January 24th, 2026

CURRICULUM VITAE

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(Nationality: Italian - naturalized US Citizen on July 9th, 2015)

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1. EDUCATION / EMPLOYMENT HISTORY

1.1. Education

2001	**Doctor of Philosophy** ("Dottore di Ricerca") in Structural Engineering, University of Trieste. *Doctoral program*: "Design and Preservation of Structures". **Dissertation title:** "Wind-Structure Oscillation on Long-span Suspension Bridges" (in English). Advisor: Prof. P. D'Asdia, University of Chieti-Pescara (Italy); co-advisors: Profs. N. P. Jones and R. H. Scanlan, Johns Hopkins University, Baltimore (MD); Prof. V. Sepe, Univ. of Chieti-Pescara.
1997	**Five-year Diploma** ("laurea") with honors in Civil Engineering–Structures, from the University of Trieste, Faculty of Engineering. **Thesis (topic):** long-span bridge aeroelasticity.

1.2. Academic Accreditations

May 8, 2019 – May 8, 2031	**Full Professor** ("Professore Prima Fascia"), National Scientific Habilitation, Scientific Discipline ICAR 08/B2, Civil Engineering/Structural Mechanics ("Scienza delle Costruzioni"), Directorial Decree ("Decreto Direttoriale") 2175/2018, Ministry of Instruction, University and Research (MIUR), Italy.
May 7, 2019 – May 7,	**Full Professor** ("Professore Prima Fascia"), National Scientific Habilitation, Scientific

2031	Discipline ICAR 08/B3, Civil Engineering/Structural Design ("Tecnica delle Costruzioni"), Directorial Decree ("Decreto Direttoriale") 2175/2018, Ministry of Instruction, University and Research (MIUR), Italy. *Renewal of qualification below.*
2013 – Dec. 11, 2019	**Full Professor** ("Professore Prima Fascia"), National Scientific Habilitation, Scientific Discipline ICAR 08/B3, Civil Engineering/Structural Design ("Tecnica delle Costruzioni"), Directorial Decree ("Decreto Direttoriale") 222/2012, Ministry of Instruction, University and Research (MIUR), Italy. *Qualification expired in 2019.*

1.3. Employment History: Primary Academic Position

Sept. 2022-present	**Full Professor with Tenure**, Department of Civil and Environmental Engineering, Northeastern University, Boston, Massachusetts.
Sept. 2011-August 2022	**Associate Professor with Tenure**, Department of Civil and Environmental Engineering, Northeastern University, Boston, Massachusetts.
January 2005-August 2011	**Assistant Professor**, Department of Civil and Environmental Engineering, Northeastern University, Boston, Massachusetts.
July 2002-Dec. 2004	**Post-doctoral Research Associate**, Department of Civil and Environmental Engineering, University of Illinois at Urbana-Champaign (UIUC). Activities: wind engineering (supervisor: Prof. N.P. Jones); development of operations and management plan for the NEES MUST-SIM facility (supervisors: Profs. A. Elnashai and B.F. Spencer Jr.)
April 2001-June 2002	**Post-doctoral Fellow**, Department of Civil Engineering, Johns Hopkins University, Baltimore, MD (JHU).

1.4. Employment History: Secondary Academic Affiliations and Visiting Positions

June 2026 (forthcoming)	**Visiting Professor**, Department of Structural and Geotechnical Engineering, University of Rome Sapienza, Rome, Italy.
December 2025	**Visiting Professor**, Department of Architecture, Design and Urban Planning, University of Sassari – Alghero, Italy.
December 2024	**Visiting Scholar**, Department of Architecture, Construction and Design, Polytechnic University of Bari, Italy.
June 2024	**Visiting Professor**, Department of Civil and Environmental Engineering, University of Perugia, Italy.
January – May 2024	**Visiting Professor**, Department of Civil, Environmental and Mechanical Engineering, University of Trento, Italy (on sabbatical leave from NU).
May 2023	**Visiting Professor**, Department of Civil, Chemical and Environmental Engineering, Polytechnic University of Genoa, Italy.
June 2022	**Visiting Professor**, Department of Engineering, University of Campania "L. Vanvitelli", Aversa, Caserta, Italy.
July 2021 - present	**Affiliate Faculty Member**, Institute for Experiential Artificial Intelligence (IEAI), Northeastern University, Boston, Massachusetts.
May/June 2020	**Visiting Professor**, Department of Civil, Environmental and Mechanical Engineering, University of Trento, Italy (virtual).
2017 - 2020	**Affiliate Faculty Member**, Department of Mechanical and Industrial Engineering, Northeastern University, Boston, Massachusetts.
2019-present	**Member of the International Faculty Board (Affiliated Faculty)**, International Doctoral Program in Civil and Environmental Engineering, University of Perugia, Perugia, Italy.
2013–2015	**Research Fellow**, Department of Civil, Environmental and Mechanical Engineering, University of Trento, Italy (on sabbatical leave from NU, October – December 2014).

1.5. Employment History: Academic Activities prior to Completion of Doctorate Degree

June 2000-July 2000	**Visiting Graduate Student**, Department of Civil Engineering, Johns Hopkins University, Baltimore (JHU). Aerodynamic/aeroelastic experimental testing in the "S.

	Corrsin" Wind Tunnel.
Sept. 1999-Mar. 2000	**Visiting Graduate Student** ("Visiting Scholar"), Department of Civil Engineering (JHU). Preparation for aerodynamic/aeroelastic tests in the "S. Corrsin" Wind Tunnel; also attended graduate courses.
1998	**Title of "Subject Expert"** (equivalent to Instructor) in Structural Design, Faculty of Engineering, University of Trieste, Italy.
1997-2000	**Graduate Research Assistant**, Dept. of Civil Engr., Univ. of Trieste, Italy

1.6. Employment History: Engineering Consulting and Others

2002-2003	**Structural Engineering Consultant** (in a team). Executive design of a road by-pass in the City of Muggia, Italy (design of a one-kilometer underwater by-pass). Design team: Geodata Engineering, Turin, Italy, COWI Engineers, Lyngby, Denmark, Steam Engineering, Padova, Italy and Gambirasio Architecture, Bergamo, Italy).
2000-2001	**Traffic-induced Noise Engineer** (consultant in a team). Various projects: Italian National Route 415 (Paullese) between Crema and Spino d'Adda, Italy; New Northern Beltway of Cremona, Italy.
2001	**Road Design** (in a team). For: *a)* junction between the Italian National Routes 14 & 55; *b)* alternate by-pass to the Italian National Route n.14 from km 161 to km 164"; Region Friuli-Venezia Giulia, Italy.
2000	**Transportation Engineering Consultant** (in a team). Environmental Impact Study for the completion of the Siracusa-Gela Motorway, from Rosolini to Gela East (80 km). Motorway Administr. of Sicily, Italy.
1999	**Traffic Engineering Consultant** (in a team). Traffic Monitoring Campaign. Province of Gorizia, Italy (monitoring of 20 stations)
1999	**Engineering Consultant** (in a team). Traffic and Revenue Study. Additional Report", for the feasibility of the Zagreb-Gorican Trans-European Motorway (Croatia); Astaldi Engineering, Rome.
1997-1998	**Coast Guard Officer** (Ensign, military duty). Commercial Port of Chioggia (Venice, Italy) after completing the 97th/L Reserve Course at Italian Navy Academy of Livorno. Maritime Safety Control surveys.

1.7. Professional Recognition: Awards and Study Fellowships

Awards

2025	**"Bilal M. Ayyub Research Prize"** for Risk and Uncertainty in Engineering Systems for the Best Paper published in 2024 on ASCE-ASME Journal of Risk & Uncertainty in Engineering Systems, Part B: Mechanical Engineering.
2021	**2019 Best Journal Paper Award,** American Association for Wind Engineering (AAWE) for J76, by Cui & Caracoglia *A New Stochastic Formulation for Synthetic Hurricane Simulation over the North Atlantic Ocean*
2020	**Fellow** (F.ASCE), American Society of Civil Engineers (held by 3% of ASCE members only).
2019	**Global Experience Office (GEO), Northeastern University,** Faculty Fellow 2019.
2015	**Elsevier, Certificate of Outstanding Contribution in Reviewing.** Journal of Sound and Vibration, awarded May 2015.
2014	**Elsevier, Certificate of Excellence in Reviewing.** Engineering Structures 2013.
2014	**Elsevier, Certificate of Excellence in Reviewing.** Journal of Wind Engineering and Industrial Aerodynamics 2013.
2010	**ASCE Outstanding Reviewer Award.** ASCE Journal of Bridge Engineering.
2009	**Faculty Early CAREER Development Award**. NSF.

Study Fellowships

2004	**Recipient** of a travel fellowship. Engineering Mechanics Division of the American Society of Civil Engineers to attend the 17th EM Conference.

1999, 2000 **Recipient** of two one-month study fellowships, "Short-Term Mobility Program of Researchers". Italian National Research Council (CNR), Department of International Exchanges (as a Visiting Scholar at JHU).

1.8. Professional Engineering Registration

1998 Italian National Civil Engineering Registration, Trieste No. 2003
(note: while licensure still standing, actual affiliation and registration with the civil engineering board has been inactive since 2016; active registration is incompatible with LC's current residence in a country other than Italy).

2. SCHOLARSHIP / RESEARCH

2.1. Research Interests

Structural dynamics, wind engineering: long-span bridges, wind engineering: tall buildings, climate change effects in structural wind engineering, use of artificial intelligence and machine learning in structural wind engineering, wind energy and wind-based energy harvesting systems, fluid-structure interaction: wind borne debris for performance-based wind engr., fluid-structure interaction: other topics, cable/stay and cable network dynamics.

2.2. Publications

According to Google Scholar (accessed on 01/23/2026) L. Caracoglia has 4150 citations with an H-index =39 and i10-index = 92.
*According to 2024 Stanford University Annual Assessment of Author Citations: L. Caracoglia is **among the top 2 percent of the most-cited worldwide scientists** with single-year impact in various disciplines https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/7*
*Graduate and undergraduate student co-authors, who are current or former students supervised by L. Caracoglia, are respectively denoted by superscripts "**" and "*"; post-doctoral fellows supervised by L. Caracoglia are denoted by "***". For Refereed Book Chapters ("BC") and Journal Publications ("J") the corresponding author (or research leader) is denoted by "†". For Conferences ("C") and Posters ("PS") the lead presenter is indicated by "‡".*

Refereed Book Chapters (BC)

Book chapters, listed in this section, are "full research papers", which are peer reviewed and listed on peer-reviewed digital databases after publication

BC4. Caracoglia, L., *"Application of Artificial Neural Networks to Model the Wind-Induced Dynamics of Tall Tower Structures,"* in **22nd International Advanced School on Wind Engineering (IAS22)**, ed. by Yang, Q.-S., and Tamura, Y., Chongqing University, Chongqing, China, August 13-14, 2025, pp. 107-129.

BC3. Caracoglia, L., "*Recent Studies on the Structural Resilience against Nonstationary, Thunderstorm Wind Loads,*" **Proceedings of the 5th Global Summit of the Global Alliance of Disaster Research Institutes (GADRI) (GSRIDRR 2021)**, Disaster and Risk Research: GADRI Book Series, Ed. by H. Tatano and P. Kovacs, Springer Nature, Singapore, ISBN: 978-981-96-0478-4 (print), 2025, pp. 91-113 (23 pages) https://doi.org/10.1007/978-981-96-0479-1_8

BC2. Caracoglia, L., *"Resilience of Structural Systems Damaged by Thunderstorm Wind Hazards,"* **Book Publication "Thunderstorm Outflows and their Impact on Structures"**, Ed. by M. P. Repetto and M. Burlando, Genoa University Press, Genoa, Italy, ISBN: 978-88-3618-210-7 (e-book), 2023, pp. 83-86 (4 pages).

BC1. Caracoglia, L., *"Investigation on a Generalized Intervention Cost Function to Examine Wind-Induced Damage on Tall Buildings,"* **Special ASCE Book Publication "Wind Engineering in Natural Hazards"**, Ed. by A. M. Aly and E. Dragomirescu, Amer. Society of Civil Eng. (ASCE), Reston, VA, USA, ISBN: 978-0-7844-1515-3 (print), 2018, pp. 25-53 (29 pp.), https://ascelibrary.org/doi/10.1061/9780784415153.ch02.

Refereed Journal Publications (J)

Published (please refer to Table 1 at the end of this list for Impact Factors).

J111. La, T.-K.**, Bernal, D., and Caracoglia, L.†, "*Stochastic Subspace Identification plus Kalman Filter for Ambient Sensor Noise Reduction in Wind Tunnel Test,*" **Journal of Wind Engineering and Industrial Aerodynamics**, Vol. 267, 2025, 106256 (14 pages), DOI: https://doi.org/10.1016/j.jweia.2025.106256.

J110. Caracoglia, L., Crisman, D. and Noè, S., "*Wind Pressure and Load Analysis on Large Building Roofs: Applicability of Database-Assisted Design to Eurocode 1 and Italian Standards,*" **ASCE Journal of Structural Engineering**, Vol. 151, No. 11, 2025, 04025193 (11 pages), DOI: https://doi.org/10.1061/JSENDH.STENG-14967

J109. Caracoglia, L., "*Long-span Bridge Flutter Analysis in Non-Stationary Downburst Outflows by Floquet Theory,*" **Journal of Wind Engineering and Industrial Aerodynamics**, Vol. 264, 2025, 106138 (13 pages), DOI:

https://doi.org/10.1016/j.jweia.2025.106138

J108. Caracoglia, L., "*Examining the Main Properties of a "Meso-Scale" Torsional Flutter Harvester in Gusty Winds,"* **Wind, MDPI**, Special Issue "Selected Papers from ERCOFTAC SIG41 Symposium on 'Fluid–Structure Interaction in Complex Systems: From Aero to Astro'", Vol. 5, No. 2, 2025, 10 (15 pages), DOI: https://www.mdpi.com/2674-032X/5/2/10.

J107. Giaccu, G.-F. and Caracoglia, L.†, "*Messina Strait Bridge Flutter Control by Multi-Unit Gyroscopic Stabilizer: Deterministic and Stochastic Analyses,"* **ASCE Journal of Bridge Engineering**, Vol. 30, No. 5, 2025, 06025001 (11 pages), DOI: https://doi.org/10.1061/JBENF2.BEENG-7059

J106. Caracoglia, L., "*Stochastic Flutter of Wind Turbine Blades Under Turbulence and Load Perturbations: Implications on Offshore Wind Energy,"* **Journal of Wind Engineering and Industrial Aerodynamics**, Vol. 259, 2025, 106041 (12 pages), DOI: https://doi.org/10.1016/j.jweia.2025.106041

J105. Caracoglia, L. , "*Exploiting Stochastic Resonance Principles to Influence the Efficiency of a Torsional-Flutter Energy Harvester in Turbulent Winds,"* **ASME Letters in Dynamic Systems and Control**, Vol. 5, No. 2, 2025, 021006 (7 pages), DOI: https://doi.org/10.1115/1.4067394

J104. Qin, Y.** and Caracoglia, L.†, "*Turbulence and Flapping Pivot Axis Effects on Torsional Flutter Harvester Efficiency by Closed-Form Formula,"* **Journal of Wind Engineering and Industrial Aerodynamics**, Vol. 256, 2025, 105938 (7 pages), DOI: https://doi.org/10.1016/j.jweia.2024.105938.

J103. Caracoglia, L., *"Improving Output Power of a Torsional-Flutter Harvester in Stochastic Thunderstorms by Duffing – Van Der Pol Restoring Torque,"* **ASCE-ASME Journal of Risk & Uncertainty in Engineering Systems, Part B: Mechanical Engineering**, Vol. 10, No.4, 2024, 041204 (13 pages), DOI: https://doi.org/10.1115/1.4065532. – **Winner of the "Bilal M. Ayyub Research Prize" for Risk and Uncertainty in Engineering Systems for the Best Paper published in 2024.**

J102. Rizzo, F.***, Caracoglia, L.†, Maddaloni, G., Sabbà, M. and Foti, D. "*Exploring Multi-Hazard Effects on a Tall Building and its Non-Structural Elements Through Simultaneous Earthquake and Wind Loading,*" **Journal of Building Engineering**, Vol. 91, 2024, 109489 (28 pages), DOI: https://doi.org/10.1016/j.jobe.2024.109489.

J101. Rizzo, F.***, Pistol A. and Caracoglia, L.†, "*Estimating Nonlinear Wind-Induced Response of Roof Cable Nets by Aeroelastic Experiments and ML Modeling,*" **J. Reliability Engineering & System Safety**, Vol. 248, 2024, 110183 (23 pages), DOI: https://doi.org/10.1016/j.ress.2024.110183.

J100. Caracoglia, L., "*Stochastic Performance of a Torsional-Flutter Harvester in Non-Stationary, Turbulent Thunderstorm Outflows",* **Journal of Fluids and Structures,** Vol. 124. 2024, 104050 (15 pages), DOI: https://doi.org/10.1016/j.jfluidstructs.2023.104050.

J99. Caracoglia, L., "*Examining Error-contaminated, Long-Span Bridge Buffeting Response by Stochastic Differential Equations",* **Journal of Fluids and Structures,** Vol. 124, 2024, 104041 (20 pages), DOI: https://doi.org/10.1016/j.jfluidstructs.2023.104041.

J98. Caracoglia, L., and Holmes, J.D., "*Editorial: Special Issue on «Codification of Wind Loading of Structures»",* **Wind and Structures**, Vol. 37, No. 2, 2023, pp. i-ii, DOI: 10.12989/was.2023.37.2.00i.

J97. Cui, W., Caracoglia, L., Zhao L.† and Ge, Y., "*Examination of Occurrence Probability of Vortex-Induced Vibration of Long-Span Bridge Decks by Fokker-Planck-Kolmogorov Equation,*" **Structural Safety**, Vol. 105, 2023, 102369 (15 pages), DOI: https://doi.org/10.1016/j.strusafe.2023.102.

J96. Caracoglia, L.†, "*Stochastic Stability of an Aeroelastic Harvester Contaminated by Wind Turbulence and Uncertain Aeroelastic Loads,*" **Journal of Wind Engineering and Industrial Aerodynamics**, Vol. 240, 2023, 105490 (8 pages), DOI: https://doi.org/10.1016/j.jweia.2023.105490.

J95. Li, S.**, Caracoglia, L.†, and Møller-Madsen, J., "*Examining Adequacy of the Empirical Theodorsen Function for Wind Turbine Blade Aeroelasticity,*" **Journal of Fluids and Structures**, Vol. 118, 2023, 103843 (21 pages), DOI: https://doi.org/10.1016/j.jfluidstructs.2023.103843.

J94. Zhang, L.** and Caracoglia, L.†, "*Wind-Induced Fragility of a Monopole Tower via Artificial Neural Network Based Surrogate Analysis,*" **Engr. Structures**, Vol. 278, 2023, 115515 (7 pages), DOI: 10.1016/j.engstruct.2022.115515.

J93. Caracoglia, L., Padgett J.E. and Venanzi, I. "*Introduction to Special Collection on "Risk-Informed and Life-Cycle Analyses of Structures and Infrastructures",*" **ASCE Journal of Structural Engineering**, Vol. 148, No. 12, 2022, 02022001, DOI: 10.1061/(ASCE)ST.1943-541X.0003495.

J92. Egger, P.** and Caracoglia, L.†, "*New Discrete Mass Model Examining the Dynamics of Multiple-Element-Pendulum Impact Dampers for Bridge Stay-Cables,*" **Engineering Structures**, Vol. 253, 2022, 113665 (12 pages).

J91. Le, V.** and Caracoglia, L.†, "*A Practical Approach to Simulate Non-synoptic Wind Velocity Profiles and its Implications on the Response of Monopole Towers,*" **Journal of Structural Engineering, ASCE**, Vol. 148, No. 1, 2022, 06021007 (5 pages), DOI: 10.1061/(ASCE)ST.1943-541X.0003228.

J90. Rizzo, F.[***], Caracoglia, L.[†], and Piccardo, G., "*Examining Wind-Induced Floor Accelerations in an Unconventionally Shaped, High-Rise Building for the Design of "Smart" Screen Walls,*" **Journal of Building Engineering, Elsevier**, Vol. 43, 2021, 103115 (18 pages), DOI: 10.1016/j.jobe.2021.103115.

J89. Rizzo, F.[***] and Caracoglia, L.[†], "*Examination of Artificial Neural Networks to Predict Wind-Induced Displacements of Cable Net Roofs,*" **Engineering Structures**, Vol. 245, 2021, 112956 (19 pages), DOI: 10.1016/j.engstruct.2021.112956.

J88. Le, V.[**] and Caracoglia, L.[†], "*Life-cycle Cost Analysis of Vertical Structures under Nonstationary Winds: Downburst vs. Tornado Loads,*" **Engineering Structures**, Vol. 243, 2021, 112515 (17 pages), DOI: 10.1016/j.engstruct.2021.112515.

J87. Giaccu, G.F. and Caracoglia, L.[†], "*Gyroscopic Stabilizer to Improve Flutter Performance of Long-Span Cable-Supported Bridges,*" **Engineering Structures**, Vol. 240, 2021, 112373 (5 pages), DOI: 10.1016/j.engstruct.2021.112373.

J86. Zhang, L.[**] and Caracoglia, L.[†], "*Layered Stochastic Approximation Monte-Carlo Method for Tall Building and Tower Fragility in Mixed Wind Load Climates,*" **Engineering Structures**, Vol. 239, 2021, 112159 (18 pages), DOI: 10.1016/j.engstruct.2021.112159.

J85. Caracoglia, L., "*Review of Wind Effects on Structures: Modern Structural Design for Wind (Fourth Edition), by Emil Simiu and DongHun Yeo,*" **ASCE Journal of Structural Engineering**, Vol. 147, No. 3, 2021, 07520001 (one page), DOI: 10.1061/(ASCE)ST.1943-541X.0002944.

J84. Cui, W.[**,†], Ma T. and Caracoglia, L., "*Time-Cost "Trade-Off" Analysis for Wind-Induced Inhabitability of Tall Buildings Equipped with Tuned Mass Dampers,*" **Journal of Wind Engineering and Industrial Aerodynamics**, Vol. 207, 2020, 104394 (12 pages), DOI: 10.1016/j.jweia.2020.104394.

J83. Li, S.[**] and Caracoglia, L.[†], "*Experimental Error Examination and its Effects on the Aerodynamic Properties of Wind Turbine Blades,*" **Journal of Wind Engineering and Industrial Aerodynamics**, Vol. 206, 2020, 104357 (18 pages), DOI: 10.1016/j.jweia.2020.104357.

J82. Le, V.[**] and Caracoglia, L.[†], "E*xperimental Investigation on Non-Stationary Wind Loading Effects Generated with a Multi-Blade Flow Device,*" **Journal of Fluids and Structures**, Vol. 96, 2020, 103049 (28 pages), DOI: 10.1016/j.jfluidstructs.2020.103049.

J81. Venanzi, I.[†], Ierimonti, L.[***] and Caracoglia, L., *"Life-Cycle-Cost Optimization for the Wind Load Design of Tall Buildings Equipped with TMDs,"* **Wind and Structures, an International Journal,** Techno-Press, Vol. 30, No. 4, 2020, pp. 379-392 (13 pp.), DOI: 10.12989/was.2020.30.4.379.

J80. Rizzo, F.[***] and Caracoglia, L.[†], "*Artificial Neural Network Model to Predict the Flutter Velocity of Suspension Bridges,*" **Computers and Structures**, Vol. 233, 2020, 106236 (20 pages), DOI: 10.1016/j.compstruc.2020.106236.

J79. Le, V.[**] and Caracoglia, L.[†], "*A Neural Network Surrogate Model for the Performance Assessment of a Vertical Structure Subjected to Non-stationary, Tornadic Wind Loads,*" **Computers and Structures**, Vol. 231, 2020, 106208 (17 pages), DOI: 10.1016/j.compstruc.2020.106208.

J78. Le, V.[**] and Caracoglia, L.[†], "*Life-cycle Cost Analysis of a Monopole Structure Subjected to Tornadic Wind Loads,*" **ASCE Journal of Structural Engineering**, Vol. 146, No. 2, 2020, 04019194 (14 pages), DOI: 10.1061/(ASCE)ST.1943-541X.0002480.

J77. Cui, W.[**] and Caracoglia, L.[†], "*Performance-Based Wind Engineering of Tall Buildings Based on Life-Cycle Downtime and Multi-Source Wind Damage,*" **ASCE Journal of Structural Engineering**, Vol. 146, No. 1, 2020, 04019179 (12 pages), DOI: 10.1061/(ASCE)ST.1943-541X.0002479.

J76. Cui, W.[**] and Caracoglia, L.[†], "*A New Stochastic Formulation for Synthetic Hurricane Simulation over the North Atlantic Ocean,*" **Engineering Structures**, Vol. 199, 2019, 109597 (11 pages), DOI: 10.1016/j.engstruct.2019.109597 – **Winner of "2019 Best Journal Paper Award" from AAWE**.

J75. Ierimonti, L.[***], Venanzi, I., Caracoglia, L.[†] and Materazzi, A.L., *"Cost-based Design of Nonstructural Elements for Tall Buildings under Extreme Wind Environments,"* **Journal of Aerospace Engineering, ASCE**, Vol. 32, No. 3, 2019, 04019020 (16 pages), DOI: 10.1061/(ASCE)AS.1943-5525.0001008.

J74. Li, S.[**] and Caracoglia, L.[†], "*Surrogate Model Monte Carlo Simulation for Stochastic Flutter Analysis of Wind Turbine Blades,*" **Journal of Wind Engineering and Industrial Aerodynamics**, Vol. 188, 2019, pp. 43-60 (18 pp.), DOI: 10.1016/j.jweia.2019.02.004.

J73. Le, V.[**] and Caracoglia, L.[†], "G*eneration and Characterization of a Non-Stationary Flow Field in a Small-Scale Wind Tunnel using a Multi-blade Flow Device,*" **Journal of Wind Engineering and Industrial Aerodynamics**, Vol. 186, 2019, pp. 1-16 (16 pp.), DOI: 10.1016/j.jweia.2018.12.017.

J72. Caracoglia, L., *"Unified Stochastic Dynamic and Damage Cost Model for the Structural Analysis of Tall Buildings in Thunderstorm-like Winds,"* **ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering**, Vol. 4, No. 4, 2018, 04018043 (17 pages), DOI: 10.1061/AJRUA6.0000999.

J71. Giaccu, G.-F. and Caracoglia, L.[†], "*Wind-Load Fragility Analysis of Monopole Towers by Layered Stochastic-Approximation-Monte-Carlo Method,*" **Engineering Structures**, Vol. 174, 2018, pp. 462-477 (16 pp.), DOI:

10.1016/j.engstruct.2018.07.081.

J70. Rizzo, F.[***,†], Caracoglia, L., Montelpare, S., "*Predicting the Flutter Speed of a Pedestrian Suspension Bridge through Examination of Laboratory Experimental Errors,*" **Engineering Structures**, Vol. 172, 2018, pp. 589-613 (25 pp.), DOI: 10.1016/j.engstruct.2018.06.042.

J69. Rizzo, F.[***] and Caracoglia, L.[†], "*Examination of Experimental Errors in Scanlan Derivatives of a Closed-Box Bridge Deck,*" **Wind and Structures – An International Journal**, Vol. 26, No. 4, 2018, pp. 231-251 (21 pp.), DOI: 10.12989/was.2018.26.4.231.

J68. Cui, W.[**] and Caracoglia, L.[†], "*A Unified Framework for Performance-Based Wind Engineering of Tall Buildings in Hurricane-Prone Regions Based on Lifetime Intervention-Cost Estimation,*" **Structural Safety**, Vol. 73, 2018, pp. 75-86 (12 pp.), DOI: 10.1016/j.strusafe.2018.02.003.

J67. Le, V.[**] and Caracoglia, L.[†], "*Computationally Efficient Stochastic Approach for the Fragility Analysis of Vertical Structures Subjected to Thunderstorm Downburst Winds,*" **Engineering Structures**, Vol. 176, 2018, pp. 152-169 (18 pp.), DOI: 10.1016/j.engstruct.2018.03.007.

J66. Ierimonti, L.[**,†], Venanzi, I. and Caracoglia, L., *"Life-Cycle Damage-Based Cost Analysis of Tall Buildings Equipped with Tuned Mass Dampers,"* **Journal of Wind Engineering and Industrial Aerodynamics**, Vol. 176, 2018, pp. 54-64 (12 pp.), DOI: 10.1016/j.jweia.2018.03.009.

J65. Caracoglia, L., *"Modeling the Coupled Electro-Mechanical Response of a Torsional-Flutter-Based Wind Harvester with a Focus on Energy Efficiency Examination,"* **Journal of Wind Engineering and Industrial Aerodynamics**, Vol. 174, 2018, pp. 437-450 (14 pp.), DOI: 10.1016/j.jweia.2017.10.017.

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Under Review

J122. Caracoglia, L. †, Čanađija, M., "*Assessing Efficiency of an Energy Harvesting Apparatus by Input Convex Neural Networks,"* **Applied Energy**, January 23rd, 2026, submitted for publication.

J121. Rizzo, F., Caracoglia, L. †, "*Uncertainty Propagation in Wind-Induced Fatigue Evaluation of Suspension Bridge Deck Girder Elements using Experimental Aeroelastic Loads,"* **Journal of Bridge Engineering, ASCE**, January 12th, 2026, submitted for publication.

J120. Caracoglia, L.†, "*Exploiting Negative Stiffness for Torsional-Flutter Energy Harvesting: Recent Results under Non-Stationary Winds"* **Journal of Wind Engineering and Industrial Aerodynamics**, Virtual Special Issue for EACWE2025, December 31st, 2025, submitted for publication.

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Conference Papers (C)

Conference papers, listed in this section, refer to "full research papers", 8 to 12 pages. The index **PR**, *placed to the right of the conference record denotes a peer-reviewed conference paper with strict acceptance process and citation in an Engineering or Scientific Database such as "Compendex", "Inspec" or "Scopus". A number of extended abstracts (e.g., C5, C26, C76 and C80) and one-page abstracts (e.g., C53, C54, C56, C57, C59, C69, C110) are also listed in this section.*

C172. Giaccu, G.F.[‡,†], Caracoglia, L., *"Enhancing the Buffeting Response of the Messina Strait Bridge by Gyroscopic Stabilizer,"* **III Fabre Conference – Existing bridges, viaducts and tunnels: research, innovation and applications (FABRE26)**, Rome, Italy, 16 - 19 February 2026 (full paper submitted to Elsevier's Structural Integrity Procedia, under review).

C171. Giaccu, G.F.[‡,†], Caracoglia, L., *"Enhancing the Buffeting Response of the Messina Strait Bridge by Gyroscopic Stabilizer,"* **13th International Conference on Structural Dynamics**, Hannover, Germany, 27th September - 1st October 2026 (abstract submitted, under review).

C170. Caracoglia, L.[‡,†], *"Application of Nonlinear Aeroelastic ONERA Model to Stochastic Flow-Induced Instabilities of Rotating Wind Turbine Blades under the Influence of Turbulence Perturbations,"* **13th International Conference on Structural Dynamics**, Hannover, Germany, 27th September - 1st October 2026 (abstract submitted, under review).

C169. Caracoglia, L.[‡,†], *"Recent Studies on Bridge Flutter Stability in Non-Synoptic Downburst Flows,"* **7th US-Japan Workshop on Wind Engineering**, Setsunan University, Osaka, Japan, August 21-23, 2025, pp. 138-143.

Table 1. Impact Factors of Peer-Reviewed Journal Publications (source: Journal Citation Report 2020)

Journal Title	Impact Factor
ASCE-ASME J. of Risk and Uncertainty in Engr. Systems, Part A: Civil Engr.	1.926
ASCE-ASME J. of Risk and Uncertainty in Engr. Systems, Part B: Mechanical Engr.	2.200
ASME Letters in Dynamic Systems and Control	1.700
Advances in Materials Science and Engineering	1.726
Computer-Aided Civil and Infrastructure Engineering	11.775
Computers and Structures, Elsevier	4.578
Engineering Structures, Elsevier	4.471
Meccanica, An International J. of Theoretical and Applied Mechanics AIMETA	2.258
Journal of Aerospace Engineering, ASCE	1.761
Journal of Bridge Engineering, ASCE	3.100
Journal of Building Engineering, Elsevier	5.318
Journal of Engineering Mechanics, ASCE	2.660
Journal of Offshore Mechanics and Arctic Engr., ASME Transactions	1.186
Journal of Fluids and Structures, Elsevier	2.917
Journal of Sound and Vibration, Elsevier	3.655
Journal of Structural Engineering, ASCE	2.454
Journal of Wind Engr. and Industrial Aerodynamics, Elsevier	4.082
Mechanical Systems and Signal Processing	6.823
Probabilistic Engineering Mechanics	3.350
Reliability Engineering & System Safety	8.100
Structural Control and Health Monitoring, Wiley	4.819
Structural Engineering and Mechanics, Techno Press, S. Korea	3.524
Structural Safety	5.047
Wind, MDPI	N/A
Wind and Structures, Techno Press, S. Korea	2.470
Wind Engineers, JAWE, Japan	N/A

C168. Shid-Moosavi Sina[‡,†], Tronci, Eleonora, and Caracoglia, L., *"Physics-Informed Gaussian Process Framework for Offshore Wind Profile Reconstruction and Wake Prediction,"* **NAWEA/WindTech 2025 Conference,** The University of Texas at Dallas & Sandia National Laboratories, Dallas, TX, USA (three-page summary and poster presentation).

C167. Caracoglia, L.[‡,†], *"Influence of Lift Force's Span-Wise Correlation and Reynolds Number on the Stochastic, Flow-Induced Instability of Wind Turbine Blades,"* **Proceedings of the International Mechanical Engineering Congress & Exposition, IMECE 2025,** Memphis, TN, USA, November 16-20, 2025 ASME paper IMECE2025-165498 (full paper). **PR**

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C164. Polucci, M.[**‡,†], Caracoglia, L., and Petrini, F., *"Surrogate Modeling of Fluid-Structure Interactions in Vertical Towers Under Downburst Wind Loads Using Artificial Neural Networks: Preliminary Results,"* **Proceedings of the International Mechanical Engineering Congress & Exposition, IMECE 2025,** Memphis, TN, USA, November 16-20, 2025, ASME paper IMECE2025-165524 (full paper accepted, to appear). **PR**

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C18. Caracoglia, L.‡ and Jones, N.P., *"Effects of Parameter Uncertainties on Long-Span Bridge Buffeting Evaluation,"* in **Structural Dynamics EURODYN 2005**, ed. by Soize, C. and Schuëller, G.I., Proceedings of the Sixth European Conference on Structural Dynamics (EuroDyn 2005), Paris, France, September 4-7, 2005, Millpress, Rotterdam, NL, ISBN 90-5966-033-1, Vol. 1, pp. 379-384. **PR**

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C16. Caracoglia, L.‡ and Jones, N.P., *"Characterization of Evolving (Local) Pressure Fields on a Low-Rise Building,"* **Proceedings of the 10th Americas Conference on Wind Engineering**, Louisiana State University, Baton Rouge, LA, May 31-June 4, 2005, CD-ROM.

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C11. Caracoglia, L.‡ and Jones, N.P., *"Measurement of High Winds on a Low–Rise Structure,"* **Proceedings of the International Conference "Response of Structures to Extreme Loading 2003" (XL2003)**, Toronto, Canada, August 3-6, 2003, Elsevier Science, Oxford, United Kingdom, CD-ROM.

C10. Caracoglia, L.‡ and Jones, N.P., *"Dynamics of Crossties with Discrete Dampers,"* **Proceedings of the 16th Engineering Mechanics Division Conference of the American Society of Civil Engineers**, University of Washington, Seattle, Washington, USA, July 16-18, 2003, CD-ROM.

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C5. Jones, N.P.‡, Stoetter, M., Ozkan, E. and Caracoglia, L., *"Predicted Response of the Messina Bridge Using Fully Coupled Multimode Frequency Domain Formulation,"* **International Bridge Aerodynamics Workshop, 7th Italian National Conference on Wind Engineering (IN-VENTO-2002), ANIV-IAWE**, Milan, Italy, September 15-18, 2002 (abstract only).

C4. Caracoglia, L.‡ and Jones, N.P., *"Analytical Method for the Dynamic Analysis of Complex Cable Structures,"* **Proceedings of the 15th Engineering Mechanics Division Conference of the American Society of Civil Engineers**, Columbia University, New York, NY, USA, June 2-5, 2002, CD-ROM.

C3. Caracoglia, L., Noè, S. and Sepe, V.‡, *"Aspetti Non Convenzionali della Dinamica Indotta dal Vento nei Ponti Sospesi di Grande Luce (in Italian – Non Conventional Aspects of Wind-Induced Dynamics on Long-Span Suspension Bridges),"* **Proceedings of the 6th Italian National Conference on Wind Engineering (IN-VENTO-2000), Italian National Association of Wind Engineering (ANIV-IAWE)**, Genova, Italy, June 18-21, 2000, Publisher: SGEditoriali Padua, Italy, 2001, ISBN 88-86281-58-7, pp. 585-592.

C2. Sepe, V.‡, Caracoglia, L. and D'Asdia, P., *"Ulteriori Risultati sull'Instabilità Aeroelastica dei Ponti Sospesi* (*in Italian – Recent Results on Aeroelastic Instability of Suspension Bridges),"* **Proceedings of the 5th Italian National Conference on Wind Engineering (IN-VENTO-98), Italian National Association of Wind Engineering (ANIV-IAWE)**, Perugia, Italy, September 13-15, 1998, Publisher: Esagrafica, Rome, Italy, 1999, pp. 359-372.

C1. Augusti, G., Sepe, V.‡, D'Asdia, P. and Caracoglia, L., *"Wind-Induced Oscillations of Long-Span Suspended Bridges,"* **Proceedings of the International Forum on Aeroelasticity and Structural Dynamics – CEAS (AIAA-AIDAA)**, Rome, Italy, June 17-20, 1997, Vol. 2, pp. 183-190.

Technical Reports (T)

T3. Caracoglia, L., Jones, N.P. and Carpenter, S.H., *"Dynamic Analysis and Testing of Highway Light Poles,"* **Research Report, Department of Civil and Environmental Engineering, University of Illinois at Urbana Champaign**, November 2005, 84 pages.

T2. Jones, N.P. (PI), Schafer, B.W. (Co-PI), Caracoglia, L. and Sangree, R.H.,*"Tasks A4, B1 - Analysis of Wind, Pressure and Structural Load Data from The Kern Pitts Center,"* **"Hurricane Loss Reduction Consortium: Wind and Structural Engineering Initiative – Final Report"**, coordinated by Dr. T. Reinhold (Vice President for Engineering, Institute for Business and Home Safety, Tampa, Florida; formerly at Clemson University), National Institute of Standards and Technology, 2004.

T1. Caracoglia, L. and Jones, N.P., *"Analysis of Light Pole Failures in Illinois – Final Report,"* **Research Report, Department of Civil and Environmental Engineering, University of Illinois at Urbana Champaign**, August 2004, 62 pages.

Posters Presentations at Conferences or Research Expositions (PS)

PS38. Caracoglia, L.‡, *"CMMI-2421490 «Collaborative Research: Modeling the Influence of Turbulence on Flow-induced Instabilities of Large Flexible Structures with Innovative Applications in Wind Turbine Blades»,"* **2025 NSF DCSD PI Meeting**, National Science Foundation, Arlington, Virginia, USA, September 4-5, 2025.

PS37. La, T.-K.**, Qin, Y.**, and Caracoglia, L.‡, *"CMMI-2020063 «Exploiting the Wind Energy Resource through Aeroelastic Vibration and Torsional Flutter»,"* **2025 NSF DCSD PI Meeting**, National Science Foundation, Arlington, Virginia, USA, September 4-5, 2025.

PS36. La, T.-K.**,‡ and Caracoglia, L., *"Fostering Design and Implementation of a Wind-Energy Torsional Harvester through MATLAB Optimizations,"* **The MathWorks Day**, Northeastern University, Boston, Massachusetts, USA, March 18, 2025.

PS35. Qin, Y.**,‡ and Caracoglia, L., *"State Space Modeling, based on Machine Learning, to Predict Vibrations and Output Power of Wind Energy Harvesters,"* **The MathWorks Day**, Northeastern University, Boston, Massachusetts, USA, February 21, 2025.

PS34. Zhang, L.**,‡ and Caracoglia, L., "*A Novel Approach for Wind-Load Fragility Analysis of Tall Buildings and Tower Structures: Layered Stochastic-Approximation-Monte-Carlo Algorithm,*" **Research Innovation and Scholarship Expo (RISE) 2020,** Northeastern University, Boston, Massachusetts, USA, April 9, 2020, Poster ID 2932.

PS33. Li, S.**,‡ and Caracoglia, L., "*Examination of Wind Tunnel Experimental Variability and its Effects on the Aerodynamic Properties of Wind Turbine Blades,*" **Research Innovation and Scholarship Expo (RISE) 2020,** Northeastern University, Boston, Massachusetts, USA, April 9, 2020, Poster ID 2926.

PS32. Le, V.**,‡ and Caracoglia, L., "*A Framework to Extend Performance-based Engineering for the Examination of Wind Loads from Thunderstorm Downbursts and Tornadoes,*" **Research Innovation and Scholarship Expo (RISE) 2020,** Northeastern University, Boston, Massachusetts, USA, April 9, 2020, Poster ID 2917.

PS31. Le, V.**,‡ and Caracoglia, L., *"Performance-based Tornado Engineering of a Vertical Structure via Artificial Neural Network (ANN) Surrogate Modeling,"* **The MathWorks SMART Laboratory - Northeastern University Collaboration Day Event**, Northeastern University, Boston, Massachusetts, USA, February 21, 2020.

PS30. Zhang, L.**,‡ and Caracoglia, L., "*A Novel, Layered Stochastic Approximation Monte Carlo Framework for Structural Wind Engineering Analysis,*" **College of Engineering PhD Research Expo 2020,** Northeastern University, Boston, Massachusetts, USA, February 20, 2020, Poster ID 62.

PS29. Li, S.[**,‡] and Caracoglia, L., "*Analysis of Experimental Errors Associated with Aerodynamic Properties Of Offshore Wind Turbine Blades,*" **College of Engineering PhD Research Expo 2020,** Northeastern University, Boston, Massachusetts, USA, February 20, 2020, Poster ID 61.

PS28. Le, V.[**,‡] and Caracoglia, L., "*Performance-based Evaluation of Structures Impacted by Winds from Thunderstorm Systems via Surrogate Modeling,*" **College of Engineering PhD Research Expo 2020,** Northeastern University, Boston, Massachusetts, USA, February 20, 2020, Poster ID 64.

PS27. Li, S.[**,‡] and Caracoglia, L., "*Uncertainty Quantification for Flutter Analysis of Large-Scale Offshore Wind Turbine Blades,*" **Research Innovation and Scholarship Expo (RISE) 2019,** Northeastern University, Boston, Massachusetts, USA, April 4, 2019.

PS26. Le, V.[**,‡] and Caracoglia, L., "*Analytical Methodology for the Performance-based Assessment of Vertical Structures Impacted by Thunderstorm Downburst and Tornado Wind Loads,*" **Research Innovation and Scholarship Expo (RISE) 2019,** Northeastern University, Boston, Massachusetts, USA, April 4, 2019.

PS25. Li, S.[**,‡] and Caracoglia, L., "*Flutter Analysis of Large-Scale Offshore Wind Turbine Blades under the Impact of Stochastic Perturbations,*" **French American Innovation Day 2019,** Northeastern University, Boston, Massachusetts, USA, March 18-19, 2019.

PS24. Le, V.[**,‡] and Caracoglia, L., *"Machine Learning Algorithms for Performance-based Tornado Engineering in the MATLAB® Computing Environment,"* **The MathWorks SMART Laboratory - Northeastern University Collaboration Day Event**, Northeastern University, Boston, Massachusetts, USA, February 26, 2019.

PS23. Le, V.[**,‡] and Caracoglia, L., "*Performance-based Structural Design against Thunderstorm and Tornadic loads: Recent Numerical and Experimental Developments,*" **College of Engineering Research Expo2019,** Northeastern University, Boston, Massachusetts, USA, February 19, 2019.

PS22. Le, V.[**,‡] and Caracoglia, L., "*Investigations on the Structural Performance of Building Structures Subjected to Non-Stationary Thunderstorm Wind Loads by Wavelet-Galerkin Numerical Methods,*" **Research Innovation and Scholarship Expo (RISE) 2018,** Northeastern University, Boston, Massachusetts, USA, April 5, 2018, Abstract ID 2114.

PS21. Le, V.[**,‡] and Caracoglia, L., *"A MATLAB®-Based Numerical Algorithm for Stochastic Simulation of Structural Load, Response and Damage (MATLAB® SLRD) Induced by Non-stationary Thunderstorm Downbursts,"* **The MathWorks SMART Laboratory - Northeastern University Collaboration Day Event**, Northeastern University, Boston, Massachusetts, USA, March 12, 2018.

PS20. Cui, W.[**,‡] and Caracoglia, L., *"MATLAB® Computations for Stochastic Forecasting of Hurricane Trajectories under Climate Change Effect and Projections of Wind-Induced Damage on Tall Buildings,"* **The MathWorks SMART Laboratory - Northeastern University Collaboration Day Event**, Northeastern University, Boston, Massachusetts, USA, February 14, 2017.

PS19. Cui, W.[**,‡] and Caracoglia, L., *"Advancing MATLAB® Computations for Stochastic Simulation of Climate-Change-Induced Hurricane Damage,"* **The MathWorks SMART Laboratory - Northeastern University Collaboration Day Event**, Northeastern University, Boston, Massachusetts, USA, March 17, 2015.

PS18. Cui, W.[**,‡] and Caracoglia, L., *"Accelerated Fragility Analysis of Tall Buildings in Wind Engineering on MatLab Platform,"* **The MathWorks SMART Laboratory - Northeastern University Collaboration Day Event**, Northeastern University, Boston, Massachusetts, USA, March 27, 2014.

PS17. Seo, D.-W.[**,‡] and Caracoglia, L., *"A Life-Cycle Cost Analysis for Structural Maintenance of Flexible Bridges under Wind Hazards,"* **2012 NSF-CMMI Engineering Research and Innovation Conference,** Boston, Massachusetts, USA, July 9–12 2012 (student poster presentation).

PS16. Moghim, F.[**,‡] and Caracoglia, L., *"Computer-generated Random Trajectories of Wind-Borne Debris in Turbulent Wind for Estimating Debris Impact against Tall Buildings,"* **2012 NSF-CMMI Engineering Research and Innovation Conference,** Boston, Massachusetts, USA, July 9–12 2012 (student poster presentation).

PS15. Caracoglia, L., *"Use of State-Space Modeling for Simulating Lateral Wind Loading Correlation Error and its Effects on the Response of Tall Buildings,"* **2012 NSF-CMMI Engineering Research and Innovation Conference,** Boston, Massachusetts, USA, July 9–12 2012.

PS14. Caracoglia, L.[‡], "*Dynamic Performance of Tall Buildings against Wind Hazards: Recent Results on a New Simulation Framework,*" **CyberBridges: Developing the Next Generation of Cyberinfrastructure Faculty for Computational and Data-enabled Science and Engineering (CB 2012),** Arlington, VA June 25-26, 2012, Poster Session for invited participants only (workshop supported by NSF - Office of Cyber-Infrastructure).

PS13. Aouinati, S.[*,‡], Moghim, F.** and Caracoglia, L., "*Protecting Tall Buildings against Compact Wind-Borne Debris: Calibration of a New Wind Tunnel Chamber,*" **2012 American Society of Engineering Education Northeast Conference,** University of Massachusetts, Lowell, Massachusetts, USA, April 27-28, 2012, Poster

Session 1, Abstract ID 44.

PS12. Egger, F.[**,‡], Caracoglia, L. and Kollegger J., "*A Novel Impact Damper for Stay-Cable Vibration Mitigation,*" **Research Innovation and Scholarship Expo (RISE) 2012,** Northeastern University, Boston, Massachusetts, USA, March 29, 2012, Abstract ID 72.

PS11. Giaccu, G.F.[***,‡], Barbiellini B. and Caracoglia, L., "*Stochastic Algorithms for the Study of Non-Linear Cable Network Dynamics: Application to the Mitigation of Stay-Cable Vibration,*" **Research Innovation and Scholarship Expo (RISE) 2012,** Northeastern University, Boston, Massachusetts, USA, March 29, 2012, Abstract ID 413.

PS10. Moghim, F.[**,‡] and Caracoglia, L., "*Probabilistic Damage Analysis Caused by "Wind-Borne Compact Debris" on Building Facades in Turbulent Winds,*" **Research Innovation and Scholarship Expo (RISE) 2012,** Northeastern University, Boston, Massachusetts, USA, March 29, 2012, Abstract ID 69.

PS9. Seo, D.-W.[**,‡] and Caracoglia L., "*A Life-Cycle Cost Model for Structural Maintenance of Long-Span Bridges under Wind Hazards,*" **Research Innovation and Scholarship Expo (RISE) 2012,** Northeastern University, Boston, Massachusetts, USA, March 29, 2012, Abstract ID 67.

PS8. Moghim, F.[**,‡] and Caracoglia, L., "*Assessing the Risk of Wind-Borne Debris Impact against Building Façades by Monte Carlo Methods,*" **NU Research Exposition 2011,** Boston, Massachusetts, USA, April 6, 2011, Research poster No. 1928.

PS7. Seo, D.-W.[**,‡] and Caracoglia L., "*Statistical Buffeting Simulations of Long-span Bridge Response under Wind Hazards: Recent Case Studies,*" **NU Research Exposition 2011,** Boston, Massachusetts, USA, April 6, 2011, Research poster No. 1968.

PS6. Coyle, S.[*,‡], Moghim, F.** and Caracoglia, L., "*Design of a New, Removable Testing Configuration for the NU Small-Scale Wind Tunnel for Wind Engineering Research,*" **NU Research Exposition 2010,** Boston, Massachusetts, USA, March 24, 2010, Poster No. 1509.

PS5. Moghim, F.[**,‡] and Caracoglia, L., "*Numerical Simulation of Wind-Borne Debris Trajectory in Horizontal Winds,*" **NU Research Exposition 2010,** Boston, Massachusetts, USA, March 24, 2010, Research poster No. 1575.

PS4. Seo, D.-W.[**, ‡] and Caracoglia L., "*Estimation of Torsional Bridge Flutter Collapse by Numerical Statistical Methods,*" **NU Research Exposition 2010,** Boston, Massachusetts, USA, March 24, 2010, Research poster No. 1410.

PS3. Seo, D.-W.[**,‡] and Caracoglia L., "*Assessment of Gust Effect Factors for Wind Loading on Low-rise Buildings through Database-Assisted-Design Method and Current Structural Design Standards,*" **NU Research Exposition 2009,** Boston, Massachusetts, USA, March 26, 2009, Research poster No. 1294.

PS2. Brito, R.[**,‡], Caracoglia, L. and Schroeder, J.M.*, *"Investigations on Section-Model Aeroelasticity of Bridge Decks for an Application to Small-Scale Wind-Tunnel Experiments,"* **NU Research Exposition 2008,** sponsored by the NU Office of the Provost, Boston, Massachusetts, USA, March 26, 2008, Research poster No. 1075.

PS1. Caracoglia, L., *"Parametric Random Noise Representation of Wind Turbulence and its Effects on the Aeroelasticity of Long-Span Bridges,"* **NU University Research Exposition 2008,** sponsored by NU Office of the Provost, Boston, Massachusetts, USA, March 26, 2008, Research poster No. 943.

Published Datasets / Software Programs (DS)

DS4. Caracoglia, L. and Zhang, L.[**], "*PRJ-5814: Wind Tunnel Aeroelastic Model Tests of a Super-Tall Building with External Guywire Support,*" **DesignSafe-CI**, Dataset, 2025, DOI: https://doi.org/10.17603/ds2-zb18-ws58.

DS3. Caracoglia, L. and Rizzo, F.[***], "*PRJ-2782: Repeated Wind Tunnel Section Model Tests of a Closed-Box Bridge Deck – Scanlan Derivatives,*" **DesignSafe-CI**, Dataset, 2020, DOI: 10.17603/ds2-6xp3-xj95.

DS2. Caracoglia, L. and Le, V.[**], "*PRJ-2772: A MATLAB-based GUI for Performance-based Tornado Engineering (PBTE) of a Monopole, Vertical Structure with Artificial Neural Networks (ANN),*" **DesignSafe-CI**, Dataset, 2020, DOI: 10.17603/ds2-g7fe-1k09.

DS1. Caracoglia, L. and Le, V.[**], "*PRJ-2188: Simulation of the Dynamics of a Monopole Structure Subjected to Non-Stationary, Stochastic Downburst Wind Loads using the Wavelet-Galerkin Approach,*" **DesignSafe-CI**, Dataset, 2019, DOI: 10.17603/ds2-a8nq-g348.

Books / Ph.D. Dissertation (B)

B1. Caracoglia, L., *"Wind-Structure Oscillations on Long-Span Suspension Bridges,"* **Ph.D. Dissertation (in English), Department of Engineering and Architecture, University of Trieste, Italy**, February 23, 2001. Available online at: http://hdl.handle.net/10077/11388. Also deposited at the Italian National Library (Rome) in accordance with the Italian law requirements: Art. 73 Law (DPR) No. 382 July 11, 1980; Art. 1, Law No. 660 August 31, 1945.

2.3. Invited Lectures and Presentations

Invited Lectures / Seminars - International (IL)

IL28. Caracoglia, L., "*Wind Load & Structural Analysis: from Low-rise Buildings to Long – Span Bridges (Analisi dei Carichi da Vento e della Risposta Strutturale: dagli Edifici Mono-piano ai Ponti di Grande Luce),*" **Invited Special Seminar,** Department of Architecture, Design and Urban Planning, University of Sassari, Alghero, Sassari, Italy, December 12th, 2025.

IL27. Caracoglia, L., "*Wind-Induced Life-cycle Cost Analysis of Tall Buildings and Towers against Stationary and Non-Stationary Windstorms,*" **Invited Seminar, Tokyo Polytechnic University,** Atsugi, Kanagawa 243-0297, Japan, August 25th, 2025.

IL26. Caracoglia, L., "*Application of Artificial Neural Networks to Model the Wind-Induced Dynamics of Tall Tower Structures,*" **Invited Lecture, The 22nd International Advanced School on Wind Engineering (IAS22)**, Chongqing University, Chongqing, PRC, August 13th, 2025.

IL25. Caracoglia, L., "*Offshore Wind Turbine Blade Aeroelasticity Affected by Stochastic Turbulence and Load Perturbations,*" **Invited Seminar**, Faculty of Applied Sciences, University of Liège, Belgium, June 24th, 2025.

IL24. Caracoglia, L., "*Wind Turbine Blade Dynamics Influenced by Stochastic Perturbations due to Turbulence and Load Errors,*" **Invited Seminar**, Faculty of Engineering, University of Rijeka, Croatia, January 10th, 2025.

IL23. Caracoglia, L., "*Off-shore Wind Turbine Blade Vibrations Under Stochastic Wind Load and Turbulence Perturbations,*" **Invited Seminar,** Department of Architecture, Construction and Design, Polytechnic University of Bari, Italy, December 18th, 2024.

IL22. Caracoglia, L., "*Long-Span Bridge Aeroelasticity against Stationary and Nonstationary Wind Loads: Emerging Research Experiences,*" **Invited Seminar,** Department of Civil, Chemical, Environmental and Materials Engineering, University of Bologna ("Alma Mater Studiorum"), Italy, December 9th, 2024.

IL21. Caracoglia, L., "*Research Activities and Future Perspectives on Long-Span Bridge Aeroelasticity,*" **Invited Seminar,** Department of Civil and Environmental Engineering, University of Perugia, Italy, June 19th, 2024.

IL20. Caracoglia, L., "*Life-cycle Damage Cost Analysis of Buildings and Tower Structures against Stationary and Non-Stationary Wind Loads,*" **Invited Seminar,** State Key Laboratory for Disaster Reduction, Department of Bridge Engineering, Tongji University, Shanghai, China, May 31st, 2024.

IL19. Caracoglia, L., "*Off-shore Wind Turbine Blade Vibrations Under Stochastic Wind Perturbations,*" **Invited Seminar,** School of Naval Architecture, Ocean and Civil Engineering, Shanghai Jiaotong University, Shanghai, China, May 30, 2024.

IL18. Caracoglia, L., "*Torsional-Flutter Energy Harvesting in Non-Turbulent and Turbulent Winds: Recent Results,*" **Invited Seminar,** School of Civil Engineering and Architecture, GuangXi University, NanNing, China, May 29, 2024.

IL17. Caracoglia, L., "*Wind Energy and Aerodynamics Principles for Horizontal-Axis Wind Turbines,*" **Invited Lecture, The 20th International Advanced School on Wind Engineering (IAS20)**, Chongqing University, Chongqing, PRC, May 28, 2024.

IL16. Caracoglia, L., "*Resilience of Structural Systems Damaged by Thunderstorm Wind Hazards,*" **Invited Lecture, International Advanced School on Thunderstorm Outflows and Their Impact on Structures,** University of Genoa**,** Italy October 4-8, 2021, (via ZOOM only).

IL15. Caracoglia, L., "*Uncertainty Quantification and Dynamic Response of Buildings and Tower Structures under Stationary and Non-stationary Wind Loads,*" **Research Seminar, Polytechnic Department of Engineering and Architecture, Doctoral Program, University of Udine**, Udine, Italy, January 11th, 2021 (via ZOOM only).

IL14. Caracoglia, L., "*Uncertainty Quantification and Dynamic Response of Buildings and Tower Structures under Stationary and Non-stationary Wind Loads,*" **Research Panelist, International Wind Engineering Seminars, University of Birmingham**, United Kingdom**,** January 7th, 2021 (via ZOOM only).

IL13. Caracoglia, L., "*Wind Load Uncertainty Effects on Long – Span Bridge Aeroelasticity: from Stochastic Dynamics to Artificial Intelligence Surrogate Models,*" **Research Seminar, Department of Civil and Environmental Engineering, International Doctoral Program, University of Perugia**, Perugia, Italy, December 9th, 2020 (via ZOOM only).

IL12. Caracoglia, L., "*Fluid-Structure Interaction of Low-Damping Systems: Some Research Results,*" **Research Seminar, Department of Civil, Environmental and Mechanical Engineering, University of Trento**, Trento, Italy, January 22nd, 2020 (via ZOOM only).

IL11. Caracoglia, L., "*Wind-induced Vibrations on Long – Span Bridges: Importance of Wind Load Uncertainty Propagation,*" **Research Seminar, Department of Structural and Geotechnical Engineering, University of Rome – La Sapienza** (invited by Prof. F. Bontempi), Rome, Italy, December 11th, 2019.

IL10. Caracoglia, L., "*Aeroelastic Vibrations of Low-Damping Structures: "Bad" and "Good" Wind,*" **Research Seminar, Department of Engineering and Architecture, University of Trieste** (invited by Prof. I. Garofalo), Trieste, Italy, November 14th, 2019.

IL9. Caracoglia, L., "*Investigations on the Aeroelasticity of Flexible Structures: Examining the Link between Wind Engineering and Wind Energy (Harvesting),*" **Research Seminar, Department of Civil and Environmental Engineering, Hong Kong University of Science and Technology** (invited by Prof. Kim KT Tse), East Kowloon, Hong Kong, January 24th, 2018.

IL8. Caracoglia, L., "*Recent Investigations on the Aeroelasticity of Slender Structures: "Bad" Wind versus "Good" Wind,*" **Research Seminar, Department of Civil and Environmental Engineering, University of Perugia** (invited by Profs. A. L. Materazzi and I. Venanzi)**,** Perugia, Italy, November 26th, 2015.

IL7. Caracoglia, L., "*Investigations on Long-span Bridge Vibrations due to Variability in the Aeroelastic Wind Loading,*" **Research Seminar, Department of Mechanical Engineering, Polytechnic of Milan – Bovisa Campus** (invited by Profs. G. Diana and A. Zasso), Milan, Italy, Dec. 19th, 2014.

IL6. Caracoglia, L., "*Probability-based Serviceability Assessment of Tall Building Structures due to High Winds,*" **Research Seminar, Department of Civil, Chemical and Environmental Engineering (DICCA), University of Genoa** (invited by Prof. M. P. Repetto)**,** Genoa, Italy, December 18th, 2014.

IL5. Caracoglia, L., "*Probabilistic Serviceability Assessment of Tall Building Structures due to Extreme Wind Loads,*" **Research Seminar, Department of Civil and Environmental Engineering (DICA), Polytechnic of Milan** (invited by Prof. F. Perotti)**,** Milan, Italy, November 24th, 2014.

IL4. Caracoglia, L., "*Probabilistic Serviceability and "Maintenance" Assessment of Tall Building Structures due to Extreme Wind Loads,*" **Research Seminar, University of Pavia** (invited by Profs. L. Faravelli and F. Casciati, Department of Civil Engineering and Architecture)**,** Pavia, Italy, November 18th, 2014.

IL3. Caracoglia, L., "*Recent Studies on the Dynamic Response of Slender Structures to Turbulent Wind Loading with Uncertain Characteristics,*" **Research Seminar, Institute for Mechanics, College of Engineering, Leopold-Franzens University**, Innsbruck, Austria, March 4th, 2008.

IL2. Caracoglia, L., "*Wind-Induced Vibration of Slender Structural Systems in the Presence of Uncertain Inputs,*" **Department of Civil Engineering and KOCED Wind Tunnel Center, Chonbuk National University**, Jeonju (Chonju), South Korea, December 19, 2006 (KOCED: KOrea Construction Engineering Development Program).

IL1. Caracoglia, L., *"Wind Effects and Civil Engineering Applications. Rigid and Flexible Structures: Lecture for the Wind Engineering Graduate Course,"* **Universidad Autónoma Metropolitana**, Unidad Acapotzalco, Mexico City, Mexico, March 10, 2006.

Invited Lectures / Seminars – National (L)

L12. Caracoglia, L., "*Recent Studies on Structural Aeroelasticity: from Damage Reduction against Destructive Winds to Harnessing the Wind Resource,*" **Keynote Speaker - Annual Meeting of the Structural Engineers Association of Massachusetts (SEAMass)**, Boston, Massachusetts, May 14, 2015.

L11. Caracoglia, L., "*Recent Challenges in Aeroelasticity of Slender Systems: from Reducing Damage against Destructive Winds to Harnessing the Valuable Wind Resource,*" **Department of Mechanical and Industrial Engineering, University of Massachusetts at Amherst,** Amherst, Massachusetts, March 2, 2015.

L10. Caracoglia, L., "*Application of Stochastic Simulation to Uncertainty Modeling and Analysis of Wind-Induced Response of Slender Structures,*" **Department of Civil and Environmental Engineering Seminar Series, University of Massachusetts at Dartmouth,** Dartmouth, Massachusetts, December 13, 2011.

L9. Caracoglia, L., "*Bridges and Skyscrapers: Wind Engineering of Civil Structures,*" **Northeastern University at Noon ("NU@NOON"),** Chatham, Massachusetts, October 12, 2010.

L8. Caracoglia, L., "*Parametric Random Noise Simulation of Wind Loading: An Application to the Aeroelastic Response of Long-Span Bridges,*" **Department of Civil and Environmental Engineering, University of Massachusetts at Amherst**, April 18, 2008.

L7. Caracoglia, L., "*Vibration of Slender Structures in the Presence of Uncertain Wind Loading Conditions – Special Seminar,*" **Wind Science and Engineering Technology Center**, Texas Tech University, Lubbock, Texas, USA, October 8, 2007.

L6. Caracoglia, L., "*Vibration of Slender Structures in the Presence of Uncertain Wind Loading Conditions,*" **Department of Civil and Environmental Engineering, Georgia Institute of Technology**, Atlanta, Georgia, March 14th, 2007.

L5. Caracoglia, L., "*Response of Structures to Wind Loading,"* **Chi-Epsilon Sponsored Session, A Window on Active Research for Undergraduate Students**, Department of Civil and Environmental Engineering,

Northeastern University, Boston, MA, 10/19/2006.

L4. Caracoglia, L., *"Wind-Induced Failures of Highway Light Poles,"* **Department of Civil and Environmental Engineering, University of Illinois at Urbana Champaign**, Urbana, Illinois, May 8, 2006.

L3. Caracoglia, L, *"Uncertainty in The Modeling and Understanding of Fluid-Structure Interaction Phenomena: Joint Seminar on Fluids and Solids*," **Department of Civil and Environmental Engineering, Massachusetts Institute of Technology**, Boston, Massachusetts, April 20, 2006.

L2. Caracoglia, L., *"Observations on Wind-Induced Dynamic Failures of Highway Light Poles,"* **Department of Civil and Environmental Engineering, Northeastern University**, Boston, Massachusetts, April 1st, 2005.

L1. Caracoglia, L., *"Wind-Induced Oscillation of Long-Span Suspension Bridges,"* **Civil Engineering Department, Johns Hopkins University**, Baltimore, Maryland, 11/13/2001.

Invited Workshop Presentations – National (WP)

WP3. Caracoglia, L. *"Stochastic Methods for Random Parametric Instability Analysis of Rotating Wind Turbine Blades,"* **Fluid-Structure Interactions Workshop, Department of Mechanical Engineering**, **University of Massachusetts at Amherst**, Massachusetts, USA, March 5, 2019.

WP2. Caracoglia, L. *"Effects of Modeling and Measurement Errors on the Wind-Induced Dynamic Response of Flexible Structures,"* **FSI 2010: A One-Day Workshop on Fluid-Structure Interactions, Department of Mechanical Engineering**, **University of Massachusetts at Amherst**, April 8, 2010.

WP1. Caracoglia, L., *"Vibration Mitigation through Cross-Ties between Cables. Analysis and Design Experiences,"* **FHWA National Workshop on Wind Induced Vibration of Cable Stay Bridges, Federal Highway Administration and Missouri Department of Transportation**, Saint Louis, Missouri, USA, April 26, 2006 (with S. Hague, Chief Structural Engineer, HNTB, Kansas City).

Invited Workshop Presentations – International (IWP)

IWP9. Caracoglia, L., "*Life-Cycle Cost Analysis of Tall Buildings & Towers in Tornadic Winds: Computational Modeling & Results,*" **Invited Presentation, Second International Workshop on Tornado Simulation and Disaster Prevention,** Centra South University, Changsha, Hunan, PRC, December 16, 2024.

IWP8. Caracoglia, L., "*Response of Tall Buildings and Towers in Non-Stationary Winds: Tornado vs. Thunderstorm Loads,*" **Invited Presentation, 111 Workshop on "Wind Disaster Mitigation and Energy Utilization",** Chongqing University, Chongqing, PRC, May 26, 2024.

IWP7. Caracoglia, L., *"Recent Studies on the Resilience of Structural Systems Affected by Stationary and Nonstationary Wind Hazards,"* **5th Global Summit of GADRI** (Global Alliance of Disaster Research Institutes), Virtual International Summit, https://gadri.net/summit/, August 31, 2021.

IWP6. V. Le[**,‡] and Caracoglia, L., *"Performance-Based Design of Vertical Structures Impacted By Thunderstorm Downburst and Tornado Wind Loads by Wavelet-Galerkin Approach,"* **First Northeastern University – Tongji University Workshop on Wind Engineering** (NU-TJU WWE1), Boston, Massachusetts, USA, June 22-26, 2019.

IWP5. S. Li[**,‡] and Caracoglia, L., *"Numerical and Experimental Studies on Stochastic Flutter of Offshore Wind Turbine Blades,"* **First Northeastern University – Tongji University Workshop on Wind Engineering** (NU-TJU WWE1), Boston, Massachusetts, USA, June 22-26, 2019.

IWP4. Caracoglia, L., *"Use of Stochastic Calculus for Non-Deterministic Flutter Analysis of Wind Turbine Blades under Random Perturbations (Special Presentation),"* **First Northeastern University – Tongji University Workshop on Wind Engineering** (NU-TJU WWE1), Boston, Massachusetts, USA, June 22-26, 2019.

IWP3. Caracoglia, L., *"Reduced-order Modeling to Investigate the Response of Tall Buildings under Stochastic Wind Loading,"* **International Conference on Interdisciplinary Research Cooperation, 2013**, International Centre of Excellence Telč, Academy of Sciences of the Czech Republic, Telč, Czech Republic, October 30-31, 2013.

IWP2. Caracoglia, L., *"Reduced-order Modeling to Investigate the Response of Tall Buildings under Stochastic Wind Loading,"* **International Conference on Interdisciplinary Research Cooperation, 2013**, International Centre of Excellence Telč, Academy of Sciences of the Czech Republic, Telč, Czech Republic, October 30-31, 2013.

IWP1. Caracoglia, L., *"Dynamic Response of Long-Span Bridges Influenced by Wind Loading Uncertainty: A Recently-Developed Simulation Framework,"* **Second United States – Japan Workshop on "Structural Dynamics and Monitoring of Bridges and Flexible Structures against Wind Hazards"**, Northeastern University, November 12-14, 2011.

3. GRANTS

3.1. External

Funded – Active

- **L. Caracoglia (co-PI)**, Prof. Yahya Modarres-Sadeghi (Lead) from University of Massachusetts – Amherst, *Adder to Collaborative Research: Modeling the Influence of Turbulence on Flow-induced Instabilities of Large Flexible Structures with Innovative Applications in Wind Turbine Blades*, "AmplifyMass", Massachusetts Clean Energy Center, September 2025 – November 2027, $300,000 ($150K to LC).
- **L. Caracoglia (co-PI),** Prof. Yahya Modarres-Sadeghi (lead PI) from University of Massachusetts – Amherst, *Collaborative Research: Modeling the Influence of Turbulence on Flow-Induced Instabilities of Large Flexible Structures with Innovative Applications in Wind Turbine Blades,* NSF, CMMI, Dynamics Control and System Diagnostics, September 1, 2024 – August 31, 2027, $704,942 ($266K to LC).
- **L. Caracoglia (senior personnel - collaborator),** Prof. Partha Sarkar (lead PI) from Iowa State University, *Mid-scale RI-1 (M1:DP): National Testing Facility for Enhancing Wind Resiliency of Infrastructure in Tornado-Downburst-Gust-front Events (NEWRITE)*, NSF, CMMI, Engineering for Civil Infrastructure, September 22nd, 2023, $14,025,452 ($150K to LC).
- **L. Caracoglia (PI),** *Exploiting the Wind Energy Resource through Aeroelastic Vibration and Torsional Flutter*, NSF, CMMI, Dynamics, Control and Systems Diagnostics (DCSD) Sept. 1st 2020 – Aug. 31st, 2023, $438,521.

Funded – Completed

- **L. Caracoglia**, *INTERN DCL NSF 21-013: Validating Stochastic Approximation Algorithms for Analysis and Design of Super-Tall Buildings in Hurricane-prone Areas by Aeroelastic Experiments – Expanding Research Goals through Industry Collaboration,* NSF, CMMI, May - October 2024 (Grant Supplement), $48,677
- **L. Caracoglia (PI),** *Performance-Based Wind Engineering: Stochastic Approximation for the Wind-Induced Dynamics of the Next-Generation Tall Buildings and Tower Structures,* NSF, CMMI, Engineering for Civil Infrastructure (ECI), May 1st 2019 – April 30th 2024, $257,777.
- **L. Caracoglia (PI),** *INTERN DCL NSF 18-102: Stochastic and Risk Analysis of Wind Turbine Blade Failures due to Flow Instabilities - Expanding Research Goals through Industry Collaboration,* National Science Foundation (NSF), CMMI, Dynamics, Control and Systems Diagnostics (DCSD), July 1st, 2020 – December 31st, 2021 (Grant Supplement), $46,743.
- **L. Caracoglia (Co-PI).** Prof. Yahya Modarres-Sadeghi (PI) from University of Massachusetts – Amherst, *Collaborative Research: Active Control of Nonlinear Flow-Induced Instability of Wind Turbine Blades under Stochastic Perturbations,* NSF, CMMI, Dynamics, Control and Systems Diagnostics (DCSD), September 1st, 2015 – August 31st, 2018 (no cost extension, 08/31/20), $155,000 ($285,000 awarded to UMass Amherst).
- **L. Caracoglia (PI),** *Analytical Method to Assess Dynamic Response of Tall Buildings to Downburst Windstorm,* NSF, CMMI, Hazard Mitigation and Structural Engr., May 1st, 2014 – April 30th, 2018, $274,296.
- **L. Caracoglia (PI),** *CAREER: An Innovative Performance-Based Simulation Framework for High-Rise Buildings against Wind Hazards,* NSF CAREER-Grant, Division of Civil, Mechanical and Manufacturing Innovation (CMMI), August 2009- August 2014, $430,000.
- **L. Caracoglia (PI),** *The Third AAWE Workshop Student Travel Grant, Hyannis, Massachusetts, August 12-14, 2012* NSF, CMMI, September 2012 – August 2013, $10,000.
- **L. Caracoglia (PI),** *A Probability-Based Methodology for the Analysis of Fluctuating Wind Loads on Cable-Supported Bridges,* NSF, CMMI, Sept. 1, 2006 – August 31, 2009 (No-cost extension until 2010) $119,421.
- **L. Caracoglia (PI),** *Dynamic Analysis and Testing of Highway Light Poles,* Illinois Department of Transportation (sub-contracted from Univ. of Illinois at Urbana-Champaign), June 2005 - August 2005, $7,792

Pending

- Prof. Y. Levendis (Pi), **L. Caracoglia (co-PI)**, *Utility-caused Wildfires: Methods to Prevent them and to Predict their Propagation Path and Speed if Prevention Fails*, NSF, Infrastructure Systems and People, December 19th, 2025, $970,304 ($485K to LC).
- Prof. Y. Levendis (Pi), **L. Caracoglia (co-PI)**, *FIRE-WUI: Home Hardening with FireScreens for Flying Ember Interception and Extinguishment*, NSF, Fire Science Innovations through Research and Education, June 20th, 2025, $908,790 ($454K to LC).
- **L. Caracoglia (Lead PI)**, Prof. Yahya Modarres-Sadeghi (co-PI) from University of Massachusetts – Amherst, *Collaborative Research: Simultaneous Wind-Wave-Current Load Interactions with Offshore and Near-Shore Civil Structures*, NSF, CMMI, Engineering for Civil Infrastructure, April 24, 2053, $740,000 ($371K to LC)
- **L. Caracoglia (co-PI),** Prof. Yahya Modarres-Sadeghi (lead PI) from University of Massachusetts – Amherst, *Large Reynolds Number Scaled Experiments of Blade and Cross Sections Tailored to Study Aeroelastic*

Instabilities of Industrial Wind Turbine Blades, Department of Energy, Solicitation RFX-2025-10021, April 4, 2025, $1.5M ($250K to LC).

Not-funded (examples)

- **L. Caracoglia (PI),** *Long-span Cable-Supported Bridge Aeroelasticity: Pushing the Design Span Limits by Innovative Gyroscopic Stabilizer,* NSF, CMMI, Engineering for Civil Infrastructure, June 20, 2024, $390,000
- **L. Caracoglia (Lead PI),** Prof. Yahya Modarres-Sadeghi (co-PI) from University of Massachusetts – Amherst, *Collaborative Research: CLIMA: Simultaneous Wind-Wave-Current Load Interactions with Offshore and Near-Shore Civil Structures in Warming Climate Conditions,* NSF, CMMI, June 7, 2023, $710,000 ($355K to LC)
- **L. Caracoglia (lead PI),** Prof. Partha Sarkar (collaborator PI) from Iowa State University, *Saving Lives and Building Portfolios against Tornadoes in Warming Climates through Human-Centric Physical Modeling and Life-Cycle Cost Assessment,* NSF, CMMI, Engineering for Civil Infrastructure, August 30, 2023, $476,322 ($376K to LC)
- **L. Caracoglia (collaborator PI),** Prof. Sriramya Nair (lead PI) from Cornell University, *Global Centers Track 1: Climate Adaptive Multi-Hazard Resilient Infrastructure (CAMRI),* NSF, CMMI, May 10, 2023, $5M+ ($350K to LC)
- **L. Caracoglia (co-PI),** Prof. Yahya Modarres-Sadeghi (lead PI) from University of Massachusetts – Amherst, *Collaborative Research: Modeling the Influence of Turbulence on Flow-Induced Instabilities of Large Wind Turbine Blades,* NSF, CMMI, Dynamics Control and System Diagnostics, February 14, 2023, $749,000 ($349K to LC)
- **L. Caracoglia (Lead PI),** Prof. Yahya Modarres-Sadeghi (co-PI) from University of Massachusetts – Amherst, C*ollaborative Research: Fluid-Structure Interactions for Informed Design Standards for Disaster Resilient Offshore and Near-Shore Structures,* NSF, CMMI, Disaster Resilience Research Grant, August 19, 2022, $400,000 ($200K to LC)
- **L. Caracoglia (PI),** *BRITE Pivot: Structural Resilience against Tornadic Windstorms using Artificial-Intelligence-Based Surrogate Models,* NSF, CMMI, April 25, 2022, $599,547.
- **L. Caracoglia (co-PI),** Prof. Emanuel Melachrinoudis (Lead PI) from NU and three other co-PIs, *Preliminary ECO-CBET: Wildfire Propagation Prediction and Integrated Environment-Human Protection for a Sustainable Wildland-Urban Interface,* NSF, CBET, September 19, 2022, $1,700,000 ($400K to LC)
- **L. Caracoglia (co-PI),** Prof. Yahya Modarres-Sadeghi (Lead PI) from University of Massachusetts – Amherst, *Collaborative Research: Modeling the Influence of Turbulence on Flow-Induced Instabilities of Large Wind Turbine Blades,* NSF, CMMI, January 2022, $700,000 ($305,100 to LC).
- **L. Caracoglia (PI),** *BRITE Fellow: Combating Research Discrimination through Innovative Wind Engineering - Examination of Climate Change Effects on Thunderstorm Disasters on Civil Structures,* NSF, CMMI, May 25, 2021, $981,520.
- **L. Caracoglia (PI),** Svend Ole Hansen (co-PI), *Investigating Higher-mode Experimental Aeroelasticity for Performance-Based Wind Engineering of the Next-Generation Vertical Structures, equipped with Structural Control Devices* NSF, CMMI, Engr. for Civil Infrastructure (ECI) May 18, 2021, $399,641 (LC $312,032).
- **L. Caracoglia (PI)**, "Urban Resilience against Tornadic and other Nonstationary Wind Hazards using Artificial-Intelligence-Based Surrogate Models", NSF, CMMI, Disaster Resilience Research Grants, September 2020, $397,610.
- **L. Caracoglia (PI)**, "Probabilistic Engineering Design for Nonstationary Thunderstorm Loads: Numerical and Experimental Implementations", NSF, CMMI, Engr. for Civil Infrastructure (ECI), December 2020, $305,676
- E. Melachrinoudis (PI), Y. Levendis (co-PI), **L. Caracoglia (co-PI)**, James Smith and Qian Yu (from UMass Amherst), "ECO-CBET Preliminary: Collaborative Research: Wildfire Spread Prediction and Population Protection for a Sustainable Environment at the Wildland-Urban Interface", National Science Foundation, ECO-CBET, February 11th, 2021, $1,181,809 (LC $393,936 approx.)
- **L. Caracoglia (PI)**, "Multi-disciplinary, Theoretical Framework for the Economic Modeling and Financial Loss Analysis Induced by Wind Loads on Tall Structures", NSF, Division of Social and Economic Sciences, Economics, January 2020, $289,121

3.2. Internal to Northeastern University

Funded – Active

Funded – Completed

- **L. Caracoglia (PI)**, *Fostering Design and Implementation of a Wind-Energy Torsional Harvester through MATLAB Optimizations*, MathWorks Micro-grant, NU, May 1st- November 30th, 2025, $25,000.

- **L. Caracoglia (PI),** *Machine Learning Algorithms for Performance-based Tornado Engineering in the MATLAB® Computing Environment*, MathWorks Micro-grant, NU (program supervised by Prof. M. Leeser), September 2019 – March 2020 (awarded on 2/26/2019), $19,981.
- **L. Caracoglia (PI),** *Advancing MatLab Computations for Stochastic Simulation of Climate-Change-Induced Hurricane Damage,* MathWorks Micro-grant, NU (monitor: Prof. M. Leeser), July 2015 – July 2016, $20,000.
- **L. Caracoglia (PI)** and Bernardo Barbiellini Amidei (co-PI, Department of Physics, NU), *Stochastic Algorithms for the Study of Non-Linear Cable Network Dynamics: Application to the Mitigation of Stay-Cable Vibration,* "Tier 1" Interdisciplinary Grants, Provost's Office, NU, July 2011 – August 2014 (after approval of no-cost extension), $50,000.
- Middler Student: Frank Xia **(supervisor: L. Caracoglia),** *Experimental Verification of Wind-borne Debris Trajectory Model,* Undergraduate Research Program (REU), Provost's Office, NU, Jan. – May 2012, $1,000.
- Junior Student: Sara Coyle **(supervisor: L. Caracoglia)**, *Design and Calibration of a New Test Chamber for Measuring Wind-borne Debris Trajectories,* Undergraduate Research Program (REU), Provost's Office, NU, April – May 2010, $1,000.
- Senior Student: John M. Schroeder **(supervisor: L. Caracoglia**), *Design of a Small-scale Force Balance for Wind Tunnel Applications,* Undergraduate Research Program (REU), Provost's Office, NU, July 2 – October 31 2007, $1,000.
- **L. Caracoglia (PI),** *Parametric Random Noise Representation of Wind Turbulence and Its Effects on the Aeroelasticity of Long-Span Bridges,* Research and Scholarship Development Fund, Provost's Office, NU, July 2006 - June 2007, $14,266.

Pending (none)

Not-funded (examples only)

- **L. Caracoglia (PI)**, *State Space Modeling, based on Machine Learning, to Predict the Vibrations and Output Power of Wind Energy Harvesters*, MathWorks Micro-grant, NU, January 31, 2025, $25,069.
- **L. Caracoglia (PI)**, *Machine Learning Applications for Stochastic Flutter Control and Avoidance in Large-Scale Wind Turbine Blades*, MathWorks Micro-grant, NU (program supervised by Prof. M. Leeser), September 2021 – March 2022, $24,980.
- **L. Caracoglia (PI)** and Juliet Davidow (co-PI, Dept. of Psychology, COS, NU), *Multi-disciplinary Optimization of a Gyroscopic Vibration Absorber for Slender Bridges by Wind-Structure-Driver-Absorber Interaction and Psychological Investigations*, "Tier 1" Interdisciplinary Grants, Provost's Office, NU (Fiscal Year 2021), July 2021 – September 2022, $50,000.
- **L. Caracoglia (PI),** *Physics-Informed Machine Learning Algorithm for Wind-Induced Fragility Analysis of Super-Tall Buildings and Towers* MathWorks Micro-grant, NU (led by Prof. M. Leeser), 2022 –2023, $24,993.
- **L. Caracoglia (PI)** and Rachel Rodgers (co-PI, Bouvé College, NU), *Engineering Psychology and User-Wind-Load Performance of Slender Bridges: Vibration Suppression by Gyroscopic Absorber,* "Tier 1" Interdisciplinary Grants, Provost's Office, NU, (Fiscal Year 2021), $50,000.

4. TEACHING AND ADVISING

4.1. Courses Taught at Northeastern University *(Please refer to Table 2 below)*

Table 2. List of Courses with Student Evaluations (Table and footnotes continue on the next pages)

Course number[6]	Course title	Course type[4]	Number of students (Number responded)	Overall effectiveness score[1,2,3]	Comparison[5]	
					CIV courses & Faculty	ALL courses & Faculty
CIVG 354	Wind Engr. (Fall '05). **NEW** by Caracoglia	Graduate. Semester (R)	6 (5)	2.6 Learning 3.0 Instructor	3.6 4.1	3.8 4.1
CIVU 425	Steel Design (Spring 2006)	Under-graduate (J/S). Semester (R)	33 (24)	3.3 Learning 2.9 Instructor	3.7 4.0	3.8 4.1
CIVU 425	Steel Design (Fall 2006)	Under-graduate (J/S). Semester (R)	23 (21)	2.8 Learning 2.7 Instructor	3.0 3.1	3.5 3.8
CIVG 352	Bridge Design (Spring 2007)	Graduate. Half-Semester (R)	8 (6)	3.0 Learning 3.4 Instructor	3.8 4.1	3.7 4.1
CIVG 354	Wind Engineering (Fall 2007)	Graduate. Semester (R)	6 (6)	4.0 Learning 3.7 Instructor	3.7 4.0	3.8 4.1
CIVU 425	Steel Design (Spring 2008)	Under-graduate (J/S). Semester (R)	32 (13)	2.8 Learning 2.7 Instructor	3.4 4.4	3.3 4.2
CIVU 425	Steel Design (Fall 2008)	Under-graduate (J/S). Semester (R)	28 (12)	4.3 Learning 3.9 Instructor	3.9 4.0	4.0 4.2
CIVG 352	Bridge Design (Fall 2008)	Graduate. Half-Semester (R)	7 (6)	3.5 Learning 4.0 Instructor	3.9 4.0	4.0 4.2

Table 2. List of Courses with Student Evaluations (Continued)

Course number	Course title	Course type[4]	Number of students (Number responded)	Overall effectiveness score[1,2,3]	Comparison[5]	
					CIV courses & Faculty	ALL courses & Faculty
CIVG 353	Pre-stressed Concrete (Fall 2008)	Graduate. Half-Semester (R)	7 (3)	3.7 Learning 4.0 Instructor	3.9 4.0	4.0 4.2
CIVG 351	Behavior of Steel Structures (Spr. '09)	Graduate. Semester (R)	8 (3)	4.3 Learning 4.0 Instructor	4.1 4.1	4.1 4.2
CIVE 2320	Structural Analysis 1 (Fall 2009)	Under-graduate (M). Semester (R)	43 (13)	4.4 Learning 3.6 Instructor	4.1 4.1	4.1 4.2
CIVE 7354	Wind Engineering (Fall 2009)	Graduate. Semester (R)	11 (2)	5.0 Learning 5.0 Instructor	4.1 4.1	4.1 4.2
CIVE 3425	Steel Design (Spring 2010)	Under-graduate (J/S). Semester (R)	60 (31)	3.9 Learning 3.5 Instructor	4.3 4.4	4.1 4.3
CIVE 3425	Steel Design (Fall 2010)	Under-graduate (J/S). Semester (R)	27 (9)	4.3 Learning 3.9 Instructor	4.2 4.2	4.3 4.2
CIVE 2221	Statics & Strength of Materials (Fall 2010)	Under-graduate (Sp). Semester (R)	46 (12)	3.3 Learning 2.6 Instructor	4.2 4.2	4.3 4.2
CIVE 2320	Structural Analysis 1 (Spring 2011)	Under-graduate (M). Semester (R)	47 (10)	3.3 Learning 2.8 Instructor	3.6 4.1	4.1 4.3
CIVE 2221 Section 01	Statics & Strength of Materials (Fall 2011)	Under-graduate (Sp). Semester (R)	50 (23)	4.1 Learning 3.4 Instructor	4.1 4.3	4.3 4.3
CIVE 2221 Section 01	Statics & Strength of Materials (Fall 2011)	Under-graduate (Sp). Semester (R)	50 (23)	4.1 Learning 3.4 Instructor	4.1 4.3	4.3 4.3
CIVE 2221 Section 02	Statics & Strength of Materials (Fall 2011)	Under-graduate (Sp). Semester (R)	50 (19)	4.3 Learning 4.2 Instructor	4.1 4.3	4.3 4.3
CIVE 7354 – V30	Wind Engineering (Spring 2012)	Graduate. Semester (R)	14 (6)	3.8 Learning 3.7 Instructor	4.3 4.2	4.2 4.3
CIVE 7354 – V35	Wind Engineering (Spring 2012)	Graduate. Semester (E) - video-stream	11 (6)	3.2 Learning 3.8 Instructor	4.3 4.2	4.2 4.3
CIVE 2221 Section 02	Statics & Strength of Materials (Fall 2012)	Under-graduate (Sp). Semester (R)	59 (40)	4.3 Learning 3.8 Instructor	4.2 4.2	4.1 4.3
CIVE 3425	Steel Design (Fall 2012)	Under-graduate (J/S). Semester (R)	26 (10)	4.0 Learning 3.1 Instructor	4.2 4.2	4.1 4.3
CIVE 7354 – V30	Wind Engineering (Spring 2013)	Graduate. Semester (R)	15 (10)	3.1 Learning 3.4 Instructor	4.3 4.3	4.2 4.3
CIVE 7354 – V35	Wind Engineering (Spring 2013)	Graduate. Semester (E) - video-stream	3	N/A	N/A	N/A
CIVE 2221 Section 02	Statics & Strength of Materials (Fall 2013)	Under-graduate (Sp). Semester (R)	43 (30)	4.3 Learning 4.0 Instructor	4.2 4.2	4.2 4.3
ENSY 7374	Wind Energy Technology (F.2013), NEW with M. Taslim (MIE)	Graduate. Semester (E)	9 (7)	3.6 Learning 4.3 Instructor	4.1 4.3	4.2 4.3
CIVE 7354 – V30	Wind Engineering (Spring 2014)	Graduate. Semester (R)	11 (5)	3.0 Learning 3.4 Instructor	4.4	4.3
CIVE 7354 – V35	Wind Engineering (Spring 2014)	Graduate. Semester (E) - video-stream	2	N/A	N/A	N/A
CIVE 2221	Statics & Strength of Materials (Sp. 2014)	Under-graduate (Sp). Semester (R)	13 (3)	5.0 Learning 4.0 Instructor	4.4	4.3
CIVE 2221	Statics & Strength of Materials (Fall 2015)	Under-graduate (Sp). Semester (R)	17 (10)	4.1 Learning 4.3 Instructor	4.2 4.3	4.1 4.3
CIVE 3425	Steel Design (Fall 2015)	Under-graduate (J/S). Semester (R)	43 (24)	3.6 Learning 3.6 Instructor	4.2 4.3	4.1 4.3
CIVE 7354 – V30	Wind Engineering (Spring 2016)	Graduate. Semester (R)	4 (3)	4.3 Learning 4.3 Instructor	N/A	4.0 4.3
CIVE 7354 – V35	Wind Engineering (Spring 2016)	Graduate. Semester (E) - video-stream	4	N/A	N/A	N/A
CIVE 2221	Statics & Strength of Materials (Fall 2016)	Under-graduate (Sp). Semester (R)	19 (14)	4.2 Learning 3.7 Instructor	N/A	4.2 4.3
CIVE 2221 – Section 1	Statics & Strength of Materials (Fall 2018)	Under-graduate (Sp). Semester (R)	13 (10)	4.0 Learning 3.7 Instructor	4.3 4.3	4.3 4.4
CIVE 3425	Steel Structure Design (Fall 2018)	Under-graduate (J/S). Semester (R)	20 (9)	4.3 Learning 4.1 Instructor	4.3 4.3	4.3 4.4
ENSY 5585 – V30	Wind Energy Systems (Fall 2018), MIE with M. Taslim	Graduate. Semester (E)	15 (10)	4.1 Learning 4.3 Instructor	4.3 4.4	4.3 4.4
CIVE 7354 – V30, V35	Wind Engineering (Spring 2019)	Graduate. Semester (R) and (E)	4 + 3 video (3)	3.7 Learning 4.3 Instructor	4.4 4.4	4.3 4.4
CIVE 2221 – Section 3	Statics & Solid Mechanics (Fall 2019)	Under-graduate (Sp). Semester (R)	27 (6)	4.2 Learning 3.8 Instructor	4.4 4.4	4.3 4.4
CIVE 3425	Steel Structure Design (Fall 2019)	Under-graduate (J/S). Semester (R)	15 (7)	3.9 Learning 3.4 Instructor	4.4 4.4	4.3 4.4
ENSY 5585 – V30, V35	Wind Energy Systems (Fall 2019), MIE	Graduate. Semester (E)	3 + 2 video (2)	4.0 Learning 4.0 Instructor	4.3 4.4	4.3 4.4
CIVE 3425	Steel Structure Design (Spring 2020)	Under-graduate (J/S). Semester (R)	36 (20)	4.1 Learning 4.1 Instructor	4.5 4.6	4.3 4.5
CIVE 2221 – Section 3	Statics & Solid Mechanics (Fall 2020)	Under-graduate (Sp). Semester (R)	24 (12)	4.5 Learning 3.8 Instructor	4.4 4.4	4.3 4.4

Table 2. List of Courses with Student Evaluations (Continued)

Course number	Course title	Course type[4]	Number of students (Number responded)	Overall effectiveness score[1,2,3]	Comparison[5]	
					CIV courses & Faculty	ALL courses & Faculty
CIVE 3425	Steel Structure Design (Fall 2020)	Under-graduate (J/S). Semester (R)	28 (14)	4.6 Learning 4.1 Instructor	4.4 4.4	4.3 4.4
ENSY 5585 – V30, V35	Wind Energy Systems (Fall 2020), MIE with M. Taslim	Graduate. Semester (E)	12 + 1 video (3)	4.7 Learning 4.7 Instructor	4.4 4.4	4.3 4.4
CIVE 7354 – V30, V35	Wind Engineering (Spring 2021)	Graduate. Semester (R)	12 + 4 video (12)	3.7 Learning 3.8 Instructor	4.4 4.5	4.4 4.5
CIVE 2221 – Section 3	Statics & Solid Mechanics (Fall 2021)	Under-graduate (Sp). Semester (R)	32 (16)	4.4 Learning 3.6 Instructor	4.4 4.4	4.3 4.4
CIVE 2320	Structural Analysis (Fall 2021)	Under-graduate (J/S). Semester (R)	39 (23)	3.0 Learning 2.3 Instructor	4.4 4.4	4.3 4.4
ENSY 5585 – V30, V35	Wind Energy Systems (Fall 2021), MIE with M. Taslim	Graduate. Semester (E)	9 (5)	3.8 Learning 4.0 Instructor	4.4 4.4	4.3 4.4
CIVE 3425	Steel Structure Design (Spring 2022)	Under-graduate (J/S). Semester (R)	20 (5)	4.3 Learning 3.8 Instructor	4.3 4.4	4.6 4.6
CIVE 4780	Timber and Masonry Structures - Technology & Design Abroad (Summer 2, 2022) **NEW**	Undergraduate (J/S). Semester (R,E)	10 (5)	3.8 Learning 4.0 Instructor	4.5 4.4	4.5 4.4
CIVE 4781	Intro to Preservation & Restoration of Historic Buildings, Technology and Policies Abroad (Summer 2, 2022) **NEW**	Undergraduate (E). Semester (R)	10 (3)	4.0 Learning 4.7 Instructor	4.5 4.4	4.5 4.4
CIVE 2221 – Section 2	Statics & Strength of Materials (Fall 2022)	Under-graduate (Sp). Semester (R)	40 (13)	4.0 Learning 3.9 Instructor	4.4 4.4	4.3 4.4
CIVE 7354 – V30, V35	Wind Engineering (Fall 2022)	Graduate. Semester (R)	7 + 1 video (7)	3.9 Learning 4.3 Instructor	4.4 4.4	4.3 4.4
CIVE 3425	Steel Structure Design (Spring 2023)	Under-graduate (J/S). Semester (R)	19 (5)	3.2 Learning 3.0 Instructor	4.5 4.6	4.4 4.3
CIVE 2221 – Section 3	Statics & Solid Mechanics (Fall 2023)	Under-graduate (Sp). Semester (R)	34 (13)	3.2 Learning 2.8 Instructor	4.3 4.4.	4.4 4.5
CIVE 3425	Steel Structure Design (Fall 2023)	Under-graduate (J/S). Semester (R)	19 (6)	4.0 Learning 3.0 Instructor	4.3 4.4.	4.4 4.5
CIVE 2221 – Section 3	Statics & Solid Mechanics (Fall 2024)	Under-graduate (Sp). Semester (R)	30 (11)	3.4 Learning 3.0 Instructor	4.4 4.5	4.4 4.5
CIVE 3425	Steel Structure Design (Fall 2024)	Under-graduate (J/S). Semester (R)	16 (7)	4.3 Learning 4.0 Instructor	4.4 4.5	4.4 4.5
ENSY 5585 – V30, V35	Wind Energy Systems (Fall 2024), MIE with M. Taslim	Graduate. Semester (E)	6 (3)	4.7 Learning 4.7 Instructor	4.6 4.6	4.4 4.5
CIVE 7354 – V30	Wind Engineering (Spring 2025)	Graduate. Semester (R)	5 (0)	n/a Learning n/a Instructor	4.5 4.6	4.4 4.5
CIVE 2221 – Section 3	Statics & Solid Mechanics (Fall 2025)	Under-graduate (Sp). Semester (R)	27 (8)	4.5 Learning 3.38 Instructor	4.46 4.37	4.31 4.48
CIVE 3425	Steel Structure Design (Fall 2025)	Under-graduate (J/S). Semester (R)	26 (13)	3.92 Learning 3.62 Instructor	4.46 4.37	4.31 4.48
CIVE 3425	Steel Structure Design (Spring 2026)	Under-graduate (J/S). Semester (R)	33	Learning Instructor		

Note (1): Mean values are reported on a scale from 0.0 to 5.0.
Note (2): The "TRACE" evaluation system, currently adopted by NU, was implemented in the Spring of 2008. Prior to this date, the "TCEP" evaluations were utilized.
Note (3): For "Learning," please refer to Question #11 of TCEP, to Question Q10 of TRACE (until 2017) or question under category "Learning Related Questions" of TRACE (2016 – present): "I learned a lot in this course." For "Instructor," please refer to Question #14 of TCEP, Question Q27 of TRACE (Q24 in Spring 2008, Q28 in Spring 2010 and prior to 2017) or question under "Instructor Effectiveness" of TRACE (2016 – present): "What is your overall rating of this instructor's teaching effectiveness?"
Note (4): Course type and designations. The under-graduate curriculum is based on a five-year Co-op program with: "J/S," junior/senior (4th or 5th year), "M," "middler" (3rd year); "Sp," sophomore (2nd year). Semester: 15 weeks, 4 semester-hours, SH; Half-Semester: 7.5 weeks, 2SH. Regular load (R), Extra compensation (E).
Note (5): Comparison against CIV courses and university-wide ("ALL") courses, taught in the same semester.

4.2. Courses Taught at Other Institutions (Invited Lecturer)

1) "Flow Induced Vibrations of Civil and Mechanical Engineering", University of Perugia, Italy, June 3rd – June 20, 2024, PhD Summer Course (hybrid, synchronously delivered on-line), 18 hours (17 students).
2) "Emerging Wind Engineering & Energy Technologies at Multiple Scales: From Large Wind Turbines to Miniature Harvesters", University of Trento, Italy, April 15-24 2024, PhD Course (hybrid, synchronously delivered on-line), 20 hours (10 students).
3) "Probability-Informed Wind Engineering against Synoptic and Non-Synoptic Wind Hazards", Polytechnic University of Genoa, Italy, May 17 - June 6 2023, PhD Summer Course (hybrid, synchronously delivered on-line), 20 hours.

4) "Introduction to Wind Science and Engineering", Department of Engineering, University of Campania "Luigi Vanvitelli", Italy, June 6 - 28 2022, PhD Summer Course (hybrid, synchronously delivered on-line), 12 hours, 30 students.
5) "Introduction to Random Vibrations and Structural Reliability", Department of Structural and Geotechnical Engineering, University of Rome, La Sapienza, Italy, June 7 - 8 2021, PhD Summer Course (synchronously delivered on-line), 6 hours, 19 students.
6) "Risk Analysis, Resilience and Life Cycle Cost Assessment of Structures against Wind Hazards", Department of Civil and Environmental Engineering, University of Perugia, Italy, May 10-28 2021, PhD Summer Course (synchronously delivered on-line), 18 hours, 16 students.
7) "Second Online Summer School on Mechanics and Performance of Resilient Structures And Infrastructures (MECHRES20)", co-taught with Profs. Oreste S. Bursi (chair), Fabrizio Paolacci, Vincenzo Gattulli, Department of Civil, Mechanical and Environmental Engineering, University of Trento, Italy, September 8 - 11 2020, 8 hours, 15 students.
8) "Direct and Inverse Dynamic Problems in Random Vibrations – Module 1 Introduction to Random Vibrations and Structural Reliability", co-taught with Prof. Vincenzo Gattulli, Department of Structural and Geotechnical Engineering, University of Rome, La Sapienza, Italy, July 3 - 6 2020, PhD Summer Course (synchronously delivered on-line), 6 hours, 30 students.
9) "A Short-Course in Wind Engineering, Bridge Aerodynamics and Performance-Based Design", Department of Civil, Environmental and Mechanical Engineering, University of Trento, Italy, May 20 – June 12 2020, Graduate course, MS student level (delivered on-line), 9 hours, 20 ~ 25 students.
10) "Introduction to Urban Resilience against Wind Hazards and other Natural Threats", Department of Architecture, Geology, Environment & Constructions (ArGEnCo), University of Liège, Belgium, 29 November – 20 December 2019, Graduate course (MS students), 12 hours, 11 students.
11) "A Short-Course in Wind Engineering (*Un Corso Breve in Ingegneria del Vento per Studenti Iscritti al Corso di Laurea Specialistica in Ingegneria Civile*)", Department of Civil and Environmental Engineering, University of Perugia, Italy, November 23 – 25 2015, Graduate course (for 5-th year Diploma students and PhD students), 8 hours, 10 to 20 students.

4.3. Supervision of Post-Doctoral Fellows, Associates and Visiting Faculty

Researcher name:	Dr. Prof. Thai-Hoa Le, Visiting Assistant Professor, on leave from Vietnam National University, Hanoi, Vietnam
Co-Advisors:	L. Caracoglia (**advisor**); Dr. Bernardo Barbiellini Amidei, Department of Physics, College of Science, NU (co-advisor)
Dates of supervision:	September 2013 - August 2016
Project description:	Stochastic algorithms for the study of dynamics and performance of tall buildings, wind turbines and long-span bridges against transient wind loads (thunderstorms, downbursts) by Wavelet – Galerkin Analysis Method
Sponsor:	NSF and NU Office of the Provost, Tier 1 Research Grants
Status:	**Completed**
Researcher name:	Dr. Fabio Rizzo, Post-doctoral Fellow, University of Chieti – Pescara, Italy (visiting NU on temporary leave from the Univ. of Pescara)
Co-Advisors:	Professor Piero D'Asdia, University of Chieti – Pescara (advisor); L. Caracoglia (**co-advisor**)
Dates of supervision:	September 2013 – present (Dr. Rizzo visited NU in May - June 2014)
Project description:	Estimation of flutter derivatives of closed-box girders – comparison between wind tunnel tests, conducted at NU, and Computational Fluid Dynamics simulations
Sponsor:	None
Status:	**Completed**
Researcher name:	Dr. Gian Felice Giaccu, Post-doctoral Fellow, Visiting Researcher from the Department of Structural Engineering, University of Cagliari, Italy
Co-Advisors:	L. Caracoglia (**advisor**); Dr. Bernardo Barbiellini Amidei, Department of Physics, College of Science, NU (co-advisor)
Dates of supervision:	August 2011 – October 2012 (Febr. 2012 – October 2012, at NU)
Project description:	Stochastic algorithms for the study of non-linear cable network dynamics and the mitigation of stay-cable vibration

Sponsor:	NU, Office of the Provost, Tier 1 Research Grants, 2011 – 2012
Status:	**Completed**
Current Position:	Assistant Professor, Department of Architecture, Design and Urban Planning, University of Sassari, Alghero, Italy

4.4. Supervision of Graduate Students

Please note that students are listed in reverse chronological order. This order is based on the date of graduation or completion of supervision period. L. Caracoglia is sole supervisor, unless otherwise noted.

PhD Students

Student name:	Mr. Sina Shid-Moosavi, Civil Engineering-Data and Systems
Co-Advisors	E.M. Tronci (advisor); L. Caracoglia (**co-advisor**)
Start date:	September 2023
Graduation date:	2026 (expected) - student passed qualifying exam in N/A
Project description:	Investigating the impact of wake-induced turbulence on wind turbine tower fatigue
Sponsor:	CEE Department (as a Research Assistant/Teaching Assistant)
Status:	**In progress**

Student name:	Mr. Matteo Polucci, Civil Engineering-Structural
Start date:	September 2024
Graduation date:	2028 (expected)
Project description:	Technical feasibility of aeroelastic experiments in the planned NEWRITE facility
Sponsor:	NSF (as a Research Assistant) – dual PhD program with Sapienza University or Rome
Status:	**In progress**

Student name:	Mr. Tuan Kiet La, Civil Engineering-Structural
Start date:	September 2024
Graduation date:	2028 (expected)
Project description:	experimentations for the technical feasibility of an aeroelastic harvester
Sponsor:	NSF (as a Research Assistant)
Status:	**In progress**

Student name:	Mr. Yuhui Qin, Civil Engineering-Structural
Start date:	September 2022
Graduation date:	2026 (expected) student passed qualifying exam in Fall 2023
Project description:	Simulations and experimentations for technical feasibility of an aeroelastic harvester
Sponsor:	COE Fellow and NSF (as a Research Assistant)
Status:	**In progress**

Student name:	Mr. Davide Piciucco, Civil Engineering-Structural
Start date:	September 2022
End date:	December 2022
Project description:	Simulations and experimentations on technical feasibility of an aeroelastic harvester
Sponsor:	COE Fellow
Status:	**Interrupted by student's request**

Student name:	Mr. Lei Zhang, Civil Engineering-Structural
Start date:	September 2019 – student passed qualifying exam in Fall 2020
Graduation date:	Summer 2025
Project description:	Stochastic approximation methods for the analysis of design of next-generation tall buildings and tower structures
Dissertation title:	**Performance-based wind engineering of super-tall building towers equipped with external guy-wire cable systems**

Sponsor:	COE Fellow and NSF (as a Research Assistant)
Status:	**In progress**
Student name:	Mr. Shaoning Li, Civil Engineering-Structural
Start date:	September 2017
Graduation date:	May 9, 2022 – student passed qualifying exam on 03/27/2019
Project description:	Stochastic aeroelastic instability of wind turbine blades
Dissertation title	**Stochastic analysis for wind turbine blades subjected to aeroelastic instabilities**
Sponsor:	NSF (as a Research Assistant), Teaching Assistant
Status:	**Completed**
Student name:	Mr. Viet Le, Civil Engineering-Structural
Start date:	September 2016
Graduation date:	May 1st, 2020 (qualifying exam passed on 04/12/2018)
Project description:	Performance of tall buildings under non-stationary wind loads
Dissertation title:	**A performance-based wind engineering framework for vertical structures subjected to nonstationary wind loads**
Sponsor:	COE Fellow, NSF and Mathworks Micro-grant (as a Research Assistant), Teaching Assistant
Status:	**Completed**
Current Position:	Research Engineer, ARUP, New York, NY
Student name:	Mr. Wei Cui, Civil Engineering-Structural
Start date:	September 2012 (supervision started in May 2013)
Graduation date:	May 5th, 2017 (qualifying exam passed on 11/23/2013)
Project description:	Performance-based design of tall buildings under high winds
Dissertation title:	**Performance-based design framework for 3D coupled wind-induced response of tall buildings in turbulent winds** (URL: http://hdl.handle.net/2047/D20250947)
Sponsor:	NSF CAREER and Mathworks Micro-grant (as a Research Assistant)
Status:	**Completed**
Current Position	Assistant professor, Department of Bridge Engineering, Tongji University, Shanghai, P.R. China
Student name:	Mr. Farid Moghim, Civil Engineering-Structural
Start date:	June 2009
Graduation date:	February 19, 2014 with degree conferred on May 2nd, 2014 (qualifying exam passed in Spring 2011)
Project description:	Simulation and assessment wind-borne debris trajectory and damage to the glass facades of tall buildings during extreme wind events
Dissertation title:	**Wind-borne debris trajectory in high winds: application to the protection of tall building facades** (URL: http://hdl.handle.net/2047/d20005006)
Sponsor:	NSF CAREER (as a Research Assistant)
Status:	**Completed**
Current Position:	Risk Analyst, Liberty Mutual, Boston, MA (formerly, Research Engineer, AIR Worldwide, Boston, MA)
Student name:	Mr. Dong-Woo Seo, Civil Engineering-Structural
Start date:	September 2008
Graduation date:	February 28, 2013 with degree conferred in May 2013 (qualifying exam passed in Spring 2011)
Project description:	Analysis of uncertainty propagation in aeroelastic systems: Wind-induced response simulation on long-span bridges
Dissertation title:	**Effects of errors in flutter derivatives on the wind-induced response of cable-supported bridges**

Sponsor:	NSF (as a Research Assistant) in 2008-2010 (TA/RA in 2011-2012)
Status:	**Completed**
Current Position:	Research Engineer, Structural Engineering Research Division, Korea Institute of Civil Engineering and Construction Technology, KICT, South Korea

PhD Students (Visiting from Institutions other than NU)

Student name:	Ms. Laura Ierimonti, PhD Student, Department of Civil and Environmental Engineering, University of Perugia, Italy
Co-Advisors:	Prof. Ilaria Venanzi, University of Perugia (primary advisor); L. Caracoglia (**co-advisor** during the study visit at NU**,** member of the examination committee and external reviewer of the thesis)
Dates of supervision:	January 2016 – March 2016 (visit to NU)
Graduation date:	May 2018 (PhD degree conferred by Universities of Florence, Perugia, Pisa, and Braunschweig - Italy/Germany)
Project description:	Risk design optimization of smart flexible structures (tall buildings)
Dissertation title:	Life-cycle cost-based design of wind excited tall buildings
Sponsor:	University of Florence, Italy; University of Perugia, Italy
Status:	**Completed**

Student name:	Mr. Bastian Nebenführ, PhD Student, Division of Fluid Dynamics, Department of Applied Mechanics, Chalmers University of Technology, Sweden
Co-Advisors:	Prof. Lars Davidson, Chalmers University of Technology (primary advisor); L. Caracoglia (**co-advisor**)
Dates of supervision:	April 16, 2013 - July 1st, 2013 (visit to NU)
Graduation date:	2015 (PhD conferred by Chalmers University of Technology)
Project description:	Modeling, simulation and verification of CFD algorithms for solution of fluid-structure interaction problems on large wind turbines in forested areas
Dissertation title:	**Turbulence-resolving simulations for engineering applications**
Sponsor:	Swedish Wind Power Technology Center (SWPTC), Chalmers University of Technology
Status:	**Completed** (student visited NU in summer 2013)

Student name:	Mr. Thomas Canor, Visiting Research Assistant at NU (CEE) and PhD Student, Department of Civil Engineering, University of Liège, Belgium
Co-Advisors:	Professor Vincent Denoël (primary advisor), Technical University of Liège; L. Caracoglia (**co-advisor** during the study visit at NU**,** member of the examination committee)
Dates of supervision:	February 2013 - April 2013; December 2013 (visit to NU)
Graduation date:	May 2014 (PhD degree conferred by the University of Liège, Belgium)
Project description:	Use of Stochastic Calculus for the solution of random bridge flutter problem contaminated by modeling errors
Dissertation title:	**New perspectives on probabilistic methods for nonlinear transient dynamics in civil engineering**
Sponsor:	FNRS - Fonds National de la Recherche Scientifique, Brussels, Belgium
Status:	**Completed**
Current position	Senior Risk Advisor, KPMG, Belgium

Student name:	Mr. Philipp Egger, Visiting Research Assistant at NU (CEE) and PhD Student, Department of Structural Engineering, Technical University of Vienna, Austria
Co-Advisors:	Professor Johann Kollegger (primary advisor), Technical University of Vienna; L. Caracoglia (**co-advisor** during the study visit at NU)
Dates of supervision:	January 2011 – present (January 2011 - June 2011 at NU)
Graduation date:	2020, expected (PhD conferred by Technical University of Vienna)
Project description:	Innovative Damping System for Stay-Cables – Modeling and Simulation
Dissertation title:	TBA

Sponsor:	Austrian Marshall Plan Foundation (Marshallplan Jubiläumsstiftung), Vienna, Austria and Technical University of Vienna in 2011
Status:	**In progress** (collaboration will continue until student graduation)
Current Position	VSL International, Köniz, Switzerland

Student name:	Mr. Gian Felice Giaccu, Visiting Research Assistant at NU (CEE) and PhD Student, Department Structural Engr., University of Cagliari, Italy
Co-Advisors:	Professor Gian Paolo Gamberini, University of Cagliari (primary advisor); L. Caracoglia (**co-advisor**); Dr. Francesco Cambuli, University of Cagliari (co-advisor)
Dates of supervision:	February 2009 – August 2009 (visit to NU)
Graduation date:	January 2010 (PhD degree awarded from University of Cagliari)
Project description:	Nonlinear dynamic simulation of stay/cross-tie systems and in-plane cable networks
Dissertation title:	**Sulla dinamica del sistema stralli-connettori** (in Italian)
Sponsor:	University of Cagliari (while visiting NU)
Status:	**Completed**
Current position	Assistant Professor, University of Sassari, Italy

PhD Students (Advised while Collaborating / Working at other Institutions)

Student name:	Mr. Antonio Malasomma, PhD Student, Department of Engineering, University of Campania "Luigi Vanvitelli", Italy
Co-Advisors:	Prof. Francesco Ricciardelli, University of Campania (primary advisor), Prof. A.M. Avossa (co-advisor); Dr. V. Picozzi (co-advisor); L. Caracoglia (**international tutor**);
Dates of supervision:	August – September 2013 (supervised by Luca Caracoglia while working as a Visiting Professor at the University of Campania, Italy in 2013)
Graduation date:	2026 - expected (PhD conferred by University of Trento, Italy)
Project description:	Full-scale measurements and monitoring of a mid-rise building under wind loads
Dissertation title:	**Full-scale monitoring of a mid-rise building under wind actions**
Sponsor:	University of Campania "Luigi vanvitelli"
Status:	**In Progress**

Student name:	Mr. Giuseppe Abbiati, PhD Student, Department of Civil, Environmental and Mechanical Engineering, University of Trento, Italy
Co-Advisors:	Prof. Salvatore Bursi, University of Trento (primary advisor)
Dates of supervision:	August – September 2013 (supervised by Luca Caracoglia while working as a Research Fellow at the University of Trento, Italy in 2013)
Graduation date:	2014 (PhD conferred by University of Trento, Italy)
Project description:	Propagation of coupling uncertainties to experimental seismic fragility curves of a typical piping system
Dissertation title:	N/A
Sponsor:	University of Trento
Status:	**Completed**
Current position	Associate Professor, Aarhaus University, Denmark

MS Students with Thesis/Report

Student name:	Mr. William Michalski, Graduate Certificate in Engineering Leadership - Gordon Leadership Program (with concentration in Civil and Environmental Engineering)
Start date:	September 2015
Graduation date:	July 2016 (data of submission of Gordon Thesis) – student completed MS degree studies and graduated in 2018
Project description:	Wind load analysis a power line support structure
Leadership Challenge Project Report title:	**Sustainable design – Envision's application to the Ticonderoga 115kV overhead line refurbishment**
Sponsor:	Black & Veatch
Status:	**Completed**

Student name:	Mr. Daniel Bissex, Electrical and Computer Engineering
Co-Advisors:	Professor Gilead Tadmor, Electrical and Computer Engineering (primary advisor); L. Caracoglia (**co-advisor**)
Start date:	September 2008
Graduation date:	2010
Project description:	Accelerated compression of large data sets and reduced order modeling of fluid flows (MS Thesis)
Sponsor:	IGERT Fellow, Intelligent Diagnostics for Aging Infrastructures - NSF
Status:	**Completed**

Student name:	Ms. Naimi Pathak, Civil Engineering-Structural
Start date:	June 2009
Graduation date:	August 2009
Project description:	Finite-element analysis of tall buildings under wind excitation
MS Report title:	**Finite element modeling and validation of second generation wind excited tall benchmark building**
Sponsor:	CEE Department (one semester only; as a Teaching Assistant)
Status:	**Completed**

Student name:	Mrs. Marra A. Smith (formerly Giuliani), Civil Engineering-Structural
Start date:	January 2008
Graduation date:	August 2009
Project description:	Performance-based design of slender structures against extreme winds
MS Thesis title:	**A Monte Carlo based method for the dynamic performance analysis of tall buildings under turbulent wind** (URL: http://hdl.handle.net/2047/d20000048)
Sponsor:	CEE Department (as a Teaching Assistant)
Status:	**Completed**

Student name:	Ms. Raulina Brito-Piña, Civil Engineering-Structural
Start date:	January 2008
Graduation date:	May 2009
Project description:	Experimental measurement of aeroelastic coefficients for flutter and buffeting analysis of long-span bridges
MS Thesis title:	**Extraction of Aeroelastic Coefficients for Bridge Decks from Small-scale Wind Tunnel Tests**
Sponsor:	NSF (as a Research Assistant)
Status:	**Completed**
Current position	Research engineer, AIR Worldwide, Boston, MA

Student name:	Mr. Antonio Velazquez-Hernandez, Civil Engineering-Structural
Start date:	January 2005
Graduation date:	August 2007
Project description:	Monte-Carlo-based algorithms for buffeting analysis of long-span bridges
MS Thesis title:	**Simulation of long-span bridge buffeting response with uncertain definition of selected aerodynamic parameters**
Sponsor:	NU Provost's Office and CEE Department (as a Research Assistant)
Status:	**Completed**
Current Position:	Assistant Professor, Department of Civil Engineering, Ohio University

MS Students with Thesis (Visiting from Institutions other than NU)

Student name:	Mr. Daniele Crisman, MS Student, Department of Civil Engineering and Architecture, University of Trieste, Italy
Co-Advisors:	Prof. Salvatore Noè, University of Trieste (advisor); L. Caracoglia (**co-advisor** during

	the study visit at NU)
Dates of supervision:	September 2018 – December 2018 (at NU)
Graduation date:	March 19, 2021
Project description:	Database Assisted-Design (DAD) of low-rise buildings for wind loads: applicability to European and Italian standards
Diploma Thesis title:	Metodologia DAD (database assisted-design) per edifici industriali sotto l'azione del vento e la sua applicabilità nella normativa italiana ed europea (in Italian).
Sponsor:	Study fellowship, University of Trieste, Italy
Status:	**Completed**
Student name:	Ms. Arianna Stragapede, MS Student (MS student / Five-year Diploma), Aeronautical and Aerospace Engineering, Rome University "Sapienza", Italy
Co-Advisors:	Professors Annalisa Fregolent (primary advisor) and Franco Mastoddi (co-advisor), Department of Mechanics and Aeronautics, University of Rome "La Sapienza"; L. Caracoglia (**external co-advisor** during the study visit at NU)
Dates of supervision:	October 2016 – February 2017 (at NU)
Graduation date:	March 14, 2017
Project description:	Aeroelastic instabilities of wind turbine blades
MS Thesis title:	**Non-deterministic flutter analysis of a reference wind turbine blade**
Sponsor:	Study fellowship, University of Rome "La Sapienza"
Status:	**Completed**
Student name:	Ms. Giulia Ansaldi, MS Student, Department of Civil and Environmental Engineering, Polytechnic University of Milan, Italy
Co-Advisors:	Professor Federico Perotti, Polytechnic University of Milan (primary advisor); Professor Luca Martinelli, Polytechnic University of Milan (co-advisor); L. Caracoglia (**external co-advisor** during the study visit at NU)
Dates of supervision:	July 2015 – September 2015 (at NU)
Graduation date:	December 2015
Project description:	Analysis of wind loading uncertainty and estimation of wind hazard and structural fragility curves for the 2nd-generation tall benchmark building
Diploma Thesis title:	**L'effetto delle incertezze sulla risposta dinamica di edifici alti soggetti all'azione del vento** (in Italian)
Sponsor:	Study fellowship, Polytechnic University of Milan
Status:	**Completed**
Student name:	Mr. Albertomaria Franzoni, MS Student, Department of Civil and Environmental Engineering, Polytechnic University of Milan, Italy
Co-Advisors:	Professor Federico Perotti, Polytechnic University of Milan (primary advisor); Professor Luca Martinelli, Polytechnic University of Milan (co-advisor); L. Caracoglia (**external co-advisor** during the study visit at NU)
Dates of supervision:	May 2013 – August 2013 (at NU)
Graduation date:	November 2013
Project description:	Study of turbulent wind loading on large-roof structures with special emphasis to the case of an aircraft hangar
Diploma Thesis title:	**Verifica numeric-sperimentale delle sollecitazioni indotte dal vento in un hangar per aeromobili** (in Italian)
Sponsor:	None
Status:	**Completed**
Student name:	Mr. Luca Scintu, MS/BS Student (Five-year Diploma), Department of Civil Engineering, Structural Engr. and Architecture, University of Cagliari, Italy
Co-Advisors:	Dr. Gian Felice Giaccu (primary advisor); L. Caracoglia (**external co-advisor**); Bernardo Barbiellini (co-advisor, NU)
Dates of supervision:	May 2013 - August 2013 (at NU)

Graduation date:	October 8, 2014 (Five-year diploma degree from University of Cagliari)
Project description:	Analysis of wind-induced response of tall buildings under uncertain wind loads due to turbulence modeling simplification; Stochastic Gradient Approximation and Stochastic Approximation Methods
Diploma Thesis title:	**Approccio Stocastico per l'analisi dinamico - prestazionale di Edifici alti soggetti al carico turbolento del vento** (in Italian)
Sponsor:	NU Office of the Provost, Tier 1 Research Grants (partial support)
Status:	**Completed**

Student name:	Mr. Alessandro De Carlo, Visiting Research Assistant at NU and MS/BS Student (Five-year Diploma), Dept. of Civil Engr., University of Trieste, Italy
Co-Advisors:	Prof. Salvatore Noè, University of Trieste (advisor); L. Caracoglia (**external co-advisor** during NU visit**,** member of the examination committee)
Dates of supervision:	June 2008 – July 2008 (at NU)
Graduation date:	October 28, 2009 (Five-year diploma degree from University of Trieste)
Project description:	Numerical simulation of time-domain aeroelastic loading for bridges
Diploma Thesis title:	**Analisi numerica del flutter accoppiato per ponti di grande luce mediante l'uso di funzioni indiciali** (in Italian)
Sponsor:	None
Status:	**Completed**

MS Students with Thesis (Advised while Collaborating / Working at other Institutions)

Student name:	Ms. Ilaria Cirronis, MS student (MS student / Five-year Diploma), Civil Engineering / Structural Engineering, University of Cagliari, Italy
Co-Advisors:	Dr. Gian Felice Giaccu (primary advisor); L. Caracoglia (**external co-advisor**);
Dates of supervision:	April 2017
Graduation date:	April 26, 2017 (MS degree conferred by the University of Cagliari)
Project description:	Examining pointing error of the Sardinia Radio Telescope induced by wind load vibration
MS Thesis title:	**Sardinia Radio Telescope: valutazione del pointing error determinata dall'azione turbolenta del vento** (in Italian)
Sponsor:	None
Status:	**Completed**

Student name:	Mr. Matteo Izzi, MS/BS Student (Five-year Diploma), Department of Civil Engineering and Architecture, University of Trieste, Italy
Co-Advisors:	Prof. Salvatore Noè, University of Trieste (advisor); L. Caracoglia (**external co-advisor** and member of the examination committee)
Dates of supervision:	December 2012 – October 2013
Graduation date:	October 2013 (Five-year diploma degree from University of Trieste)
Project description:	Theoretical and numerical study evaluating the performance of various damping devices for stay-cable vibration mitigation, including the use of Nonlinear Target-Energy-Transfer (TET) devices
Diploma Thesis title:	**Smorzatori oleodinamici e dispositivi Targeted Energy Transfer per il controllo passivo delle vibrazioni di stralli** (in Italian)
Sponsor:	None
Status:	**Completed**

MS Students (Independent Study only)

Student name:	Mr. Qiming Liang, MS student in CE-Structures
Dates of supervision:	January 2010 - August 2010
Project description:	Independent study with project report (4 credits). Research on practical issues associated with the use of the "DAD method" for the design of low-rise buildings against wind hazards
Sponsor:	None

Status:	**Completed**
Student name:	Mr. Bing Li, MS student in CE-Structures
Dates of supervision:	January 2009 - April 2009
Project description:	Independent study with project report (4 credits). Research on the numerical modeling of the wind-borne debris trajectory equation during hurricane storms.
Sponsor:	None
Status:	**Completed**
Student name:	Mr. Antonio Velazquez-Hernandez, MS student in CE-Structures
Dates of supervision:	May 2005 - August 2005
Project description:	Independent study with project report (4 credits). Extraction of frequency and damping characteristics of highway light poles from laboratory tests
Sponsor:	Illinois Department of Transportation
Status:	**Completed**

4.5. Supervision of Undergraduate Students

BS Students with Thesis (Visiting from Institutions other than NU or Advised while Collaborating/Working at other Institutions)

Student name:	Mr. Daniele Crisman, Three-Year Engineering Diploma Student (equivalent to BS degree), Dept. of Engineering and Architecture, University of Trieste, Italy
Co-Advisors:	Prof. Salvatore Noè, University of Trieste (primary advisor); L. Caracoglia (**co-advisor**); M. Izzi, University of Trieste (co-advisor)
Dates of supervision:	December 2015 – October 2016 (while student at the University of Trieste)
Graduation date:	October 3, 2016 (diploma degree conferred by University of Trieste)
Project description:	Application of the Database-Assisted-Design approach to study roof pressure coefficients on low-rise buildings and comparison against the current Italian design standards
Diploma Thesis title:	**Coefficienti di pressione per la valutazione dei carichi da vento sulle coperture. Confronto tra il Database-Assisted Design del NIST e le normative vigenti**
Status:	**Completed**

REU Students (Advised while at NU)

Student name:	Camille Youngberg, Civil Engineering (Middler, Class of 2014)
Dates of supervision:	June 2012- July 2012
Project description:	Independent study: design of a section model for wind tunnel testing (truss-type bridge) using SolidWorks
Sponsor:	NSF-CAREER, REU
Status:	**Completed**
Student name:	Frank Xia, Civil Engineering (Middler/Junior, Class of 2014)
Dates of supervision:	September 2011 – February 2012
Project description:	Independent study on wind tunnel testing of wind-borne debris trajectories in high winds
Sponsor:	NSF-CAREER, REU
Status:	**Completed**
Student name:	Said Aouinati, Mechanical Engineering (from MassBay Community College)
Dates of supervision:	June 2011 - August 2011 (First summer internship)
(Two times)	June 2012 - August 2012 (Second summer internship)
Project description:	Independent study on wind tunnel testing of wind-borne debris trajectories in high winds
Sponsor:	STEP-UP Program, Northeastern University
Status:	**Completed**

Student name:	Mr. John Beale, Chemical Engineering (Junior)
Dates of supervision:	July 2010 - August 2010
Project description:	Independent study on technical issues in current wind-turbine technology engineering practice
Status:	**Completed**

Student name:	Ms. Dana Peck, Civil Engineering (Junior, class of 2011)
Dates of supervision:	May 2010 – February 2011
Project description:	Aerodynamic coefficients of plate-like objects and assistance with laboratory experiments
Sponsor:	NSF-CAREER, REU
Status:	**Completed**

Student name:	Ms. Sara Coyle, Civil Engineering (Junior, class of 2011)
Dates of supervision:	January 2010 - May 2010
Project description:	Assistance with experimental activities in the small-scale wind tunnel and design of new chamber components for the facility
Sponsor:	NSF-CAREER, REU and NU Provost's Office
Status:	**Completed**

Student name:	Mr. John M. Schroeder, Civil Engineering (Senior, graduated in 2008)
Dates of supervision:	Summer 2007 - Fall 2007
Project description:	Design of a small-scale force balance for wind tunnel applications
Sponsor:	NSF (partially) and NU Provost's Office
Status:	**Completed**

4.6. Teaching and Advising Activities – Others

Spring Semester 2015	**Lecturer** (invited session), Wind-resistant design, Structural Engineering Capstone course, CIVE 4767, NU. Instructor: Prof. A. Myers.
Spring 2009	**Lecturer** (two sessions), Design of steel connections, Structural Engr. Capstone course, CIVE 4767, NU. Instructor: Professor M.L. Wang.
Spring Semesters 2005, 2006, 2013, 2015	**Lecturer** (invited session), Wind-resistant design, Structural Engineering Capstone course, CIVE 4767, NU. Instructor: Prof. D. Bernal.

4.7. Outreach Activities

2009-2015	**Organizer**, outreach activity for the Fluid Mechanics undergraduate course (CIVE 2331). Laboratory experience for students in collaboration with the course Instructor. Description: "Measurement of boundary layer profile in a small-scale wind tunnel."
2007-2015	**Session organizer**, "Building Bridges Open House Event" for high-school students. COE, Division of Multi-Cultural Studies (part of NSF-sponsored activities).
October 2009	**Organizer**, Wind Engineering laboratory session, CIVE 7354 graduate course. Hands-on experience for students. Title: "Measurement of H_1^* flutter derivative of a truss deck girder" (part of the NSF-sponsored activities).
October 24, 2008	**Organizer,** technical visit to the OldCastle Rotondo Precast Plant in Rehoboth, MA. Field trip for students of CIVE 7353 graduate course in collaboration with Ms. Seraderian, Executive Director of PCI (Precast/Pre-stressed Concrete Institute), Northeast Region, Belmont, MA.
2007, 2009	**Organizer,** technical visit to the Wright Brothers Wind Tunnel Laboratory, Department of Aeronautical and Aerospace Engineering (AAE), MIT, Cambridge. Organized for the students of the CIVE 7354 graduate course. Host: Mr. R. Perdichizzi, Senior Technical Instructor, AAE, MIT.

5. SERVICE AND PROFESSIONAL DEVELOPMENT

5.1. Service to Northeastern University

Departmental Service: PhD Dissertation Committees and MS Thesis Reader

Dec. 2025	**Reader, MS Essay**, Structural Engineering (Mahmut M.).
Dec. 2022 – Dec 2023	**PhD Dissertation Committee** (contributor only), Structural Engineering (candidate: Robert B. Bond)
September 2022	**PhD Dissertation Committee**, Structural Engineering (candidate: Silvestre Chan - Esquivel)
August 2022	**PhD Dissertation Committee**, Structural Engineering (candidate: Esmaeil MemarzadehZavareh)
August 2022	**PhD Dissertation Committee**, Geotechnical Engineering (candidate: Alpay Burak Demiryurek)
August 2022	**PhD Dissertation Committee**, Geotechnical Engineering (candidate: U. Ozdemir)
April 2021	**Reader,** MS Essay, Structural Engineering (Hong Yan).
Dec. 2020 – Dec. 2021	**PhD Dissertation Cmte**, Structural Engr. (candidate: Andrew Summerfield).
Febr. 2020 – May 2021	**PhD Dissertation Committee**, Structural Engr. (candidate: Xinlong Du).
Feb 2019 – March 2021	**PhD Dissertation Committee**, Structural Engr. (candidate: Matt Joyner).
Jan 2019 – April 2020	**PhD Dissertation Committee**, Structural Engr. (candidate: Chi Qiao).
Jan 2019 – August 2019	**PhD Dissertation Committee**, Structural Engr. (candidate: Fariborz Mirzaie).
November 2017 – December 2018	**PhD Dissertation Committee**, Construction Management Engr. (candidate: Niloofar Montazeri).
January 2017	**PhD Dissertation Cmte**, Structural Engr. (candidate: Anshuman Kunwar).
September 2016	**PhD Dissertation Committee**, Interdisciplinary Engr. (candidate: Hao Liu).
July 2016	**PhD Dissertation Cmte**, Structural Engr. (candidate: Spencer Hallowell).
May 2016	**PhD Dissertation Cmte**, Structural Engr. (candidate: D. Vines-Cavanaugh).
November 2015	**PhD Dissertation Committee**, Geotechnical Engr. (candidate: Fritz Rudolph Pangihutan Nababan).
September 2015	**PhD Dissertation Committee**, Interdisciplinary Engr. Civil/Mechanical (candidate: Yifeng Lu).
September 2015	**PhD Dissertation Committee**, Interdisciplinary Engr. Civil/Mechanical (candidate: Yubo Zhao).
September 2015	**PhD Dissertation Committee**, Structural Engr. (candidate: Vahid Valamesh).
August 2014	**PhD Dissertation Committee**, Structural Engr. (candidate: Y. Zhang).
August 2014	**PhD Dissertation Committee**, Structural Engr. (candidate: B. Guldur).
August 2013	**Reader and Evaluation Committee Member,** Challenge Project Report, Mechanical Engr. & Gordon Leadership Engr. Program (Christopher Magsen).
August 2013	**Reader,** MS Essay, Structural Engineering (Nestor Polanco).
August 2012	**Reader**, MS Essay, Structural Engineering (Salma Mozaffari - Kojidi).
December 2011	**PhD Dissertation Committee,** Structural Engr. (candidate: S. Sagiroglu).
April 2011	**PhD Dissertation Committee,** Geotechnical Engr. (candidate: E. Kianirad).
August 2011	**PhD Dissertation Committee,** Structural Engr. (candidate: Y. Bulut).
Dec. 2007	**PhD Dissertation Committee**, Structural Engr. (candidate: O. Tigli).
May 2007	**PhD Dissertation Committee**, Structural Engr. (candidate: E. Hernandez).
June 2006	**Reader, MS Essay**, Structural Engineering (Marcus J. Kösters).
Dec. 2005	**PhD Dissertation Cmte,** Structural Engr. (candidate: M. Tarnowski).

Departmental Service: Other Activities and Committees

Sept. 2021 - March 2022	**Member**, CEE Faculty Search Committee in Computational Mechanics
Sept. 2021 - July 2022	**Member**, CEE Awards Committee
Sept. 2020 - May 2023	**Member**, CEE Graduate Studies Committee (Advisor of MSCE/Struct. Students)
Sept. 2018 - Aug. 2020	**Member**, Undergraduate Studies Committee, CEE.
February 2018	**Member**, Merit Review Committee, CEE.
February 2016	**Member**, Merit Review Committee, CEE.
Aug. 2011-2014	**Member**, Graduate Studies Committee, CEE.

Aug. 2011 - March 2012	**Member**, CEE Faculty Search Committee (one position in computational mechanics), academic year 2011-2012.
Aug. 2011 - present	**Member**, Tenure and Promotion Committee, CEE, various years.
Aug. 2010 - 2104	**Faculty Advisor**, Chi-Epsilon, CEE Honor Society, NU Student Chapter (acting advisor between August 2010 and March 2011; member of Chi Epsilon since March 21, 2010).
2009-2014	**Advisor**, AISC-ASCE Steel Bridge Competition, NU Student Chapter.
2008-2014	**Lecturer**, Department of Civil and Environmental Engineering and Chi-Epsilon engineering society, Two-Hour Review Session on the Design of Steel Structures for the FE Exam (Oct. 2008, Apr. & Oct. 2009, Apr. 2010).
Fall '06-Spring 2008	**Graduate Seminar Series Coordinator,** CEE (four semesters).
Spring 2011	**Graduate Seminar Series Coordinator,** CEE**,** CIVE 7400 (>70 students).
2007-2010	**Member**, CEE Undergraduate Curriculum Committee.
2006-2007	**Member**, CEE Faculty Search Committee, Structural Engineering.
October 2006	**Lecturer**, Department of Civil and Environmental Engr. and Chi-Epsilon Engr. Society, Sponsored session on research for undergraduate students.
2005-present	**Member,** Structural Engineering PhD Qualifying Exam: January 2005 (one candidate), January 2006 (three candidates), October 2006 (four candidates), January 2007 (three candidates); January 2010 (one candidate); September 2010 (three candidates); January 2011 (two candidates).
2005-present	**Graduate Admissions Officer**, CEE.

College Service

September – Dec. 2024	**Member,** Tenure and Promotion Committee, College of Engineering.
September – Dec 2023	**Vice-Chairperson,** Tenure and Promotion Committee, College of Engineering.
September – Dec. 2022	**Member,** Tenure and Promotion Committee, College of Engineering.
February – March 2022	**Member,** Merit Review Committee, MGEN Faculty, College of Engineering.
Febr. 2019 – Dec. 2020	**Member,** Dean's Search Committee, College of Engineering.
February 26, 2019	**Member,** Judging Panel, COE PhD Research Expo, College of Engineering.
Dec. 2018 – Jun.2020	**Member,** Online Instructional Quality Committee, College of Engineering.
Sept. 2018 – Jun.2020	**Member,** Sabbatical Leave Committee, College of Engineering.
October 2011-2013	**Member,** Student Awards Committee, College of Engineering.
2008-2011	**Member**, Academic Standing Committee, College of Engineering, representing the Department of Civil and Environmental Engineering**.**
2007-2009	**Member**, Sabbatical Leave Committee, College of Engineering (two terms)
2006-2014	**Collaborator**, "Building Bridges. A Window on Academic Activities in Structural Engineering for High-School Students", NU College of Engineering (15 times).

University Service

March 2023	**Member,** Ad-Hoc Service Committee, NU Faculty Senate.
March 2022	**Member,** Graduate Student Research Awards Committee, PhD Network.
Sept. 2021 – April 2022	**Member,** Financial Affairs Committee, NU Faculty Senate.
April 2021	**Alternate Member,** University Academic Appeals Resolution Committee, NU.
July 2020 – June 2022	**Member,** Senate Agenda Committee, NU Faculty Senate (for two academic years).
September 2019 - 2023	**Member,** NU Faculty Senate (elected twice, for a two-year term).
Sept. 2019 – April 2020	**Member,** Financial Affairs Committee, NU Faculty Senate.
February 2017	**Award Committee Member**, Outstanding Graduate Student Research Award, Provost's Office, NU.
Dec. 2011 - present	**Associate University Marshal,** NU Cadre.
May 6, 2011	**File Marshal** for the College of Engineering, Graduate Commencement Ceremony, Academic Year '10-'11, Matthews Arena.
May 6, 2011	**File Marshal** for the College of Engineering, Undergraduate Commencement Ceremony, Academic Year '10-'11, TD-Boston Garden.
May 7, 2010	**File Marshal** for the College of Engineering, Undergraduate Commencement Ceremony, Academic Year '09-'10, TD-Boston Garden.

May 1st, 2009	**File Marshal** for the College of Engineering, Graduate School Commencement Ceremony, Academic Year 2008-2009, Matthews Arena.

Regional, National and International Service: PhD Jury Committees

June 2025	**Member, International Jury of PhD Dissertation and Defense**, Faculty of Applied Sciences, University of Liège, Belgium (candidate: J. Heremans, advisor Prof. V. Denoël).
February-June 2022	**PhD Dissertation – External Reviewer and Committee Member**, Civil Engr., Universities of Florence, Perugia, Pisa, Braunschweig, Italy-Germany (candidate: Ms. Michela Torti, advisors Profs. F. Ubertini, I. Venanzi, M. Empelmann and S. Javidmehr).
January 2022	**PhD Dissertation – External Reviewer**, Civil Engr., University of Genoa, Italy (candidate: Mr. Luca Roncallo, advisors Profs. G. Solari – deceased, Federica Tubino).
August 2021	**PhD Dissertation – External Reviewer**, Civil Engr., University of Genoa, Italy (candidate: Mr. Stefano Brusco, advisor Prof. Giuseppe Piccardo).
March 2021 – June 2021	**PhD Dissertation - External Examiner**, Civil Engr., Univ. of Trondheim, Norway (candidate: Mr. Tor Martin Lystad, advisor Prof. Ole Andre Øiseth).
March 2021 – April 2021	**PhD Dissertation - External Reviewer**, Civil Engineering, University of Genoa, Italy (candidate: Mr. Andrea Orlando, advisors Professors Maria Pia Repetto and Luisa Carlotta Pagnini).
January 2019 – February 2019	**PhD Dissertation - External Reviewer**, Civil Engr., University of Genoa, Italy (candidate: Mr. Alberto Balbi, advisor Professor Maria Pia Repetto).
January 2018	**PhD Dissertation Committee – Member**, Civil Engineering, The Hong Kong University of Science and Technology (candidate: Mr. Zengshun Chen, advisor Professor Tim K. T. Tse).
January 2018	**PhD Dissertation - External Evaluator**, Civil Engr., University of Perugia, Italy (candidate: Ms. Laura Ierimonti, advisor Prof. Ilaria Venanzi).
May 2017	**PhD Dissertation - External Dissertation Reviewer**, Civil Engineering, University of La Coruña, Spain (candidate: Miguel Cid Montoya, advisors Profs. S. Hernández Ibáñez and F. Nieto Mouronte).
August 2016	**PhD Dissertation Committee - External Examiner**, Civil Engr., Univ. of Windsor, Ontario, Canada (candidate: Javaid Ahmad, advisor Prof. S. Cheng).
July 2016	**PhD Dissertation Committee – Member and Examiner**, Mechanical Engr., University of Massachusetts – Amherst (candidate: Pariya Pourazarm, advisor Prof. Y. Modarres-Sadeghi).
May 2014	**Member, International Jury of PhD Dissertation and Defense**, Faculty of Applied Sciences, University of Liège, Belgium (candidate: T. Canor, advisor Prof. V. Denoël).
November 2011	**PhD Dissertation Committee - External Examiner,** Structural Engr., Universidad Autónoma Metropolitana, Unidad Azcapotzalco, Mexico City, Mexico, (candidate: Juan Antonio Álvarez Arellano; primary advisor, Prof. Emilio Sordo - Zabal).

Regional, National and International Service: Delegation Representative, Advisory Boards, etc.

August 21-23, 2025	**Invited Participant & Delegation Chair**, US-side delegation, Seventh U.S.-Japan Workshop on Wind Engineering, Neyagawa Campus, Setsunan University, Osaka, Japan.
2014 - present	**Tenure and Promotion External Reviewer and Letter Writer,** Various universities (6+ cases)
April 2017	**Member,** Award Committee, Richard Marshall Award 2017, American Association for Wind Engineering (AAWE)**.**
February 21-22, 2013	**Member**, United States-side Delegation, 44th Joint Panel Meeting on Wind and Seismic Effects, UJNR, National Institute for Standards and Technology, NIST. Gaithersburg, Maryland, USA.
2011–2015	**Member,** Awards Committee, American Association for Wind Engr. (AAWE)**.**
July 26-28, 2010	**Invited Participant**, US-side delegation, 5th United-States Japan Workshop on Wind Engineering, as part of the scientific activities of the Task Committee D, UJNR Panel on Wind and Seismic Effects of the US-Japan Cooperative Program in Natural Resources, UJNR, Chicago, Illinois.
October 27-28, 2009	**Participant**, United-States-Japan "Workshop on Bridge Dynamics and Monitoring", College of Engineering, JHU, Baltimore, MD (UJNR Panel on Wind and Seismic Effects).

May 18-21, 2008	**Member**, United States-side Delegation, 40th Joint Panel Meeting on Wind and Seismic Effects, UJNR, National Institute for Standards and Technology, NIST. Gaithersburg, Maryland, USA.
May 14-19, 2007	**Member,** United States-side Delegation, 39th Joint Panel Meeting on Wind and Seismic Effects, UJNR, Tsukuba, Japan.

5.2. External Services – Professional

President of Scientific Advisory Boards

June 2025 – present	American Association for Wind Engr. AAWE – affiliated with IAWE (**President**)

Scientific or Professional Advisory Boards

January 2022 (*circa*) – present	Scientific Committee & Board, CRIACIV – Inter-University Research Center for Building Aerodynamics and Wind Engineering: Universities of Florence (lead), Chieti-Pescara, Campania-Aversa, Padua, Perugia, Rome-Sapienza, Trieste (**Member**)
May 2020 – December 2022	Board of Directors, American Association for Wind Engineering AAWE – affiliated with IAWE (**Member**)
November 2019 - present	Executive Board, Italian National Association for Wind Engineering ANIV – affiliated with IAWE (**Member**)
October 1, 2013 - December 2018	International Advisory Board, Centre of Excellence Telč, Ministry of Education, Youths and Sports, Czech Republic - Advanced Research Centre for Cultural Heritage Interdisciplinary Projects, supported by European Commission 5th Framework Programme (**Member**)
Sept. 2012 - July 2017	International Executive Board, International Association for Wind Engineering - IAWE (**Member**)

Editorship of Technical Journals (with editor privileges)

October 2025 – present	**Virtual Special Issue Guest co-Editor**, Recent advances on fluid structure interactions of structures and infrastructures under stationary and nonstationary, extreme wind loads, Journal of Fluids and Structures., Elsevier. With Y. Okuda.
August 2025 – present	**Virtual Special Issue Guest co-Editor**, New England Fluid-Structure Interactions ("NEFSI 2025"), Journal of Fluids and Structures. Elsevier. With Y. Modarres-Sadeghi e J. Dahl..
August 2022 – June 2024	**Special Issue Guest co-Editor**, Codification of Wind Loading of Structures, Wind & Structures, Techno-Press. With JD Holmes.
March 2021- September 2022	**Special Collection Guest co-Editor**, Risk-Informed and Life-Cycle Analyses of Structures and Infrastructures, ASCE Journal of Structural Engineering. With I. Venanzi and J. Padgett.
Sept. 2017-present	**Member of the International Editorial Board and Associate Editor**, Journal of Fluids and Structures, Elsevier.
March 2014-present	**Associate Editor**, ASCE Journal of Bridge Engineering.
February 2015 – June 2016	**Special Guest Editor**, Advances in Materials Science and Engineering, Special Issue on "Advanced Materials and Technologies for Structural Performance Improvement (AMTI)", Hindawi Publishing Corporation (principal Editor: Prof. S. Sorace, Univ. of Udine, Italy)

Editorial Boards of Technical Journals (without editor privileges)

Dec. 2019 - present	**Member**, International Editorial Board, Structural Safety, Elsevier.
Dec. 2019 - present	**Member**, International Editorial Board, Wind and Structures, Techno Press.
Nov. 2016 - 2022	**Member**, Intern. Editorial Board, Structural Control and Health Monitoring, Wiley.
Dec. 2012 - present	**Member**, International Editorial Board, Engineering Structures, Elsevier.

Technical Journal Reviewer

The alphabetical list includes those journals, for which reviews are conducted regularly – two or more times per year – and those for which review has been invited more occasionally. The Impact Factor (IF) of the Journal from year 2020 is provided:

(1) Acta Mechanica – Springer (IF: 2.9), (2) Advanced Steel Construction – An International Journal (IF: 1.317); (3) Advances in Engineering Software, Elsevier (IF: 4.141); (4) Advances in Structural Engineering, SAGE Publications (IF: 1.800); (5) Advances in Wind Engineering – Elsevier (IF:) (6) AIAA Journal (IF: 3.11); (7) Ain Shams Engineering Journal, Elsevier (IF: 3.18); (8) Alexandria Engineering Journal, Elsevier (IF: 3.732); (9) Applied Energy, Elsevier (IF: 9.746); (10) Applied Mathematical Modeling – Elsevier (IF: 4.4); (11) Archive of Applied Mechanics, Springer (IF: 1.976) (12) ASCE Journal of Aerospace Engineering (IF: 1.761); (13) ASCE Journal of Bridge Engineering (IF: 2.196); (14) ASCE Journal of Engineering Mechanics (IF: 2.003); (15) ASCE Journal of Structural Engineering (IF: 2.454); (16) ASCE-

ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering (IF: 1.331); (17) ASME Journal of Computational and Nonlinear Dynamics (IF: 2.085); (18) ASME Journal of Vibration and Acoustics (IF: 1.583); (19) Bulletin of Earthquake Engineering, Springer (IF:3.827); (20) Condensed Matter – MDPI (IF: 1.9), (21) Composite Structures, Elsevier (IF: 5.407); (22) Computer-Aided Civil and Infrastructure Engineering, Wiley (IF: 11.775); (23) Computers and Fluids, Elsevier (IF: 3.013); (24) Computers and Structures, Elsevier (IF: 4.578); (25) Earthquake Spectra, EERI (IF: 3.030); (26) Earthquakes and Structures - An International Journal, Techno Press, South Korea (IF: 2.018); (27) Engineering Computations, Emerald Group Publishing (IF: 1.593); (28) Engineering Failure Analysis, Elsevier (IF: 4.0); (29) Engineering Structures, Elsevier (IF: 4.471); (30) Experimental Thermal and Fluid Science, Elsevier (IF: 3.232); (31) Experimental Techniques, Society for Experimental Mechanics, Springer (IF: 1.167); (32) Experiments in Fluids, Springer (IF: 2.480); (33) International Journal of Ambient Energy, Taylor-Francis (IF: 2.330) (34) International Journal of Computational Fluid Dynamics – Taylor Francis (IF: 1.330), (35) International Journal of Non-Linear Mechanics, Elsevier (IF: 2.985); (36) Journal of Applied and Computational Mechanics (Ahvaz, Iran, IF: N/A); (37) Journal of Building Engineering, Elsevier (IF: 5.318), (38) Journal of Civil Engineering and Management, Taylor & Francis (IF: 2.338); (39) Journal of Computational Physics, Elsevier (IF: 3.553); (40) Journal of Earthquake Engineering, Taylor & Francis (IF: 3.994); (41) Journal of Fluids and Structures, Elsevier (IF: 2.917); (42) Journal of the Franklin Institute, Elsevier (IF: 4.504); (43) Journal of Sound and Vibration, Elsevier (IF: 3.655); (44) Journal of Vibration Engineering & Technologies, Springer (IF: 2.2); (45) Journal of Vibration and Control, SAGE Publications (IF: 3.095); (46) Journal of Wind Engineering and Industrial Aerodynamics, Elsevier (IF: 4.082); (47) Measurement, Journal of the International Measurement Confederation – IMEKO - Elsevier (IF: 3.927); (48) Meccanica, International Journal of the Italian Association of Theoretical and Applied Mechanics, AIMETA, Springer-Netherlands (IF: 2.258); (49) Natural Hazards, Journal of the International Society for the Prevention and Mitigation of Natural Hazards, Springer (IF: 3.102); (50) Natural Hazards Review, ASCE (IF: 1.667); (51) Nonlinear Dynamics, Springer (IF: 5.022); (52) Ocean Engineering, Elsevier (IF: 3.795); (53) Probabilistic Engineering Mechanics, Elsevier (IF: 3.350); (54) Physics of Fluids – American Institute of Physics (IF: 4.400), (55) Reliability Engineering & System Safety, Elsevier (IF: 6.188); (56) Renewable and Sustainable Energy Reviews – Elsevier (IF: 16.300) (57) Simulation Modelling Practice and Theory, International Journal of the Federation of European Simulation Societies (EUROSIM), Elsevier (IF: 3.272); (58) Smart Structures and Systems - An International Journal, Techno Press, South Korea (IF: 3.342); (59) Structural Control and Health Monitoring, Wiley (IF: 4.819); (60) Structural Engineering International – IABSE, Taylor & Francis (IF: 1.056) (61) Structural Engineering and Mechanics - An International Journal, Techno Press, South Korea (IF: 3.542), (62) Structural Safety, Elsevier (IF: 5.047); (63) Structure and Infrastructure Engineering, Taylor-Francis (IF: 3.087); (64) The Structural Design of Tall and Special Buildings (IF: 2.344); (65) Wave Motion, Elsevier (IF: 2.020); (66) Wind and Structures - Techno Press, South Korea (IF: 2.470); (67) Wind Engineering SAGE Publ. (IF: 1.400).

Technical Book or Book Proposal Reviewer

April 2019	Book chapter review for a book on fluid-structure interactions (two chapters, 50 pages). Author and title are not included for confidentiality. Requested by Book Project Coordinator, Springer Nature, Chennai, India (**Reviewer**).
November 2018	Book proposal for a book on wind load effects on structures. Author and title are not included for confidentiality. Requested by Editor, CRC Press, Boca Raton, Florida (**Rev**.)
July 2016	Book proposal for a book on wind effects on building structures. Author and title are not included for confidentiality Requested by Editor, J Wiley & Sons, Ltd (**Reviewer**).
April 2011	Book proposal for a book on wind effects on long-span bridges. Author and title are not included for confidentiality. Requested by Editor, J Wiley & Sons, Ltd (**Reviewer**).
January 2011	Textbook on Structural Steel Design (pre-print version, 800 pages). Author and title are not included for confidentiality. Requested by John Wiley & Sons, Ltd (**Reviewer**).
November 2009	Book proposal for a technical publication discussing the new wind loading provisions of ASCE7-10. Author and title are not included for confidentiality but are available, if needed. Requested by the ASCE Press Acquisition Editor, Reston, VA (**Reviewer**).

Research Panelist / Reviewer (for NSF or other Research Agencies)

January 2026	National Science Foundation, CMMI (**Virtual Panelist**).
February 2024	National Science Foundation, GEO-AGS (**Ad-hoc Reviewer by mail**).
October 2023	National Science Foundation, CMMI-ECI (**Site Visit Panelist**).
February 2023	National Science Foundation, CMMI-ECI (**Virtual Panelist**).
July 2021	National Science Foundation, CMMI-DCSD (MCA, **Virtual Panelist**).
June 2021	National Science Foundation, CMMI-ECI (**Reviewer by mail** – one proposal).
December 2020	National Science Foundation, CMMI-DCSD (CAREER, **Virtual Panelist**).
September 2020	National Science Foundation, CMMI-NHERI (**Virtual Panelist**).

May 2020	National Science Foundation, CMMI-SBIR (**Virtual Panelist**).
April 2020	National Science Foundation, CMMI (**Virtual Panelist**).
September 2019	National Science Foundation, CMMI (**Panelist**).
October 2018	National Science Foundation, CMMI (**Panelist**).
September 24, 2018	Massachusetts Institute of Technology, Sea Grant Technical Review (**Panelist**).
September 2017	National Science Foundation, CMMI (**Reviewer by mail** – one proposal).
November 2016	National Science Foundation, CMMI (**Panelist**).
May 2016	National Science Foundation, CMMI (**Reviewer by mail** – four proposals).
June 2015	National Science Foundation, CMMI (**Panelist**).
April 10-11, 2013	National Science Foundation, CBET, Wind Energy Panel (**Panelist**).
February 13-14, 2013	NASA Aeronautics Scholarship Program 2013, American Society of Engineering Education, Washington DC. For fields: aeronautical/aerospace engr. (**Panelist**).
February 13, 2013	SMART Defense Scholarship for Service Program 2013, Department of Defense of the United States, American Society of Engr. Education, Washington DC (**Reviewer**).
October 26, 2011	National Science Foundation, CMMI (**Panelist**).
May 20, 2011	National Science Foundation, CMMI (**Panelist**).
February 11-13, 2011	ASEE & National Science Foundation Graduate Research Fellowship Program (GRFP). (**Panelist**, "Civil & Environmental Engineering Panel").
February 4 – 6, 2010	ASEE & National Science Foundation Graduate Research Fellowship Program (GRFP). (**Panelist**, "Civil & Environmental Engineering Panel").
December 2, 2009	National Science Foundation, Division of Civil, Mechanical and Manufacturing Innovation, CMMI (**Reviewer** by mail; CAREER proposal).
November 6, 2009	National Science Foundation, CMMI (**Panelist**).
December 2007	National Science Foundation, CMMI (**Panelist**).
November 2006	National Science Foundation, CMMI (**Panelist**).
April 2005	National Science Foundation, CMMI (**Panelist**).

International Research Panelist / Reviewer

June 2025	GAČR - Czech Science Foundation (**Scientific Proposal Reviewer**).
February 2025	Research Grants Council of Hong Kong, China (**Proposal Reviewer, four proposals**).
July 2024	GAČR - Czech Science Foundation (**Scientific Proposal Reviewer**).
March 2024	Fund for Scientific Research-FNRS (F.R.S.-FNRS), Brussels, Belgium (**Proposal Review.**)
February 2024	Research Grants Council of Hong Kong, China (**Proposal Reviewer, four proposals**).
April 2023	Fund for Scientific Research-FNRS (F.R.S.-FNRS), Brussels, Belgium (**Proposal Review.**)
March 2023	Research Grants Council of Hong Kong, China (**Proposal Reviewer**).
August 2022 – December 2022	Ministry of Education, Science, Research and Sport of the Slovak Republic, 2022 Periodic Assessment of Research, Development, Artistic and Other Creative Activities Sub-Panel Civil Engineering and Architecture (**Panelist**).
June 2022 - present	ERIES – Engineering Research Infrastructures for European Synergies (2022-2026), funded by Horizon Europe Framework Program of the EU, TA Selection and Evaluation Panel (**Panelist**). *Panel meets twice a year*
August 2021	Fund for Scientific Research-FNRS (F.R.S.-FNRS), Brussels, Belgium (**Proposal Review.**)
July 2021	Italian Ministry of Education, University and Research (MIUR), PRIN 2020 – research proposals of national interest (**Scientific Proposal Reviewer**).
May 2021	Italian Ministry of Education, University and Research (MIUR), Rita Levi Montalcini Program for Young Researchers 2021 (**Proposal Reviewer** by mail).
February 2021	Research Grants Council of Hong Kong, China (**Scientific Proposal Reviewer**).
November 2020	National Agency for Investigation and Development, Ministry of Science, Technology, Knowledge and Innovation, Government of Chile - FONDECYT (**Proposal Reviewer**).
June – July 2020	GAČR - Czech Science Foundation (**Scientific Proposal Reviewer**).
February – March 2020	Research Grants Council of Hong Kong, China (**Proposal Reviewer**).
February 2019	Research Grants Council of Hong Kong, China (**Proposal Reviewer**).
November 2018	Italian Ministry of Education, University and Research (MIUR), Rita Levi Montalcini Program for Young Researchers 2018 (**Proposal Reviewer**).
July – August 2018	University of Florence, Italy, Competitive Proposals for Your Investigators / Researchers

(**Scientific Proposal Reviewer**).

June – August 2018 GAČR - Czech Science Foundation (**Scientific Proposal Reviewer**).

December 2017 Natural Sciences and Engineering Research Council of Canada, Discovery Grant proposals (**Scientific Proposal Reviewer**).

December 2016 Natural Sciences and Engineering Research Council of Canada, Discovery Grant proposals (**Scientific Proposal Reviewer**).

June – July 2016 GAČR - Czech Science Foundation (**Scientific Proposal Reviewer**).

August 2015 POLIMI International Fellowships 2015, Politecnico di Milano, Italy (**Proposal Reviewer**).

June – July 2014 GAČR - Czech Science Foundation (**Scientific Proposal Reviewer**).

August 2013 GAČR - Czech Science Foundation (**Scientific Proposal Reviewer**).

March - April 2012 Canada Foundation for Innovation, Leaders Opportunity Fund (**Reviewer**).

January 2012 City University of Hong Kong, P.R. China, Research Committee, Strategic Research Program, (**Proposal Reviewer**).

International Scientific Award Referee

June-July 2010 2010 State Natural Science Award of the People's Republic of China, National Office for Science and Technology Awards, Beijing, P.R. China (**International Referee** by mail).

Technical Committees

2025-present Sub-Task Committee on "Codes and Standards", IAWE Task Group on "Equitable Response to Wind Climate Change", IAWE International Association for Wind Engineering (**Member**)

2024-present Working Group "Non-Synoptic Winds on Structures & Infrastructures: Realistic Modeling of Wind Loads for Ensuring Safety & Serviceability" (Acronym: NonSyWind), IAWE International Association for Wind Engineering (**Co-Leader and Coordinator**)

2020-present Performance Based Wind Engineering, Structural Engineering Institute, American Society of Civil Engineers, ASCE ("**Affiliate** or **Friend"**)

2012-present Fluid Dynamics Committee, Engineering Mechanics Institute, American Society of Civil Engineers, ASCE (**Member**)

2011-present Probabilistic Methods Committee, Engineering Mechanics Institute, American Society of Civil Engineers, ASCE (**Member**)

2007-2008 International Technical Committee on Fluid-Structure Interaction, Pressure Vessels and Piping Division (PVP), American Society of Mechanical Engineers, ASME (**Affiliate**).

2006-present Dynamics Committee, Engineering Mechanics Institute, American Society of Civil Engineers, ASCE (**Member**)

2006-present Task Committee D on Wind Engineering, UJNR Panel on Wind and Seismic Effects, UJNR: United States-Japan Cooperative Program in Natural Resources (**Affiliate**).

Conference-Related Activities: Principal Conference Chairman

August 21-23, 2025 **Co-Chairman and co-Organizer,** 7th US-Japan Workshop on Wind Engineering, Setsunan University, Osaka, Japan, August 21-23, 2025.

January 2025 – April 2025 **Co-Organizer,** First New England Fluid Structure Interaction (NEFSI) Symposium, University of Massachusetts, Amherst, April 24, 2025.

January 2019 – May 2019 **Organizer and Faculty Advisor,** First Northeastern University – Tongji University Workshop on Wind Engineering, Northeastern University, Boston, Massachusetts, May 22-25, 2019.

September 2012 - June 2016 **International Conference Chairman and Principal Organizer,** BBAA VIII, 8th International Colloquium on Bluff Body Aerodynamics and Applications, Northeastern University, Boston, Massachusetts, June 7-11, 2016. More than 240 participants from 25 countries. Total conference income to Northeastern University: $187,365 (registration fees, university housing, contributions from sponsors, 20% tax/service fee to NU, etc.)

January 2012 - August 2012 **Workshop Chairman and Principal Organizer**, 3rd American Association for Wind Engineering Workshop, Hyannis, Massachusetts, August 12-14, 2012 (65 participants).

November 12-14, 2011 **Workshop Chairman and Organizer**, 2nd US-Japan mini-Workshop on "Structural Dynamics and Monitoring of Bridges and Flexible Structures against Wind Hazards", Northeastern University (by invitation).

Conference-Related Activities: Board or Scientific Committee Member

September 2025 – June 2026 Scientific Committee, 8th International Symposium on Computational Wind Engineering, June 7–11, 2026, London, Ontario, Canada (**Member**).

July 2025 – June 2026	International Scientific Committee, Fourth International Symposium on Dynamics and Aerodynamics of Cables (ISDAC 2026), University of Sherbrooke, Quebec, Canada, June 3-5, 2026 (**Member**).
September 2025 – August 2025	International Scientific Committee, 10th Asia-Pacific Conference on Wind Engineering, Chengdu, China, August 15-19, 2025 (**Member**).
January 2024 – June 2025	International Scientific Committee, 9th European-African Conference on Wind Engineering, Trondheim, Norway, 16-19th June 2025 (**Member**).
December 2023 – September 2026	International Scientific Committee, XIII International Conference on Structural Dynamics (EURODYN), Hannover, Germany, 27 September - 1 October 2026 (**Member**).
November 2023 – September 2024	International Scientific Committee, Third National Conference on Wind Engineering (3NCWE), Romanian Association for Wind Engineering (ARIV), Bucharest, Romania, September 11- 13, 2024 (**Member**).
November 2023 – October 2025	International Scientific Committee, International Congress of the Croatian Society of Mechanics, Vodice (Šibenik), Croatia, September 30 - October 3, 2025 (**Member**).
June 2023 – May 2024	International Scientific Committee, Third International Symposium on Flutter and its Application (ISFA2024), Tongji University, Shanghai China, May 24-26, 2024 (**Member**).
July 2023 – September 2024	International Scientific Committee, 2024 Conference of the Italian Association for Wind Engineering (IN-VENTO 2024), Pisa, Italy, September 8-11, 2024 (**Member**).
May 2023 – August 2024	International Scientific Committee, 9th International Colloquium on Bluff Body Aerodynamics and Applications (BBAA IX), University of Birmingham, UK, August 2024 (**Member**).
August 2022 – August 2023	International Scientific Committee, 16th International Conference on Wind Engineering ICWE16, IAWE, Florence, Italy, August 27-31, 2023 (**Member**).
June 2022 – June 2023	International Scientific Committee, International Symposium on the Dynamics and Aerodynamics of Cables (ISDAC 2023), University of Rome - Sapienza, Italy, June 13-15, 2023 (**Member**).
December 2021 – September 2022	International Scientific Committee, 2022 Conference of the Italian Association for Wind Engineering (IN-VENTO 2022), Milan, Italy, September 4-7, 2022 (**Member**).
January 2022 – Sept. 2022	International Scientific Committee, 8th European-African Conference on Wind Engineering (8EACWE2022), Bucharest, Romania, 20-23 September 2022 (**Member**).
June 2021 – May 2022	Scientific Committee, 14th Americas Conference on Wind Engineering, (ACWE 2022), Texas Tech University, Lubbock, Texas, USA, 17-19 May 2022 (**Member**).
March 2021 – May 2021	Scientific Committee, 6th AAWE Workshop, American Association for Wind Engineering, Clemson Univ. South Carolina, USA, May 12-14, 2021 (**Member**).
January 2021 – September 2021	International Scientific Committee, International Symposium on Dynamics and Aerodynamics of Cables (ISDAC 2021), University of Stavanger, Norway, September 16-17, 2021 (**Member**).
December 2019 – September 2020	International Scientific Committee, 16th Conference of the Italian Association for Wind Engineering (IN-VENTO 2020), Lake Como, Italy, September 6-9, 2020 (**Member**).
December 2019 – September 2020	International Scientific Committee, International Symposium on the Dynamics and Aerodynamics of Cables, ISDAC 2020, University of Stavanger, Norway, September 24-25, 2020 (**Member**).
December 2018 – June 2019	Scientific Committee, 2nd National Conference on Wind Engineering (2NCWE 2019), Romanian Association for Wind Engineering (ARIV), June 16 - 7, 2019 (**Member**).
November 2017 – June 2018	International Scientific Committee, 7th International Symposium on Computational Wind Engineering (CWE2018), Seoul, South Korea, June 18 - 22, 2018 (**Member**).
July 2017 – 2018	International Scientific Committee, 15th Conference of the Italian Association for Wind Engineering (IN-VENTO 2018), Napoli, Italy, September 9-12, 2018 (**Member**).
December 2016 – March 2018	International Advisory Board, International Workshop on Wind-Related Disasters and Mitigation, Tohoku University, Sendai, Japan, March 11 – 14, 2018 (**Member**).
March 2017 – October 2017	Intern. Scientific Committee, International Symposium on the Dynamics and Aerodynamics of Cables, ISDAC 2017, Univ. of Porto, Portugal, October 30-31, 2017 (**Member**).
September 2016 – May 2017	Scientific Committee, 13th Americas Conference on Wind Engineering, (ACWE 2017), Gainesville, Florida, USA, 21-24 May 2017 (**Member**).
September 2015 – July 2017	International Scientific Committee, Seventh European-African Conference on Wind Engineering (EACWE 2017), Liège, Belgium, July 3-6, 2017 (**Member**).
October 2015 –	International Scientific Committee, 14th Conference of the Italian Association for Wind

September 2016	Engineering (IN-VENTO 2016), Perugia, Italy, September 25-28, 2016 (**Member**).
2014-2015	International Scientific Committee, 14th International Conference on Wind Engineering (14-ICWE), Porto Alegre, Brazil, June 21-26, 2015 (**Member**).
July 2013 – Jun. 2014	Scientific Committee, 13th Conference of Italian Association for Wind Engineering (IN-VENTO 2014), University of Genoa, Italy, June 22-25, 2014 (**Member**)
January - August 2013	Scientific Committee, 2013 Conf. Engr. Mechanics Institute, American Association of Civil Engineers, Northwestern Univ., Evanston, Illinois, USA, August 4 – 7, 2013 (**Member**)
February 2013	Technical Committee, 12th Americas Conference on Wind Engineering (ACWE-12) of the AAWE (American Assoc. for Wind Engr.), Seattle, WA, June 2013 (**Paper Reviewer**).
2010-2011	International Advisory Board, 13th International Conference on Wind Engineering (13-ICWE), Amsterdam, NL, 2011 (**Member** and **Paper Reviewer**).
May 23-27, 2010	Special Reviewers Board, 5th International Symposium on Computational Wind Engineering (CWE2010)**,** Chapel Hill, North Carolina, USA (**Member** and reviewer abstracts & papers).
September 20-23, 2009	International Reviewing Committee, 8th International Symposium on Cable Dynamics, AIM Montefiore Institute (Belgium), Paris, France (**Member**).
2008	International Scientific Committee, 6th International Colloquium on Bluff-Body Aerodynamics and Applications (BBAA VI). Center for Wind Engineering Research (CIRIVE), Polytechnic of Milan, Milan, Italy, 2008 (**Member**).

Conference-Related Activities: Session Chairman, Session Organizer, Paper Reviewer

August 17th, 2025	10h Asia – Pacific Conference on Wind Engineering (APCWE10), Chengdu, China, August 2025, Technical Session "Computational Wind Engineering & Wind Energy and Applications" (**Session Chairman**)
November 19th, 2025	International Mechanical Engineering Congress and Exposition - IMECE2025, American Society of Mechanical Engineers, Memphis, Tennessee, November 2025, Technical Session "Flow-induced Vibrations of Wind Energy Systems" (**Session Co-organizer and Chairman**)
November 19th, 2025	International Mechanical Engineering Congress and Exposition - IMECE2025, American Society of Mechanical Engineers, Memphis, Tennessee, November 2025, Technical Session "Optimization, Uncertainty and Probability" (**Session Co-organizer and Chairman**)
November 20th, 2024	International Mechanical Engineering Congress and Exposition - IMECE2024, American Society of Mechanical Engineers, Portland, Oregon, November 2024, two Technical Sessions 07-12-01 and 07-12-02 "Optimization, Uncertainty and Probability" (**Session Co-organizer and Chairman**)
September 2024	2024 Conference of the Italian Association for Wind Engineering (IN-VENTO 2024), Pisa, Italy, September 8-11, 2024, Session 4 "Wind Mapping and Extreme Wind Analysis for Italy" (**Session Chairman**)
August 2024	Nineth International Colloquium on Bluff Body Aerodynamics and Applications, University of Birmingham, UK August 2024, BBAA IX, Technical Session 5.5 "Wind Energy Systems" (**Session Chairman**)
May 2024	Third International Symposium on Flutter and its Application (ISFA2024), Tongji University, Shanghai China, May 24-26, 2024, Session A4 "Energy Harvest based on Flutter" (**Session Co-Chairman**).
October 31st, 2023	International Mechanical Engineering Congress and Exposition - IMECE2023, American Society of Mechanical Engineers, New Orleans, Louisiana, October 2023, Technical Session 07-12-01 "Optimization, Uncertainty and Probability" (**Session Co-organizer and Chairman**)
August 28th, 2023	**16th International Conference of Wind Engineering (ICWE 16),** International American Association for Wind Engineering (IAWE), Florence, Italy, August 27-31, 2023 Technical Session TS 29-(01) "Wind Energy" (**Session Chairman**)
June 2023	International Symposium on the Dynamics and Aerodynamics of Cables (ISDAC 2023), University of Rome - Sapienza, Italy, June 13-15, 2023, Technical Session on "Monitoring and Testing" (**Session Chairman and Paper Reviewer**).
September 2022	17th Conference of the Italian Association for Wind Engineering (IN-VENTO 2022), Milan, Italy, September 4-7, 2022, Technical Session on "Wind Energy" (**Session Chairman**).
November 1–5, 2021	International Mechanical Engineering Congress and Exposition - IMECE2021, American Society of Mechanical Engineers, Virtual Conference, Session "07-13-01 Optimization, Uncertainty and Probability I" (**Session Co-Chairman**).
June 28-30, 2021	COMPDYN 2021, 8th Inter. Conference on Computational Methods in Structural Dynamics

	and Earthquake Engineering, Video-streamed from Athens, Greece, Mini-symposium 24 "Life-Cycle Risk-Based Structural Assessment and Cost Analysis" (**Co-Organizer**).
January 2019	15th International Conference on Wind Engineering (ICWE 15), International Association for Wind Engr. (IAWE), Beijing, P.R. China, September 1-6, 2019 (**Paper Reviewer**).
September 12, 2017	X International Conference on Structural Dynamics, EURODYN 2017, Rome, Italy, September 10-13, 2017, Mini-Symposium MS25 on "Energy Sink and Energy Harvesting", Session MS25.II (**Session Co-Chairman**).
July 4, 2017	7th European and African Conference on Wind Engineering (EACWE 2017), Liège, Belgium, July 4-7, 2017, Technical Session on "Probabilistic Methods" (**Chairman**).
May 24, 2017	13th Americas Conference on Wind Engineering (13ACWE), University of Florida, Gainesville, Florida, USA, May 21-24, 2017, Technical Session on "High-Rise and Super-Tall Buildings I" (**Session Chairman**).
September 2016	14th Conference of the Italian Association for Wind Engineering (IN-VENTO 2016), Perugia, Italy, September 25-28, 2016, Technical Session B on "Wind-induced Load and Vibration 1" (**Session Co-Chairman**).
June 2015	14th International Conference on Wind Engineering (14-ICWE), Porto Alegre, Brazil, June 21-26, 2015, Technical Session on "Wind Turbines: Control" (**Session Chairman**).
June 2014	13th Conference of the Italian National Association for Wind Engineering on Wind Engineering (IN-VENTO 2014), Genoa, Italy, June 22-25, 2014, Technical Session on "Aeroelasticity" (**Session Co-Chairman**).
August 2013	EMI2013, 2013 Conference of the Engineering Mechanics Institute, American Association of Civil Engineers, Northwestern University, Evanston, Illinois, USA, August 4 – 7, 2013, Session "Applied Aerodynamics for Engineering Systems and Applications" (**Invited Session Organizer and Session Co-Chairman**)
June 2013	12th Americas Conference on Wind Engineering, Seattle, Washington, USA, June 16 – 19 2013, Session 12 "Cable-Stayed Bridges and Cable Dynamics" (**Session Moderator**)
February 2013	Technical Committee, 12th Americas Conference on Wind Engr. (ACWE-12) of the AAWE (American Association for Wind Engr.), Seattle, Washington, June 2013 (**Paper Reviewer**).
October 2012	12th Italian Conference on Wind Engineering "In-Vento-2012", Italian National Association for Wind Engineering, ANIV, Venice, Italy, October 7-10, 2012, Technical Session D "Bridges and Aeroelasticity" (**Session Co-Chairman**).
September 2012	7th International Colloquium on Bluff Body Aerodynamics and Applications, Shanghai, China, September 2-6, 2012, Session C-2 "Prism Aerodynamics - Circular" (**Chairman**).
July 10-15, 2011	13th International Conference on Wind Engineering, ICWE13, Amsterdam, NL, Technical Session on "Cable aerodynamics – Galloping (Part 2)" (**Session Co-Chairman**)
July 10-15, 2011	13th International Conference on Wind Engineering, ICWE13, Amsterdam, NL, 2011. Special Technical Session on "Aero-elastic stability and post-critical processes of slender structures" (**Session Co-Organizer** and **Co-Chairman**)
June 2-4, 2011	EMI2011, Engineering Mechanics Institute, American Society of Civil Engineers, Northeastern University, Boston, USA. Session #25 "Flow-Induced Vibration - Part 1 and Part 2" (**Two-part Session Organizer**).
May 9-11, 2011	"Sixth Subrata Chakrabarti International Conference on Fluid Structure Interaction 2011," Orlando, Florida, USA. Wessex Institute of Technology. Session 2 "Hydrodynamic Forces and Offshore Structures" (**Session Chairman**).
2010	ASME Pressure Vessels and Piping (PVP) Conference, American Society of Mechanical Engineers, Washington, DC (**Reviewer** of a technical paper, invited by ASME-PVP Fluid-Structure Interaction Technical Committee).
May 23-27, 2010	5th Intern. Symposium on Computational Wind Engr. (CWE2010)**,** Chapel Hill, NC, USA. Session 9-3: Wind-structure interaction III: Bridges and cables (**Invited Co-Chairman**).
May 19-21, 2008	1st Inaugural Conference of the Engineering Mechanics Institute (EM08), American Society of Civil Engineers, University of Minnesota, Minneapolis, USA. Session "Structural Mechanics" (**Session Chairman**).
July 1-6, 2007	12th International Conference on Wind Engineering, Australasian Wind Engineering Society, Cairns, Australia. Session "Bridges 7 – Flutter" (**Invited Session Co-Chairman**).
June 3-6, 2007	18th Engr. Mechanics Division Conference of the American Society of Civil Engineers, Virginia Tech University, Blacksburg, Virginia, USA. Session "Dynamics" (**Chairman**).

National and International Scientific Workshop Participation

February 23-24, 2023	SEI-NIST Performance Based Design Workshop, ASCE Bechtel Conference Center; 1801 Alexander Bell Drive, Reston, Virginia, February 23-24, 2023 (**Participant** by invitation only)

February 18-29, 2020	NHERI DesignSafe-CI Workshop on Artificial Intelligence in Natural Hazards Engineering, University of Texas, Austin, February 18-19, 2020 (**Participant** by invitation only)
September 14, 2012	UMass - Northeastern Workshop on Fluid-Structure Interactions, Department of Mechanical Engineering, University of Massachusetts, Amherst, September 14, 2012 - Five oral presentations by NU researchers affiliated with the "Wind Engineering and Dynamics Research Group" led by L. Caracoglia (**Workshop Co-Organizer**).
June 13-14, 2012	National Workshop "Measurement Science R&D Roadmap - Windstorm and Coastal Inundation Impact Reduction", organized by the National Institute for Standards and Technology (NIST) and NSF, American Society of Civil Engr., Reston, Virginia (**Invited**).
March 11-13, 2012	3rd US-Japan mini-Workshop on "Structural Dynamics and Monitoring of Bridges and Flexible Structures against Wind Hazards", Texas Tech University, Lubbock, TX, USA (**Workshop Invited Participant**).
May 28-29, 2010	Intl. Workshop on Wind Engr. Research and Practice: Current State-of-the-Art and Future Needs, William and Ida Friday Center for Continuing Education, Chapel Hill, NC, USA (**Workshop Invited Participant** and **Session Moderator**).

Professional Memberships

2005–present	American Association for Wind Engineering (**Member**)
2009–present	American Institute of Steel Construction (**Member**)
2001–present	American Society of Civil Engineers (**Fellow**)
2012-2014	American Society for Engineering Education (**Member**)
2011-present	Chi Epsilon, Civil Engineering Honor Society (**Member**)
1998–present	(Italian) National Association for Wind Engineering, ANIV (**Member**)
2003–2012	Society for Experimental Mechanics, SEM (**Member**)
2010-2011, 2012	Structural Engineers Association of Massachusetts, SEAMass (**Member**)

6. ADDITIONAL INFORMATION:

Spoken languages: Italian; English; French; Spanish (basic).