

PERSONAL INFORMATION

Laura Gioiella✉ laura.gioiella@unicam.it

Sex F | Date of birth | Nationality Italian

WORK EXPERIENCE

January 2023 – Today

Assistant Professor of Structural Engineering (Rtd-A)

University of Camerino, School of Architecture and Design, Italy

- Research and development, teaching, consulting services.

Business or sector Research and education

November 2023–January 2024

Visiting Scholar at the University of California San Diego UCSD

Irwin & Joan Jacobs School of Engineering UCSD and Englekirk Structural Engineering Center UCSD

- Working experience at the Large High Performance Outdoor Shake Table (LHPOST6) focusing on control system
- Collaboration at the Converging Design Project <https://tallwoodinstitute.org/nheri-converging-design/>.

November 2022–December 2022

Technical administrative staff (category D)

University of Camerino, Laboratory Facilities, Italy

- Technical Scientific Support Area of the Laboratories for the needs of the laboratory for experimental tests on materials and structures of the University of Camerino
- Research and development, teaching, consulting services.

Business or sector Laboratory tests, Research and education

November 2019 – October 2022

Research fellow

University of Camerino, School of Architecture and Design, Italy

- Research and development.

Business or sector Research and education

October 2017 – September 2020

Adjunct Professor of Earthquake Engineering

University of San Marino, DESD, Republic of San Marino

- Research and development, teaching, consulting services.

Business or sector Research and education

November 2009 – October 2013

Professional Activity in the Sector of Civil EngineeringProfessor L. Dezi Engineering Company, and *Seitec SeismoTechnologies srl*, spin-off of the Università Politecnica delle Marche

- Design of civil structures, assessment of seismic vulnerability of existing strategic and relevant buildings (hospitals and schools), study of seismic retrofit interventions with passive techniques, consulting services.

Business or sector Engineering Company

TEACHING EXPERIENCE

A.Y. 2022/23 – present, except

Lecturer in Structural Issues of Historic Buildings

2023/24, maternity leave

SAAD, University of Camerino, Italy

Teaching the module Structural Issues of Historic Buildings (50 hours) within the MSc programme in Architecture – Conservation.

A.Y. 2024/25

Lecturer in Design of Geotechnical Structures

School of Science and Technology, University of Camerino, Italy

Teaching the module (51 hours) within the MSc programme in Geoenvironmental Resources And Risks.

Period: 10/07/2025 - 10/07/2025

Lecturer (5 hours of classroom teaching) in the course “Analysis and Design of Building Structures: from Statics to Structural Sizing”

SAAD, University of Camerino, Italy

Teaching the module (eacher training programme A037-FI – Construction Sciences and Technologies, Representation Technologies and Techniques.

Period: 22/11/2024 - 22/11/2024

Speaker at a 2-hour seminar entitled “Example of Reliability Assessment”

Inter-university Consortium FABRE, Italy

The seminar has been held at the Civitanova Marche campus of the University of Camerino, within the teaching activities of the Second-level University Master’s Programme in Evaluation and Management of the Safety of Existing Infrastructure Works, administratively based at the Department of Architecture and Industrial Design of the University of Campania “Luigi Vanvitelli”.

A.Y. 2017/18, 2018/19, 2019/20

Adjunct Lecturer in Seismic Engineering

University of the Republic of San Marino

Taught the Seismic Engineering course (9 ECTS, MSc in Civil Engineering/IASA). Also engaged in student outreach activities and organized two field visits in the earthquake-affected area of Camerino (Central Italy, 2016 events).

A.Y. 2017/18

Teaching Assistant in Structural Engineering and Seismic Engineering

Marche Polytechnic University

Supported courses in Structural Engineering (Prof. Luigino Dezi) and Seismic Engineering (Prof.ssa Laura Ragni) (40 hours, MSc in Civil Engineering).

A.Y. 2015/16, 2016/17, 2017/18

Teaching Assistant in Structural Rehabilitation

Marche Polytechnic University

Delivered lectures and exercises (18 hours, MSc in Civil Engineering), focusing on pushover analysis of existing RC and masonry structures (Prof. Alessandro Balducci).

A.Y. 2015/16

Teaching Assistant in Statics and Strength of Materials

SAAD, University of Camerino, Italy

Conducted 18 hours of exercises (BSc in Architecture).

A.Y. 2015/16– present

Subject Expert (“Cultore della materia”) Structural Engineering

SAAD, University of Camerino, Italy

Member of examination boards in Structural Engineering (ICAR/09).

**PUBLICATIONS AND OTHER
RESEARCH ACTIVITIES
OUTPUTS**

Publications in international
peer-reviewed journals
indexed in Scopus
and Web of Science

- [J01] Gioiella L, Tubaldi E, Gara F, Dezi L, Dall'Asta A., (2018). Modal properties and seismic behaviour of buildings equipped with external dissipative pinned rocking braced frames. *Engineering Structures*, Volume 172, 1 October 2018, pages: 807-819. Codice SCOPUS: s2.0-85048880126. WOS: 000445440300059. ISSN: 01410296. doi: 10.1016/j.engstruct.2018.06.043.
- [J02] Gioiella L, Tubaldi E, Gara F, Dezi L, Dall'Asta A., (2018). Stochastic Seismic Analysis and Comparison of Alternative External Dissipative Systems. *Shock and Vibration*, Volume 2018, 2018, Article number 5403737. Codice SCOPUS: s2.0-85048852729. WOS: 000426198300001. ISSN: 10709622. doi: 10.1155/2018/5403737.
- [J03] Tubaldi E., Gioiella L., Scozzese F., Ragni L., Dall'Asta A., (2020). A design method for viscous dampers connecting adjacent structures. *Frontiers in Built Environment, Earthquake Engineering*, Volume 6, 19 March 2020, Article number 25. Codice SCOPUS: s2.0-85083202401. WOS: 000548327400001. ISSN: 22973362. doi: 10.3389/fbuil.2020.00025.
- [J04] Dall'Asta A., Leoni G., Micozzi F., Gioiella L., Ragni L., (2020). A Resilience and Robustness Oriented Design of Base-Isolated Structures: The New Camerino University Research Center. *Frontiers in Built Environment, Earthquake Engineering*, Volume 6, 28 April 2020, Article number 50. Codice SCOPUS: s2.0-85083202401. WOS: 000548338000002. ISSN: 22973362. doi: 10.3389/fbuil.2020.00050.
- [J05] Castaldo P., Tubaldi E., Selvi F., Gioiella L., (2021). Seismic performance of an existing RC structure retrofitted with buckling restrained braces. *Journal of Building Engineering*, Volume 33, January 2021, Article number 101688. Codice SCOPUS: s2.0-85092739204. WOS: 000599820000001. ISSN: 23527102. doi: 10.1016/j.jobe.2020.101688.
- [J06] Scozzese F., Gioiella L., Tubaldi E., Ragni L., Dall'Asta A., (2021). Influence of viscous dampers ultimate capacity on the seismic reliability of building structures. *Structural Safety*, Volume 91, July 2021. Codice SCOPUS: s2.0-85105597260. WOS: 000663079800005. ISSN: 01674730. doi: 10.1016/j.strusafe.2021.102096.
- [J07] Dall'Asta A., Leoni G., Gioiella L., Micozzi F., Ragni L., Morici M., Scozzese F., Zona A., (2022). Push-and-release tests of a steel building with hybrid base isolation. *Engineering Structures*, Volume 2721, December 2022, Article number 114971. Codice SCOPUS: s2.0-85139066964. WOS: 000867388700002. ISSN: 01410296. doi: 10.1016/j.engstruct.2022.114971.
- [J08] Gioiella L., Morici M., Dall'Asta A., (2023). Empirical predictive model for seismic damage and economic losses of Italian school building heritage. *International Journal of Disaster Risk Reduction*, 2023, 91, 103631. ISSN: 22124209. doi: 10.1016/j.ijdr.2023.103631
- [J09] Ragni L., Micozzi F., Gioiella L., Castellano M.C., Infanti S., Dall'Asta A., (2023). λ -Factors for the Upper and Lower Bound Analyses of Base-Isolated Structures: Historical Review of Code Provisions for Elastomeric Bearings. *Applied Sciences (Switzerland)*, Volume 13, Issue 9 May 2023 Article number 5820. ISSN: 20763417. doi: 10.3390/app13095820
- [J10] Micozzi F., Ragni L., Gioiella L., Quaglini V., Dall'Asta A., (2023). Variability of Dynamic Properties of Rubber Compounds for Elastomeric Bearing. *Structural Control and Health Monitoring*. Volume 2023, Article ID 6638748, 17 pages. <https://doi.org/10.1155/2023/6638748>.
- [J11] Poeta A, Micozzi F, Gioiella L, and Dall'Asta A. (2025). Influence of knowledge uncertainties on the safety assessment of existing post-tensioned concrete bridges. *Structural Engineering and Mechanics*. Vol. 94, No. 6 (2025) 463-478, <https://doi.org/10.12989/sem.2025.94.6.463>
- [J12] D'Amato, M.; Rinaldo, A.; Rosciano, M.; Zona, A.; Morici, M.; Gioiella, L.; Micozzi, F.; Poeta, A.; Quaglini, V.; Cattaneo, S.; et al. The Development and Statistical Analysis of a Material Strength Database of Existing Italian Prestressed Concrete Bridges. *Infrastructures* 2025, 10, 203. <https://doi.org/10.3390/infrastructures10080203>
- [J13] D'Amato, M.; Rinaldo, A.; Rosciano, M.; Zona, A.; Morici, M.; Gioiella, L.; Micozzi, F.; Poeta, A.; Quaglini, V.; Cattaneo, S.; et al. The Development and Statistical Analysis of a Material Strength Database of Existing Italian Prestressed Concrete Bridges. *Infrastructures* 2025, 10, 203. <https://doi.org/10.3390/infrastructures10080203>
- [J14] Candigliota, E.; Colaneri, O.; Gioiella, L.; Leggeri, V.; Marghella, G.; Marzo, A.; Mazzarelli, S.; Morici, M.; Murazzo, S.; Seferi, R.; et al. The Integration of a Multidomain Monitoring Platform with Structural Data: A Building Case Study. *Sustainability* 2025, 17, 3076. <https://doi.org/10.3390/su17073076>
- [J15] Sciomenta M., Tamagnone G., Gioiella L., Micozzi F., Zona A., Dall'Asta A., Fragiaco M. Experimental testing of school furniture designed with life-saving functions in case of earthquakes. (2025) *Engineering Structures*, 336, art. no. 120389. DOI: 10.1016/j.engstruct.2025.120389
- [J16] Gioiella L, Micozzi F, McBain M, Morici M, Zona A, Dall'Asta A, Simpson BG, Barbosa AR. Vision-based monitoring of absolute and relative displacements in multi-story buildings during full-scale shake-table tests. *Structural Control and Health Monitoring*, vol. 2025, p. 1-21, ISSN: 1545-

2255, doi: 10.1155/stc/2618220

- [J17] McBain M, Pieroni L, Araújo Rodríguez, GA, Kontra S, Mishra P, Barbosa AR, Gioiella L, van de Lindt JW, Sinha A, Brown N, Freddi F, Simpson BG. Design and shake-table testing of a full-scale, six-story mass timber building with post-tensioned rocking walls and buckling restrained boundary elements. *Journal of Structural Engineering*. Submitted. Under Review.

Other publications:

The undersigned is also co-author of 35 papers presented at international conferences and 13 papers presented at national conferences, as well as of the monograph:

Life-Saving Furniture System: Seismic Life-Saving Furniture, University of Camerino Press, 2022, ISBN: 978-88-6768-059-7.

Presenting Author and Organizer Member of Conferences and Seminars

- Organizer and chairman of the special session entitled: Developments and Challenges in Seismic Testing: Methodologies and Recent Applications (SS06), within the conference ANIDIS 2025 – XX Convegno ANIDIS “L’Ingegneria Sismica in Italia” 7-11 settembre 2025, Assisi, Italia.
- Organizer of the mini symposium entitled: Progresses and probabilistic-based techniques for damage assessment of infrastructures: towards new and integrated perspectives for Structural Health Monitoring (MS04), within the conference EUROSTRUCT 2025 – 3rd Conference of the European Association on Quality Control of Bridges and Structures – EUROSTRUCT2025, 2–5 September 2025, Ireland.
- Organizer and chairman of the mini symposium entitled: Structural reliability assessment of existing post-tensioned concrete bridges (MS14), within the conference EUROSTRUCT 2023 – 2nd Conference of The European Association on Quality Control of Bridges and Structures – Eurostruct, 25-29 September 2023 – Wien, Austria.
- Member of the Scientific Secretariat of XIII Convegno ANIDIS “L’Ingegneria Sismica in Italia” - Ascoli Piceno, Italy, 15-19 September 2019.
- Member of the Secretariat of Technical Courses of XIII Convegno ANIDIS “L’Ingegneria Sismica in Italia” - Ascoli Piceno, Italy, 15-19 September 2019.
- Presenting Author and Winner of the Female Best Paper Award at the EVACES 2025 – 11th International Conference on Experimental Vibration Analysis of Civil Engineering Structures. 2-4 July 2025, Porto, Portugal.
- Presenting Author at the COMPDYN 2025 – 10th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering. 15-18 June 2025, Rhodes Island, Greece.
- Presenting Author at the SECED 2023 – Earthquake Engineering & Dynamics for a Sustainable Future. 15-15 September 2023, Cambridge, UK.
- Presenting Author at the 9th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering – COMPDYN2023, 12-14 June 2023, Athens, Greece.
- Presenting Author at the XVII WCSI World Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures - ASSISi Society. 11-16 settembre 2022, Torino, Italia.
- Presenting Author at the XVII Convegno Nazionale - L’ingegneria sismica in Italia – ANIDIS 2022. 11-15 settembre 2022, Torino, Italia.
- Presenting Author at the 14th CST Computational Structures Technology and 11th ECT Engineering Computation Technology. 23-25 agosto 2022, Montpellier, Francia.
- Presenting Author at the 8th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering – COMPDYN2021, 27-30 June 2021, Streamed from Athens, Greece.
- Presenting Author at the XVIII Convegno Nazionale –L’ingegneria sismica in Italia – ANIDIS 2019 – Ascoli Piceno 15-19 settembre 2019.
- Presenting Author at the 7th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2019), Crete, Greece, June 24–26, 2019.
- Presenting Author at the 10th International Conference on Structural Dynamics, (EURODYN 2017) – Rome, Italy, 10-13 September 2017.
- Presenting Author at the 16th World Conference on Earthquake Engineering (16WCEE 2017) – Santiago, Chile, 9-13 January 2017.
- Presenting Author at the 19th Congress Challenges in Design and Construction of an Innovative and

Sustainable Built Environment (IABSE 2016) – Stockholm, Sweden, 21-23 September 2016.

- Presenting Author at the 7th European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS Congress 2016) – Crete, Greece, 5-10 June 2016.
- Presenting Author at the XVI° Convegno Nazionale – L'ingegneria sismica in Italia – ANIDIS 2015 – L'Aquila, 13-17 Settembre 2015.
- Presenting Author at the 7th IEEE Workshop on Environmental, Energy, and Structural Monitoring Systems (EESMS 2015) – Trento, Italy, 9-10 July 2015.

PROJECTS AND COLLABORATIONS

28th of July – 8th of August 2025

Laboratory experiments of hurricane surge and waves on elevated coastal structures

Oregon State University, United States of America

- A 1:3 scaled specimens of timber elevated coastal structures up to collapse.
- Vision-based acquisition of displacements.

November 2023 – January 2024

Converging Design Project

LHPOST6 University of California San Diego, United States of America

- Phases I and II, a six-story mass timber building equipped with different lateral resisting systems subjected to shake-table testing.
- Vision-based acquisition of displacements.

January 2021

Push'O ver Project: real pushover test on existing masonry building as is and upgraded with fibre reinforced plaster

University of Camerino, Italy

- A full-scale pushover test to identify the seismic capacity of a typical Italian masonry building as is and upgraded.
- In-field pushover test design and execution.
- <http://www.unicam.it/pressroom/comunicati-stampa/1727157821>
- <https://progettpushover.it/>
- https://www.ansa.it/sisma_ricostruzione/notizie/regione/marche/2021/01/18/terremoto-progetto-pusho-vertest-su-resistenza-edifici_dabc1ebc-a15b-4f87-a9b8-618e85bb57ba.html

2020 – 2022

Structural Design Collaboration of the seismic improvement of the student residence “Fazzini”

University of Camerino, Italy

- 3500 sqm building (7 500 000 €), external dissipation, passive vibration control, viscous damping.

2018 – 2021

Structural Design Collaboration of the “New Camerino University Research Centre – ChIP building” and Snap-Back test design and execution

University of Camerino, Italy

- 6500 sqm building (13 352 000 €), seismically isolated.
- Seismic Isolation Design, bearing testing, in-field snap back test design and execution, hazard and risk assessment
- https://youtu.be/Ou95s6_Jcws
- <https://youtu.be/6kg7rg9W0ck>

2017 – present

Experimental Activities in collaboration with DiagnosticLab

University of Camerino, School of Architecture and Design, Italy

- Palazzo Ducale, Camerino (MC) – In-situ non-destructive tests on masonry structural elements, including flat-jack tests (Jan–Feb 2022).
- School of Chemistry University of Camerino, Camerino (MC) - In-situ non-destructive tests on r.c. frame building (2021).
- Private building, Piazza San Giacomo 2, Monteprandone (AP) – In-situ non-destructive tests on reinforced concrete and masonry structural elements, including pacometric surveys, SonReb method, and flat-jack tests (Apr 2019).
- Fazzini College University of Camerino, Camerino (MC) - In-situ destructive and non-destructive tests on r.c. frame building (2019).
- Palazzo Colucci, Ascoli Piceno (AP) – In-situ non-destructive tests on reinforced concrete and masonry structural elements, including pacometric surveys, SonReb method, and flat-jack tests (2018).
- Municipal Gymnasium, Staffolo (AN) – In-situ non-destructive tests on reinforced concrete elements, including pacometric surveys, SonReb method, and verification of construction details (2018).

EDUCATION AND TRAINING

- November 2013 – March 2017 **Doctorate in Civil, Environmental, Building Engineering and Architecture**
Università Politecnica delle Marche, Italy
PhD Thesis entitled “External Dissipative Rocking System”, Advisor Prof. Fabrizio Gara
- Structural Engineering, Passive Control Systems, Advanced Nonlinear Modelling, Advanced Finite Element Analysis, Masonry Structures, Steel Structures.
- October 2003 – November 2009 **Bachelor and Master Degree in Building Engineering (3+2-year) 110/110 cum laude**
Università Politecnica delle Marche, Italy
- Mathematics, Physics, Technical Drawing and Survey, Science and Technology of Materials, Structural Mechanics, Computational Mechanics, Design of Reinforced Concrete Structures, Prestressed Concrete Structures, Steel Structures, Masonry Structures, Geotechnical Engineering and Foundations, Finite Element Analysis, Earthquake Engineering, Cultural Heritage Preservation.

CERTIFICATIONS

- Since February 2018 **Certified Level 3 Technician for Non-Destructive Testing (NDT), Static Load Testing (MS) method**
- Civil Engineering, Cultural Heritage and Architectural sector In compliance with UNI 11931:2024 and RG 01 PRS_PND CIV .
- Since February 2018 **Certified Level 3 Technician for Non-Destructive Testing (NDT), Visual Testing (VTCiv) method**
- Civil Engineering, Cultural Heritage and Architectural sector In compliance with UNI 11931:2024 and RG 01 PRS_PND CIV.
- Since June 2016 **Certified Level 2 Technician for Non-Destructive Testing (NDT), Vibration Measurement (MV) method**
- Civil Engineering, Cultural Heritage and Architectural sector In compliance with UNI 11931:2024 and RG 01 PRS_PND CIV.
- Since April 2009 **Professional Qualification and Registration**
- Qualified to practise as an engineer (State Examination, 2009).
 - Registered with the Order of Engineers of the Province of Ancona, Section A – Civil and Environmental Engineering (No. 3487).

PERSONAL SKILLS

Mother tongue Italian

Other language

English
First Certificate in English (FCE)
2001 - Cambridge English
Language Assessment

French

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
B2	B2	B2	B2	B2
B1	B1	B1	B1	A2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills

- Good communication skills gained through the experience as university teacher and speaker at national and international conferences and seminars.

Organisational / managerial skills

- Leadership gained through the experience in coordination activities of national and international research teams.

Job-related skills

- Ability to handle and solve complex problems gained through the experience in research and design development.
- Ability to interact with researchers, professionals, and entrepreneurs with diversified background gained through the experience in multidisciplinary research projects.

Computer skills

- Good knowledge of Microsoft Office™ tools gained in research and teaching activities.
- Good knowledge of Google™ tools gained in research and teaching activities.
- Advanced knowledge of SAP2000™ software gained in research and consulting activities.
- Advanced knowledge of MIDAS™ software gained in research and consulting activities.
- Advanced knowledge of OpenSees™ software gained in research and consulting activities.
- Good knowledge of ABAQUS™ software gained in research and consulting activities.
- Good knowledge of Autodesk AutoCAD™ gained in research and consulting activities.
- Good knowledge of Adobe Acrobat and Illustrator™ gained in publishing activities.
- Good knowledge of MATLAB™ programming gained in research activities.
- Basic knowledge of Phyton programming gained in research activities.

Driving licence

- B

Editorial activities

- Reviewer for many international journals (Engineering Structures, Journal of Building Engineering, Structures, Shock and Vibrations, Earthquake Spectra, ASCE Multidisciplinary Journal of Civil Engineering, International Journal of Critical Infrastructure Protection, Journal of Constructional Steel Research, International Journal of Disaster Risk Reduction, ASCE Journal of Structural Engineering) and conferences.

ADDITIONAL INFORMATION

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use the data provided in this CV.

Ancona, 7th January 2026

Dr. Laura Gioiella