 113248, doi: https://doi.org/10.1016/j.engstruct.2021.113248

J3. N Makris, and **KN Kalfas** (2021). The eigenvalues of a partially embedded flexural, prismatic column. *Earthquake Engineering & Structural Dynamics*, **50(13)**, pp. 3403-3420, doi: https://doi.org/10.1002/eqe.3515

J2. **KN Kalfas,** SA Mitoulis, and D Konstantinidis (2020). Influence of steel reinforcement on the performance of elastomeric bearings. *ASCE, Journal of Structural Engineering*, **146(10)**, pp: 04020195, doi: https://doi.org/10.1061/(ASCE)ST.1943-541X.0002710

J1. **KN Kalfas**, SA Mitoulis, and K Katakalos (2017). Numerical study on the response of steel-laminated elastomeric bearings subjected to variable axial loads and development of local tensile stresses. *Engineering Structures*, **134**, pp. 346-357, doi: https://doi.org/10.1016/j.engstruct.2016.12.015

Book Chapters

B1. **KN Kalfas**, and D Forcellini (2022). *Analytical formulas of the mechanical behavior of rubber bearings considering the isolator non-linearities and the influence of shear modulus*. Chapter 13 in *Seismic Evaluation, Damage, and Mitigation in Structures*, P Awoyera and I. Mansouri (eds.), Elsevier.

Refereed Conference Publications & Presentations

C15. N Makris, and **KN Kalfas**. (2025). Component testing and phenomenological modelling of the pressurized sand damper, In *Proc. of the 19th World Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures*, September 15–19, 2025, Berkeley, CA

C14. **KN Kalfas**, and N Makris. (2025). Experimental campaign of the rate-independent pressurized sand dampers, In *Proc. of the 10th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, June 15–18, 2025, Rhodes Island, GR

C13. **KN Kalfas**, N Vaiana, and N Makris. (2025). Characterization of the pressurized-sand dampers with a newly developed uniaxial model, In *Proc. of the 10th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, June 15–18, 2025, Rhodes Island, GR

C12. **KN Kalfas**, L Cao, JM Ricles, and N Makris. (2024). Supplemental damping of rocking systems coupled with pressurized sand dampers, In *Proc. of the IABSE Congress "Beyond Structural Engineering in a Changing World"*, September 25–27, 2024, San Jose, CR

C11. **KN Kalfas**, and N Makris. (2024). Component testing of pressurized sand dampers to assess the effect of design parameters, In *Proc. of the IABSE Congress "Beyond Structural Engineering in a Changing World"*, September 25–27, 2024, San Jose, CR

C10. **KN Kalfas**, and N Makris. (2024). Component testing of cost-effective pressurized sand-dampers, In *Proc. of the 18th World Conference of Earthquake Engineering*, June 30–July 5, 2024, Milan, IT

C9. **KN Kalfas**, and D Forcellini. (2023). Seismic response of a 20-story steel MRF structure equipped with inter-story rubber bearings, In *Proc. of the EURODYN 2023, XII International Conference on Structural Dynamics*, July 2–5, 2023, Delft, ND

C8. D Forcellini, and **KN Kalfas**. (2023). 3D Numerical simulations of multi-layered elastomeric bearings (EB) subjected to combined vertical and horizontal loads, In *Proc. of the 9th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, June 12–14, 2023, Athens, GR

C7. **KN Kalfas**, and N Makris. (2022). Estimation of the design parameters of pressurized sand dampers from experiments, In *Proc. of the Engineering Mechanics Institute Conference 2022 (EMI 2022)*, May 31–June 3, 2022, Baltimore, MD — **1st Prize Winner – Dynamics Student Paper Competition**

C6. **KN Kalfas**, SA Mitoulis, and D Konstantinidis. (2021). Quantifying damage in the steel shims of seismic isolation rubber bearings due to support rotation, In *Proc. of the IABSE Congress Ghent "Structural Engineering for Future Societal Needs"*, September 22–24, 2021, Ghent, BE

C5. **KN Kalfas**, and D Forcellini. (2020). A developed analytical non-linear model of elastomeric bearings verified with numerical findings, In *Proc. of the EURODYN 2020, XI International Conference on Structural Dynamics*, June 22–24, 2020, Athens, GR

C4. **KN Kalfas**, A Camara, and B McKinley. (2018). Numerical analysis of wired connections of the reinforcement bars of steel cages: the slash-tying technique, In *Proc. of the 40th IABSE Symposium "Tomorrow's Megastructures"*, September 19–21, 2018, Nantes, FR — **1st Prize Winner – My Thesis in 180s**

C3. **KN Kalfas**, and SA Mitoulis. (2017). Performance of steel-laminated rubber bearings subjected to combinations of axial loads and shear strains, *Procedia Engineering*, **199**, pp. 2979-2984, doi: https://doi.org/10.1016/j.proeng.2017.09.533, In *Proc. of the EURODYN 2017, X International Conference on Structural Dynamics*, September 10–13, 2017, Rome, IT

C2. D Forcellini, SA. Mitoulis, and **KN Kalfas**. (2017). Study on the response of elastomeric bearings with 3D numerical simulations and experimental validation, In *Proc. of the 6th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, June 15–17, 2017, Rhodes Island, GR

C1. **KN Kalfas**, SA Mitoulis, and K Katakalos. (2017). Numerical study on bridge elastomeric bearings subjected to large shear strains with emphasis on local tension, In *Proc. of the 16th World Conference of Earthquake Engineering*, January 9–13, 2017, Santiago, CI

Refereed Conference Publications & Presentations (Extended Abstracts: EA)

EA6. **KN Kalfas**, and N Makris. (2022). Component testing of a sustainable pressurized sand damper for response modification of structures, In *Proc. of the ICONHIC2022, 3rd International Conference on Natural Hazards & Infrastructure*, July 5–7, 2022, Athens, GR

EA5. **KN Kalfas**, and D Forcellini. (2022). Closed-form solutions for the description of stability of elastomeric bearings, In *Proc. of the ICONHIC2022, 3rd International Conference on Natural Hazards & Infrastructure*, July 5–7, 2022, Athens, GR

EA4. **KN Kalfas**, and N Makris. (2022). Testing of the prototype and sustainable pressurized sand damper for the response modification of structures, In *Proc. of the 12th National Conference on Earthquake Engineering (12NCEE)*, June 27–July 1, 2022, Salt Lake City, UT

EA3. **KN Kalfas**. (2022). Pressurized sand damper as a sustainable solution for the response modification of structures, In *Proc. of the 24th Young Researchers' Conference, Institution of Structural Engineers (24 YRC IStructE)*, March 15, 2022, Virtual-London, UK — **2nd Prize Winner – Poster Competition**

EA2. IS González, and **KN Kalfas**. (2018). An ecological sanitation project towards the well-being of the patients and the sustainability of the Kumi Hospital in Uganda, In *Proc. of the Global Engineering Congress (GEC2018)*, October 22–26, 2018, London, UK — **2nd Prize Winner**

EA1. E Efthymiou, **KN Kalfas**, and I Flower. (2017). Engineers for Overseas Development (EfOD): Inspiration and development of young designers through humanitarian aid, In *Proc. of the IABSE Conference Bath*, April 19–20, 2017, Bath, UK

Conference Presentations (Abstracts: A)

A9. **KN Kalfas**, N Vaiana, and N Makris. (2025). Phenomenological modeling of the pressurized sand dampers, In *Proc. of the Engineering Mechanics Institute Conference 2025 (EMI 2025)*, May 27–30, 2025, Anaheim, CA

A8. **KN Kalfas**, L Cao, JM Ricles, and N Makris. (2025). Seismic hazard mitigation of a CLT rocking wall−pressurized sand damper system: A real-time hybrid simulation approach, In *Proc. of the Engineering Mechanics Institute Conference 2025 (EMI 2025)*, May 27–30, 2025, Anaheim, CA

A7. **KN Kalfas**, and N Makris. (2024). The pressurized sand-damper: A low-cost, long-stroke, rate/temperature independent energy dissipation device, In *Proc. of the Engineering Mechanics Institute Conference 2024 (EMI 2024)*, May 28–31, 2024, Chicago, IL

A6. **KN Kalfas**, N Vaiana, and N Makris (2024). Characterization of pressurized sand dampers response with the Vaiana-Rosati model, In *Proc. of the Engineering Mechanics Institute Conference 2024 (EMI 2024)*, May 28–31, 2024, Chicago, IL

A5. L Cao, **KN Kalfas**, N Makris, and JM Ricles. (2023). Real-time hybrid simulation of a CLT rocking wall system equipped with pressurized sand dampers for seismic hazard mitigation, In *Proc. of the Engineering Mechanics Institute Conference 2023 (EMI 2023)*, June 6–9, 2023, Atlanta, GA

A4. **KN Kalfas**, and N Makris. (2023). Design and component testing of pressurized sand-dampers: Effects of the design parameters, In *Proc. of the Engineering Mechanics Institute Conference 2023 (EMI 2023)*, June 6–9, 2023, Atlanta, GA

A3. M Karimipetanlar, U El Shamy, **KN Kalfas**, and N Makris. (2023). Numerical simulations of particle behavior and breakage within a pressurized sand damper subjected to cyclic loading, In *Proc. of the Engineering Mechanics Institute Conference 2023 (EMI 2023)*, June 6–9, 2023, Atlanta, GA

A2. **KN Kalfas**, and N Makris. (2022). Design and component testing of pressurized sand dampers for the response modification of structures, In *Proc. of the 13th HSTAM 2022 International Congress on Mechanics*, August 24–27, 2022, Patras, GR

A1. U El Shamy, E Sabi, **KN Kalfas,** and N Makris. (2022). Characterization of energy dissipation during cyclic loading of a sand damper, In *Proc. of the Engineering Mechanics Institute Conference 2022 (EMI 2022)*, May 31–June 3, 2022, Baltimore, MD

Poster Presentations (Posters: P)

P7. **KN Kalfas**. (2024). Design and component testing of the long-stroke and rate-independent pressurized sand damper, in *Natural Hazards Research Summit 2024*. DesignSafe-CI. https://doi.org/10.17603/ds2-fdr3-5963; May 14–15, 2024, College Station, MD

P6. **KN Kalfas**, and D Forcellini. (2024). Seismic hazard mitigation of tall buildings with mid-level isolation, *EERI 2024 Annual Meeting*, April 9–12, 2024, Seattle, WA

P5. **KN Kalfas**, L Cao, JM Ricles, and N Makris. (2024). Seismic response of rocking structures equipped with pressurized sand dampers through real-time hybrid simulations, *2nd NHERI Computation Symposium*, February 1–2, 2024, Los Angeles, CA

P4. **KN Kalfas**. (2022). Can we protect our structures sustainably against natural hazards?, *Research & Innovation Week*, March 28–April 1, 2022, SMU, Dallas, TX, USA — **1st Prize Winner**

P3. **KN Kalfas**. (2021). An innovative and sustainable solution for the protection of buildings and bridges: The pressurized sand damper, *Lyle Research Days 2021*, November 11–12, 2021, SMU, Lyle School of Engineering, Dallas, TX, USA — **2nd Prize Winner**

P2. **KN Kalfas**. (2021). The dynamics of utility poles by considering soil-structure interaction (SSI), *SMU Research Days 2021*, March 3, 2021, Southern Methodist University, Dallas, TX, USA — **1st Prize Winner**

P1. **KN Kalfas**, B McKinley, and A Camara. (2018). The strength and stability of steel reinforcement cages: Improving safety of construction site personnel by avoiding misunderstood collapses during construction, *STEM for Britain 2018 Exhibition*, March 12, 2018, Houses of Commons, London, UK

Technical Reports

TR2. JA Dieppa Ortiz, L Cao, JM Ricles, **KN Kalfas**, and N Makris. (2022). *Real-time hybrid simulations of a self-centering CLT wall system with pressurized sand dampers*, Research Experiences for Undergraduates (REU), Natural Hazards Engineering Research Infrastructures (NHERI) 2022, DesignSafe-CI, doi: https://doi.org/10.17603/ds2-t4a3-dx65

TR1. E Roman Cardona, L Cao, JM Ricles, **KN Kalfas**, and N Makris. (2022). *Characterization test of pressurized sand damper using the Bouc-Wen model*, Research Experiences for Undergraduates (REU), Natural Hazards Engineering Research Infrastructures (NHERI) 2022, DesignSafe-CI, doi: https://doi.org/10.17603/ds2-8vxr-tb47

Invited speaker

2024 Lehigh University, ATLSS Experimental Facilities; NHERI Lehigh Seminar Series: "*Design, component testing and application of the low-cost, robust, resilient, and sustainable pressurized sand damper for the protection of civil structures*", Webinar, October 31st, 2024

2024 University of Naples Federico II; Short course on *Hysteretic Mechanical Systems*: "*Pressurized sand dampers: experimental tests and phenomenological modeling*", Naples, IT, April 29th, 2024

2023 Lehigh University, ATLSS Experimental Facilities; NHERI Lehigh RTMD Researcher Workshop: "*Seismic hazard mitigation with pressurized sand dampers and their response in extreme temperatures*", Bethlehem, PA, November 16th, 2023

2022 Ministry of Infrastructure and Water Management, Dept. of Bridges and Structures (Netherlands); Seminar: Earthquakes and Bridges: "*Response-modification devices – Review of current challenges and advances*", Virtual, March 14th,2022

2021 Università degli Studi della Repubblica di San Marino, Dept. of Civil and Environmental Engineering; Seminar series: "*Seismic isolation – Review of current challenges of steel reinforced elastomeric bearings*", San Marino, SM, June 4th, 2021

2019 Temporary Works forum; Lecture: "*Strengthening and stability of steel reinforcement cages at their temporary state – Progress and future*", City, University of London, London, UK, March 20th, 2019

2017 Lunch & Learn with JACOBS Chelmsford office; Seminar Series: "*Alleviating poverty through volunteering and engineering*", JACOBS, Chelmsford, UK, July 14th, 2017

Research Grants (awarded and pending)

4. Project Title: **Development of a self-centering CLT rocking wall coupled with pressurized sand dampers for functional recovery** (1/01/2024 — 12/31/2024)
   PI: Konstantinos N. Kalfas
   Funding Agency: *American Society of Civil Engineers, Structural Engineering Institute (ASCE, SEI)*
   Award amount: $4,500.00
3. Project Title: **Commercialization of a sustainable pressurized sand damper for earthquake and wind engineering** (11/01/2021 — 09/01/2024)
   PI: Nicos Makris
   Funding Agency: *Hart Institute for Technology, Innovation and Entrepreneurship (SMU HITIE)*
   Award amount: $70,000.00
   Role: Researcher and proposal co-author
2. Project Title: **Investigation of a novel pressurized sand damper for sustainable seismic and wind protection of buildings** (10/01/2020 — 09/30/2023); Grant No CMMI 2036131
   PI: Nicos Makris
   Funding Agency: *National Science Foundation (NSF)*
   Award amount: $616,827.00
   Role: Researcher
1. Project Title: **Rocking isolation of multistorey, low-strength confined masonry buildings in developing countries** (02/01/2020 — 08/31/2020)
   PI: Nicos Makris
   Funding Agency: *Hunt Institute Global Development Lab (SMU HU-GDL)*
   Award amount: $10,000.00
   Role: Graduate Advisor

Distinctions and awards

2025 **NSF Travel Grant/Award**: Attend the 2025 Natural Hazard Engineering Research Infrastructure (NHERI) Summer Institute for Early-Career Faculty

2024 **NSF Primary Travel Award**: Attend the Natural Hazards Research Summit; College Park, MD; funds provided by the NSF (Publication: P7)

2024 **Registration Grant and Travel Award**: Attend the 2024 EERI Annual Meeting; Seattle, WA; funds provided by the U.S. Federal Emergency Management Agency (FEMA), and Computers & Structures, Inc. (CSI) (Publication: P6)

2024 **Travel Grant: NSF NHERI SimCenter at UC Berkeley;** 2nd NHERI Computation Symposium; UCLA Samueli School of Eng, Los Angeles, CA (Publication: P5)

2023 **ASCE O. H. Ammann Research Fellowship in Structural Engineering**

2023 **SMU Dean's Postdoctoral Research Fellowship**, SMU, TX, USA

2023 **Travel Grant:** EMI 2023; Atlanta, GA; funds provided by the Moody School of Graduate and Advanced Studies at SMU (Publication: A4)

2022 **ASCE EMI 2022: 1st Prize Award** for the Dynamics Student Paper Competition. Title: "Estimation of the design parameters of pressurized sand dampers from experiments" (Publication: C7)

2022 **Outstanding Graduate Student Award** in the Civil and Environmental Engineering Department of the SMU Lyle School of Engineering

2022 **Travel Grant:** EMI 2022; Baltimore, MD; funds provided by the Moody School of Graduate and Advanced Studies at SMU (Publication: C7)

2022	**SMU Dean's Award Winner: 1st Prize Winner** in the Department of CEE during the 2022 Research and Innovation Week for the best poster presentation. Title: "Can we protect our structures sustainably against natural hazards?" (Publication: P4)
2022 – 2023	**Hart Institute for Technology Innovation and Entrepreneurship Fellowship**: Due to my contribution to SMU Lyle School of Engineering and to the commercialization of the pressurized sand damper
2022	**24th Young Researchers' Conference, Institution of Structural Engineers (24 YRC IStructE): 2nd Prize Award** for the best poster presentation. Title: "Pressurized sand damper as a sustainable solution for the response modification of structures" (Publication: EA3)
2022	**Registration Grant and Travel Award**: Attend the 12th National Conference on Earthquake Engineering (12NCEE) and the Annual EERI Meeting; Salt Lake City, UT; funds provided by the EERI, the U.S. FEMA, and CSI (Publication: EA4)
2022	**EERI Friedman Family Visiting Professionals Program**: Funds provided by the EERI to the newly established EERI SMU Student Chapter to cover the expenses of the visit of a Professional earthquake engineering practitioner. Dr. Sissy Nikolaou from NIST visited and delivered a lecture to SMU
2021	**Travel Grant/Award**: Funds provided by the Lehigh University – NHERI Experimental Facility to attend a 3-day Research Planning Workshop, to perform training and pilot testing associated with my research interest and applications with the RCPSS (Real-time Cyber-Physical Structural Systems Laboratory)
2021	**SMU Lyle School of Engineering: 2nd Prize Award** during the 2021 Lyle Research Days for the best poster presentation. Title: "An innovative and sustainable solution for the protection of buildings and bridges: The pressurized sand damper" (Publication: P3)
2021	**SMU Dean's Award Winner: 1st Prize Winner** in the Department of CEE during the 2021 SMU Research Days for the best research presentation. Title: "The dynamics of utility poles by considering soil-structure interaction (SSI)" (Publication: P2)
2019 – 2020 & 2021 – 2022	**Research Assistant Fellowship:** Department of CEE, Southern Methodist University
2020	**Research Assistant Fellowship:** Department of CEE, SMU, funds provided by Hunt Institute Global Development Lab for the project "Rocking isolation of multistory confined masonry buildings in developing countries"
2018	**Global Engineering Congress: 2nd Prize award** of a paper among more than 150 contributions to be part of the 50th Anniversary booklet; the booklet was released during the Global Engineering Congress (GEC2018), London, UK (Publication: EA2)
2018	**Research Centre in Civil Engineering Structures (City, University of London):** Scholarship of excellence towards the attendance and presentation to the 40th IABSE Symposium "Tomorrow's Megastructures", Nantes, FR (Publication: C4)
2018	**1st Prize Winner** of the session "My Thesis in 180s" during the 40th IABSE Symposium "Tomorrow's Megastructures"; Nantes, FR (Publication: C4)
2018	**IABSE BG sponsorship** for my presentation to the 40th IABSE Symposium "Tomorrow's Megastructures", Nantes, FR (Publication: C4)
2018	**STEM for Britain Exhibition 2018:** Nomination of my research on the stability of steel reinforcement cages at their temporary state to be presented at the Houses of Commons, at Westminster, London, UK (Publication: P1)
2018	**City, University of London Scholarship:** University scholarship for the MA in Academic Practice course, EDM120 – Learning, Teaching and Assessment
2017	**Faculty Research Support Fund (FRSF):** A University of Surrey Award for the submission of my work at the X EuroDyn Conference in Rome, IT (Publication: C3)
2017	**Study Assistance Scheme (SAS):** A COSTAIN Group PLC Award towards attending and presenting my work during the 16WCEE in Santiago, CL (Publication: C1)
2006	**Academic Scholarship:** A fund award for entering the School of Civil Engineering of the NTUA among the top 20%

Student Mentorship

Graduate Students

MSc – E. Velle, Numerical study on response of elastomeric bearings under combined loads, Sep 2016, (Co-supervised with Dr S. Mitoulis, Grade: 76/100, Distinction) University of Surrey, UK
MSc – F.T. Salvador, Numerical study on response of the behaviour in elastomeric bearings subjected to variable axial loads and development of local tensile stresses, Sep 2016, (Co-supervised with Dr S. Mitoulis, Grade: 70/100, Distinction) University of Surrey, UK

Undergraduate Students

BSc, Honors Research Course – J. Rivera, Numerical modeling of elastomeric bearings to accommodate displacement demands, April 2025, 10th Annual UT Tyler Lyceum, The University of Texas at Tyler, TX
BSc – A. Alawy, What is the strength and stiffness of tied connections used in reinforcement cages?, Jul 2019, (Co-supervised with Dr B. McKinley, Grade: 70/100, Distinction) City, University of London, UK

REU Students (Research Experience for Undergraduates)

Jackson Delmer, Fall 2021 & Spring 2022
Juliana Roller, Spring 2022
Josué Dieppa Ortiz, Summer 2022
Eiry Román Cardona, Summer 2022

Professional Memberships

American Society of Civil Engineers (ASCE): Member (Since 2017)
Earthquake Engineering Research Institute (EERI): Member (Since 2021)
International Association for Bridge and Structural Engineering (IABSE): Individual Member (Since 2016)
Association of Civil Engineers in Greece: General Member (Since 2012)
Higher Education Academy (HEA), UK: Associate Fellow (Since 2018)

Professional Licensure

Engineer in Training (E.I.T.), Texas (May 2021)
Institution of Civil Engineers (ICE), UK: Chartered Engineer (CEng MICE) (Since 2021)
Technical Chamber of Greece: Chartered Engineer (Since 2012)

Professional Service

Technical Committee Work

IABSE: Member of Target Group 1.1: Improving Seismic Resilience of Reinforced Concrete Structures (Elected Member – Since 2024)
IABSE: Member of Target Group 4.1: Bearings and Joints (Elected Member – Since 2018)

Professional Committee Work

2025 – Present	Member of *ASCE Dynamics Committee*
2021 – Present	Member of *EERI* Young Members Committee (YMC)
2022 – 2023	Chair of the *EERI YMC Webinars*
2021 – 2023	Member of the *Natural Hazards Engineering Research Infrastructure (NHERI)* Graduate Student Council (GSC)
2021 – 2023	Member of the *EERI SESI Classroom Education and Outreach* Committee (committee dissolved 2023)
2021 – 2023	Founder and Chair of the *EERI SMU Student Chapter*
2018 – 2019	Member of the *IABSE British Group* Executive Committee (May 2018 – Dec 2019)
2016 – 2023	Member of the *IABSE Young Engineers Program* (*YEP*) Board (2016 – 2023)
2016 – 2017	Evening Seminars Organizer of the *ICE Graduates & Students* Committee

Mini-Symposia/ Sessions Organizer in Conferences and Member of Scientific Committees

Planning and organization of a Mini-Symposium: "Experimental mechanics in the age of big data: design, sensing, and integration", *EMI2026*, Boulder, CO, June 2-5, 2026
Planning and organization of a Mini-Symposium: "Innovative response modification methods and devices for resilient structures and infrastructure", *EMI2026*, Boulder, CO, June 2-5, 2026
Planning and organization of a Mini-Symposium: "Dynamic response of engineering structures: experimental techniques, mathematical models and design methods", *COMPDYN2025*, Rhodes Island, GR, June 15-18, 2025

Planning and organization of a Mini-Symposium: "Innovative response modification methods and devices for resilient structures and civil infrastructures: Experimental, mathematical, and numerical advances", *EMI2025*, Anaheim, CA, May 27-30, 2025
Member of Scientific Committee: *IABSE Congress "Beyond Structural Engineering"*, San Jose, CR, September 25-27, 2024
Planning and organization of a Special Session: "Recent advances in response modification devices and strategies", 18th *World Conference on Earthquake Engineering* (18*WCEE*), Milan, IT, June 30-July 5, 2024
Planning and organization of a Special Session: "Eco-friendly systems, devices, and metamaterials for structural vibration control", *EMI2024*, Chicago, IL, May 28-31, 2024
Planning and organization of a Special Session: "Recent advances in response modification devices and strategies", *EMI 2023*, Atlanta, GA, June 6-9, 2023
Member of Scientific Committee: *IABSE Symposium "Long Span Bridges"*, Istanbul, TR, April 26-28, 2023
Member of Scientific Committee: *IABSE Congress "Bridges and Structures: Connection, Integration and Harmonisation"*, Nanjing, CH, September 21-23, 2022
Planning and organization of a Special Session: "Numerical simulations of resilient systems subjected to natural hazards", *ICONHIC2022, 3rd International Conference on Natural Hazards & Infrastructure*, Athens, GR, July 5–7, 2022
Member of Scientific Committee: *EERI, 12th National Conference on Earthquake Engineering*, Salt Lake City, UT, June 27-July 1, 2022
Planning and organization of a Special Session: "Recent advances in response modification devices and strategies", *Engineering Mechanics Institute (EMI) Conference 2022*, Baltimore, MD, May 31–June 3, 2022
Member of Scientific Committee: *IABSE Congress "Structural Engineering for Future Societal Needs"*, Ghent, Belgium, September 22-24, 2021
Member of Scientific Committee: *IABSE Congress "Resilient Technologies for Sustainable Infrastructures"*, Christchurch, NZ, February 3-5, 2021

Referee Work – Reviewer in Engineering Journals

2024 – Present *Structural Engineering*, ASCE
2024 – Present *Engineering Mechanics*, ASCE
2023 – Present *Engineering Structures*, Elsevier
2023 – Present *Structures*, Elsevier
2024 – Present *Soil Dynamics and Earthquake Engineering*, Elsevier
2024 – Present *Bridge Engineering*, ICE
2024 – Present *Buildings*, MDPI
2024 – Present *Applied Sciences*, MDPI
2024 – Present *Materials*, MDPI
2024 – Present *Research on Engineering Structures and Materials*, MIM

Advisory Board Member

2024 – Present *Research on Engineering Structures and Materials*, MIM
2024 – Present *Bridge Engineering*, ICE (Early Career Reviewer Board)

Other

2025 Early Career Panelist for the 2025 *NHERI REU* Panel/Meeting (January 2025)
2024 Early Career Panelist for the 2024 *NHERI REU* Panel/Meeting (July 2024)
2024 Judge to the Seismic Design Competition by *EERI* during the *EERI 2024 Annual Meeting*, April 9–12, 2024, Seattle, WA
2019 – 2020 *SMU Hunt Institute Global Development Lab*: Graduate Advisor
2016 – 2019 *STEM* Ambassador, UK
2015 – 2019 *Engineers for Overseas Development (EfOD)* – London Branch Chair (Jan 2017 – Mar 2018)
Project manager/ leader and structural engineer for the *eco-sanitation project* of the Kumi Hospital, Kumi District, Uganda

Workshops/ Training

2024 EERI AM Reconnaissance Training Workshop (Attendee): instruction in post-earthquake reconnaissance tools and techniques, such as documenting perishable data on geological, geotechnical, structural, and lifelines impacts; utilizing instruments, survey tools, and mobile-based software apps in the field; understanding resources for sharing, publishing, and archiving reconnaissance data; and dealing with the methodological and ethical dimensions of rapid-response research in post-disaster contexts. The workshop will feature presentations from key organizations in the reconnaissance community as well as a presentation from the Washington Geological Survey introducing the multi-hazard Washington Geologic Hazards Clearinghouse, a new framework for coordinating reconnaissance following earthquake, tsunami, landslide, and volcano events impacting Washington State.; April 9th, 2024

Lehigh University; NHERI Experimental Facility (Attendee): NHERI Lehigh Researcher Workshop: Meeting the challenges of natural hazards mitigation through advanced simulation; December 8-10th, 2021

Personal skills and competences

Software packages: ABAQUS/ CAE (FEA), SAP2000 (FEA), OpenSees

Design Software: AutoCAD (CAD), Formian (Configuration of Trusses), SolidWorks

Programing languages: LaTex, MatLab, Python, Mathematica

Languages: Greek (Native speaker), English (C2 CPE-University of Michigan), German (B2 Goethe Zertifikat)