Curriculum Vitae Dr Filippo Ubertini

PERSONAL INFORMATION

Family name, First name: Ubertini, Filippo
Researcher unique identifier: ORCID 0000-0002-5044-8482, SCOPUS ID 55891659200

- **KEY EXPERTISE**

Filippo Ubertini's research is mainly focused on Structural Health Monitoring (SHM) of civil engineering structures, including buildings and bridges, and on smart construction materials for SHM, such as smart concretes and smart bricks. The latest research activities in these fields concerned: (i) data science and artificial intelligence algorithms for structural health monitoring using a variety of sensing systems; (ii) fabrication, modelling and application of novel strain sensing smart concretes, smart bricks and smart road pavements for SHM; (iii) system identification and dynamic modelling of civil engineering structures.

- **BIBLIOMETRIC INFORMATION**

Total number of journal articles:
Scopus: 225 papers, 4121 citations, H-index 36.
Google Scholar: 287 papers, 5196 citations, H-index 40, i-10 index 109.

- **EDUCATION**

2009	PhD in Civil Engineering Department of Structural Mechanics, University of Pavia, Italy
2005	MSc degree cum laude in Civil Engineering (Structural Engineering path) Faculty of Engineering, University of Perugia, Italy
2003	Bachelor Degree cum laude in Civil Engineering Faculty of Engineering, University of Perugia, Italy

- **CURRENT POSITION(S)**

2018 – 2022 Full Professor, Dept. of Civil and Environmental Engineering, University of Perugia

- **PREVIOUS POSITIONS**

2015 – 2018	Associate Professor Dept. of Civil and Environmental Engineering, University of Perugia
2008 – 2015	Assistant Professor Department of Civil and Environmental Engineering, University of Perugia
2005 – 2008	PhD fellow Department of Structural Mechanics, University of Pavia

- **SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS**

2008 – 2022 5 Post-doc fellows, 3 PhD students (graduated), 6 PhD Students (ongoing), 70 Master Students
Dept. of Civil and Environmental Engineering, University of Perugia

- **TEACHING ACTIVITIES**

2015 – 2022	Teacher, MSc course "Advanced Structural Design", University of Perugia
2021 – 2022	Teacher, MSc course "Seismic Safety of Structures", University of Perugia
2017 – 2022	Co-Teacher, MSc course "Design of Earthquake-Resistant Buildings", University of Perugia
2019 – 2022	Teacher, BSc course "Structures for Industrial Design", University of Perugia
2012 – 2015	Teacher, MSc course "Theory and Design of Bridges", University of Perugia
2010 – 2012	Teacher, MSc course "Experimental Diagnosis of Structures", University of Perugia
2009 – 2010	Teacher, MSc course "Structural Rehabilitation II", University of Perugia

- **ORGANISATION OF SCIENTIFIC MEETINGS**

2015-2022	Scientific Committee Member of international and national conferences, including EUROSTRUCT 2023, FABRE 2022, EUROSTRUCT 2021, CWE2018, BBAA8.
2015-2022	Organizer of minisymposia in International conferences, including ECCOMAS 2022, EWSHM2022, MURICO2021, EMI 2021, COMPDYN 2021, EWSHM2020, UNCECOMP 2015.

- **INSTITUTIONAL RESPONSIBILITIES**

2018 – 2022	Coordinator, International and Industrial Doctoral Program in Civil and Environmental Engineering
2020 – 2022	Vice-President and Representative of University of Perugia, FABRE Consortium "for assessment and monitoring of bridges, viaducts and other structures".

- **COMMISSIONS OF TRUST**

2012 – 2022 Editor: “Mechanical Systems and Signal Processing” (Elsevier), “Sensors” (MDPI), “Advances in Civil Engineering” (Hindawi Publishing Corporation), "Shock and Vibration" (Hindawi Publishing Corporation), "Mathematical Problems in Engineering" (Hindawi Publishing Corporation), "Engineering Research Express" (IOP), “Modeling” (MDPI), “Engineering Proceedings” (MDPI).

2013 – 2022 Member of PhD Committees in top European and American Universities (e.g. Iowa State University, University of Porto, University of Seville, Politecnico di Milano, University of Florence, Polytechnic University of Marche, University of Pavia).

2010 – 2018 Member of the Board of Teachers of the joint International Doctoral Course "Processes, Materials and Constructions in Civil and Environmental Engineering and for The Protection of the Historic-Monumental Heritage" between University of Florence and Technical University of Braunschweig.

- **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

2017 – 2022 Member, Italian Association for Earthquake Engineering (ANIDIS)
2012 – 2022 Member, International association for bridge maintenance and safety (IABMAS)
2008 – 2022 Member, Italian Association of Wind Engineering (ANIV)
2021 – 2021 Member, Italian Association of Theoretical and Applied Mechanics (AIMETA)

- **AWARDS AND OTHER RECOGNITIONS**

2020: Semi-plenary speaker at the EURODYN 2020 - XI International Conference on Structural Dynamics, 23-26 November 2020, Athens (Greece) - online.
2020: Plenary speaker at the “IV Congresso Brasileiro de Patologia das Construções (CBPAT 2020)”, 10-14 August 2020, Fortaleza (Brasil) – online.
2017: Keynote speaker at the "4th International Electronic Conference on Sensors and Applications", 15-30 November 2017, online (presentation available at: http://sciforum.net/conference/ecsa-4/paper/4889).
2014-2022: Invited speaker at the following international conferences: ICME 2016, ICEM 17, EMRS Spring Meeting 2016, EURODYN 2014.
2016-2022: Invited seminars at Princeton University, Columbia University, Universidad de Malaga, Iowa State University, New York University.
2020: Recognition in the list of World’s Top 2% Scientists according to citations and scientific impact of his research activity.
2019: Best Paper Award, International Operational Modal Analysis Conference (IOMAC).
2017: Best Paper Award for keynote speech at ECSA4 Electronic Conference (available at http://sciforum.net/conference/ecsa-4/paper/4889)
2011: Best Paper Award, Fourth International Conference on Experimental Vibration Analysis for Civil Engineering Structures (EVACES)
2010: Recognition for outstanding contribution through the prize of Italian Association for Wind Engineering (ANIV)

- **MAJOR RESEARCH PROJECTS**

1. SAFERUP!: Sustainable, Accessible, Safe, Resilient and Smart Urban Pavements, 2018-2022
Duration: 48 months. Funder: European Commission (MSCA ITN). Role: PI of Partner institution (UNIPG) and WP Leader
2. DETECT-AGEING: DETECT-AGING - Degradation Effects on sTructural safEty of Cultural heriTAGe constructions through simulation and health monitoring, 2019-2022. Funded by: Italian Ministry of University and Research. Role: Principal Investigator of Local Research Unit
3. Multilevel risk analysis and structural health monitoring of existing bridges, 2021-2022
Duration: 12 months. Funder: FABRE Consortium. Role: PI
4. RELUIS-DPC, 2021-2022
Funded by: RELUIS Consortium. Role: Principal Investigator of Local Research Unit
5. DETECT-AGEING: DETECT-AGING - Degradation Effects on sTructural safEty of Cultural heriTAGe constructions through simulation and health monitoring, 2019-2022. Funded by: Italian Ministry of University and Research. Role: Principal Investigator of Local Research Unit
6. Eco-Earth: Shot –earth for an eco-friendly and human-comfortable construction industry, 2020-2022. Duration: 24 months. Funder: Italian Ministry of University and Research. Role: Co-PI of Partner institution (UNIPG)
6. SMART-BRICK: Novel strain-sensing nano-composite clay brick enabling self-monitoring masonry structures, 2017-2020. Funded by: Italian Ministry of University and Research. Role: Principal Investigator
7. HERACLES: Heritage Resilience Against CLimate Events on Site, 2016-2019. Funded by: European Commission. Role: PI of Partner institution (UNIPG)