Curriculum Vitae of Prof. Michele Gattullo, PhD

Michele Gattullo

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CURRENT POSITIONS AND ACADEMIC ACTIVITIES

Associate Professor for the scientific-disciplinary sector IIND-03/B Design and methods of industrial engineering, at the Department of Mechanics, Mathematics, and Management of the Polytechnic University of Bari.

Lecturer in Technical Representation Methods – Part Two (3 ECTS) for the Bachelor's Degree Course in Mechanical Engineering (A-K), Polytechnic University of Bari.

Lecturer in Technical Representation Methods – Part Two (3 ECTS) for the Bachelor's Degree Course in Mechanical Engineering (L-Z), Polytechnic University of Bari.

Lecturer in Industrial Augmented Reality (6 ECTS) for the Master's Degree Course in Mechanical Engineering, Polytechnic University of Bari.

Lecturer in Prototyping for Virtual Reality (6 ECTS) for the Master's Degree Course in Energy Engineering, Polytechnic University of Bari.

Member of the teaching staff of the accredited PhD program in Mechanical and Management Engineering at the Polytechnic University of Bari (XXXVIII cycle).

Member of the teaching staff of the accredited PhD program in Mechanical and Energy Engineering (DRIME) at the Polytechnic University of Bari (XXXIX - LX - LXI cycle).

Member of the Review Group (GdR) and Management Group (GdG) of the Bachelor's Degree Course in Mechanical Engineering, Polytechnic University of Bari.

PREVIOUS POSITIONS AND ACTIVITIES

2022-2025	**Fixed-term Researcher under Article 24(3)(b) of Law 240/**10 for the scientific-disciplinary sector IIND-03/B Design and methods of industrial engineering, at the Department of Mechanics, Mathematics, and Management of the Polytechnic University of Bari.
2017-2022	**Research Fellow** for the scientific-disciplinary sector IIND-03/B Design and methods of industrial engineering, at the Department of Mechanics, Mathematics and Management of the Polytechnic University of Bari.

EDUCATION

2020 **National Scientific Qualification as Associate Professor** (ASN 2018-2020, sixth four-month period) in the competition sector 09/A3 - Industrial Design, Mechanical Engineering, and Metallurgy, from 04/05/2021 to 04/05/2032

2016 **PhD in Mechanical and Management Engineering**, XXVIII cycle. Thesis title: "Informing the Design of an Augmented Reality Information System for Manual Working Stations."

2012 **Qualification to practice as an Industrial Engineer** (section A).

2012 **Master's Degree in Mechanical Engineering**. Polytechnic University of Bari. Experimental thesis in Simulation and Virtual Prototyping entitled "Augmented Reality in Industrial Maintenance."

2009 **Bachelor's Degree in Mechanical Engineering**. Polytechnic University of Bari. Experimental thesis in Energy Systems I entitled "Analysis of the flow through the intake valve of an internal combustion engine."

INSTITUTIONAL ACTIVITIES AND ASSIGNMENTS

Michele Gattullo's institutional activities from 2016 to the present consist almost entirely of service activities for the Polytechnic University of Bari, to which he belongs. Below is a brief description of Michele Gattullo's main institutional activities.

2024-present Member of the Review Group (GdR) and Management Group (GdG) of the Bachelor's Degree Course in Mechanical Engineering, Polytechnic University of Bari.

2025-present Member of the teaching staff of the accredited PhD program in Mechanical and Energy Engineering at the Polytechnic University of Bari (LXI cycle).

2024-present Member of the teaching staff of the accredited PhD program in Mechanical and Energy Engineering at the Polytechnic University of Bari (LX cycle).

2023-present Member of the teaching staff of the accredited PhD program in Mechanical and Energy Engineering at the Polytechnic University of Bari (XXXIX cycle).

2022-present Member of the teaching staff of the accredited PhD program in Mechanical and Energy Engineering at the Polytechnic University of Bari (XXXVIII cycle).

2023-present Appointed by the director of the Department of Mechanics, Mathematics, and Management at the Polytechnic University of Bari to draw up the timetables for the following degree courses: Bachelor's Degree in Mechanical Engineering, Master's Degree in Mechanical Engineering, Master's Degree in Energy Engineering, Master's Degree in Mechanical Engineering.

2023-2024 Appointed Representative of Researchers on the Council of the Department of Mechanics, Mathematics, and Management at the Polytechnic University of Bari (D.R. 611 del 11/05/23).

2025 External member of the selection committee for the award of one research grant for graduates for research in the scientific/technological field of "production and civil systems engineering (area 04)" within the macro-theme of research "digital technologies and processes," supported by the research project "id&a co-financing: ideation, development & assessment of methodologies, tools, and devices for humans in their living environments" (Prot. n. 395199 del 15/10/2025, selection notice n. STIIMA-BR-07-2025-BA).

2025 Chair of the selection committee for the award of one "professionalizing" research grant entitled "Implementation of an industrial environment with biophilic elements visualized in Extended Reality" (D.R. 1623 del 18/12/2024).

2026 Member of the selection committee for the award of one research contract for the performance of study and research activities within the research project “PIANIFICO -

PIANIFIcazione Chirurgica, prOduzione efficiente di protesi custom made e monitoraggio domiciliare con sistemi IoT" (D.R. 117/2026 del 09/02/2026).

2026 Member of the selection committee for the award of one post-doctoral position for study and research activities within the research project "BUILD AI MAINTENANCE" (D.R. 107/2026 del 06/02/2026).

2026 Member of the selection committee for the award of one research position for the performance of study and research activities within the research project "BUILD AI MAINTENANCE" (D.R. 107/2026 del 06/02/2026).

2026 Member of the selection committee for the award of one research position for the performance of study and research activities within the research project "QUOTA" (D.R. 98/2026 del 03/02/2026).

2026 Member of the selection committee for the award of one post-doctoral position for study and research activities within the research project "QUOTA" (D.R. 96/2026 del 03/02/2026).

2025 Member of the selection committee for the award of one postgraduate scholarship for study and research activities within the "SAILVERSE" project (D.R. 544 del 24/04/2025).

2024 Member of the selection committee for the award of one post-doctoral research grant entitled "Study, design, implementation, and validation of a prototype virtual courtroom in the Metaverse for use in legal clinics and public administration training courses" (D.R. 86 del 19/01/2024).

2024 Chair of the selection committee for the award of one professional research grant entitled "Modeling of virtual biophilic elements for inclusion in XR environments to improve operator well-being" (D.R. 534 del 03/05/2024).

2024 Chair of the selection committee for the award of one postdoctoral research grant entitled "Modeling an XR work environment to assess the effect of virtual biophilic elements on operator well-being and performance" (D.R. 733 del 20/06/2024).

2023 Member of the examining board for the final examination of PhD students Luigi Falbo, Emanuele Marino, and Francesco Spada for the award of the PhD in "Civil and Industrial Engineering" - XXXV cycle, with administrative headquarters at the University of Calabria (D.R. 313 del 10/03/2023).

2023 Member ("opponent") of the examining board for the final examination of doctoral student Hanna Heinonen for the award of a PhD in "human-technology interaction" at Tampere University of Applied Sciences.

2023 Substitute expert member of the State Examination Commission for engineers and junior engineers, Year I and II, 2023 session (D.R. 754 del 19/06/2023).

2022 Member of the selection committee for the awarding of prizes for the year 2022, as provided for in the department's excellence project, to professors in the Department of Mechanics, Mathematics, and Management who have distinguished themselves for the quality of their research (D.D.D. n. 51/2022 del 05/04/2022).

2022 Member of the selection committee for the award of one 'professionalising' research grant entitled 'Development of a computational model simulating the process of cell adhesion to a substrate' (D.R. 553 del 10/05/2022).

2022 Member of the selection committee for the awarding of one freelance professional contract under the FONDIMPRESA contracts, funded by Prof. G. Pappalettera, Scientific Director. (D.D. 79/2022 del 29/06/2022).

2022	Member of the selection committee for the awarding of one postgraduate scholarship for study and research activities within the Research Project PON_FabriCARE_UR_UVA - FabriCARE - FABRIcation of Customized bioActive pRosthetic devicEs» n. F/190110/01-03/X44 of which Prof. A.E. Uva is Scientific Director (D.R. 1161 del 04/11/2022).

TEACHING ACTIVITIES

Michele Gattullo's teaching activities have all been developed since 2013 within the scientific disciplinary sector IIND-03/B (formerly ING-IND/15) at the Department of Mechanics, Mathematics, and Management of the Polytechnic University of Bari. The teaching activities began with the formal assignment of supplementary teaching duties (called 'teaching support cycles') as part of the course 'Simulation and Virtual Prototyping,' which is part of the Master's Degree in Mechanical Engineering at the Polytechnic University of Bari. Furthermore, although there are no formal assignments, Michele Gattullo has been a member of the examination board for the course "Methods for Technical Representation" as part of the Bachelor's Degree courses in Mechanical/Electrical/Management Engineering at the Polytechnic University of Bari since 2013, becoming a full member once he was appointed as a contract professor. Below are the courses he has taught and the relevant time periods.

a.y. 2025/2026	Polytechnic University of Bari *Master's Degree in Energy Engineering* Prototyping for Virtual Reality (6 ECTS)
From a.y. 2024/2025	Polytechnic University of Bari *Doctoral School* Design of User Experience to exploit Extended Reality for the enhancement of research activities (2 ECTS)
From a.y. 2023/2024	Polytechnic University of Bari *Bachelor's Degree in Mechanical Engineering* Technical Representation Methods – 2nd part, course A-K (3 ECTS)
From a.y. 2023/2024	Polytechnic University of Bari *Bachelor's Degree in Mechanical Engineering* Technical Representation Methods – 2nd part, course L-Z (3 ECTS)
From a.y. 2023/2024	Polytechnic University of Bari *Master's Degree in Mechanical Engineering – Taranto headquarters* Industrial Augmented Reality (6 ECTS)
From a.y. 2022/2023	Polytechnic University of Bari *Master's Degree in Mechanical Engineering* Industrial Augmented Reality (6 ECTS)
From a.y. 2022/2023 to a.y. 2024/2025	Polytechnic University of Bari *Master's Degree in Energy Engineering* Virtual Prototyping and Augmented Reality (6 ECTS)
a.y. 2021/2022	Polytechnic University of Bari *Master's Degree in Mechanical Engineering – Taranto headquarters* Simulation and Virtual Prototyping (6 ECTS)
From a.y. 2018/2019 to a.y. 2021/2022	Polytechnic University of Bari *Bachelor's Degree in Electrical Engineering* Technical Representation Methods (6 ECTS)

Since 2015, as Supervisor and Co-Supervisor, Michele Gattullo has supervised the development of 2 PhD theses in Mechanical and Management Engineering, 25 Master's theses in Mechanical Engineering, 1 Master's thesis in Energy Engineering, one Bachelor's thesis in Automation Engineering, one Bachelor's thesis in Mechanical Engineering, and one Bachelor's thesis in Management Engineering.

Michele Gattullo has also taught at prestigious universities abroad, participating in calls for applications under the Erasmus+ program. Below are some of the positions he has held and the relevant periods.

2026 Winner of a grant under the Erasmus+ KA131 program for teaching activities lasting **8 hours** at the Instituto Superior Técnico, University of Lisbon, Portugal.

2025 Guest lecturer for doctoral students and researchers affiliated with VRLab and Sintef at the Norwegian University of Science and Technology (NTNU), Norway, as part of the Erasmus+ KA131 program. Lecture titles: **Biophilic enrichment of XR environments**. Activity duration: 3 hours. **The minimal Augmented Reality authoring approach**. Activity duration: **3 hours**.

2025 Guest lecturer for students of the "Graphics and Visualization" course (Master's degree in Computer Science) at the Faculty of Computer Science of the Norwegian University of Science and Technology (NTNU), Norway, as part of the Erasmus+ KA131 program. Lecture title: **Industrial Augmented Reality – Potential and issues**. Activity duration: **2 hours**.

2025 Lecture (invited speaker) for participants in the "EuroXR Summer School 2025" organized by the EuroXR association at the National Research Council (CNR), Lecco, Italy. Teaching: **Biophilic enrichment of XR environments**. Duration of activity: **2 hours**.

2023 Lecture (guest lecturer) for doctoral students and researchers affiliated with the TAUCHI Research Center at the University of Tampere (TUNI), Finland. Lecture title: **The minimal Augmented Reality authoring approach**. Activity duration: **2 hours**.

2023 Guest lecture for students enrolled in the course "Gestión de la Representación Digital del Producto" (Master's Degree in Industrial Engineering) at the Faculty of Industrial Engineering of the Polytechnic University of Valencia (UPV), Spain, as part of the Erasmus+ KA131 program. Lecture title: **Industrial Augmented Reality – Potential and issues**. Duration of activity: **4 hours**.

2023 Guest lecture for PhD students and researchers affiliated with LabDesign and LabLENI at the Polytechnic University of Valencia (UPV), Spain, as part of the Erasmus+ KA131 program. Lecture title: **Biophilic enrichment of XR environments**. Duration of activity: **2 hours**.

2023 Lecture (guest lecturer) for PhD students and researchers affiliated with LabDesign and LabLENI at the Polytechnic University of Valencia (UPV), Spain, as part of the Erasmus+ KA131 program. Lecture title: **The minimal Augmented Reality authoring approach**. Activity duration: **2 hours**.

2021 Lecturer at the "International week in summer semester 2021" organized by FHWS – University of Applied Sciences Würzburg-Schweinfurt, faculty of "Business and Engineering." Germany. Course: **Augmented Reality for everyday life**. Teaching duration: **60 hours**.

2019 Guest lecturer for students of the Master's degree in Mechanical Engineering at the Faculty of Mechanical Engineering of the Novosibirsk State Technical University (NSTU), Russia, as part of the Erasmus+ KA107 program. Lecture title: **Design of Industrial AR solutions**. Activity duration: **4 hours**.

2019 Lecture (invited speaker) for participants in the Summer School "Smart Cities Today and Tomorrow" at the Faculty of Computer Engineering and Automation of the Novosibirsk State Technical University (NSTU), Russia, as part of the Erasmus+ KA107 program. Title of the lecture: **Use of VR and AR in smart cities**. Duration of activity: **2 hours**.

Within the scope of the IIND-03/B sector, he also carried out professional training activities as part of professional courses organized by training institutes and schools in the area. Some of the assignments carried out and the reference periods are listed below.

2024 Lecturer for training activities for the Aerotech Academy Puglia, at the company "Leonardo Aerostrutture." Teaching: **CAD Design for Aeronautics, Aerospace, and Helicopter applications**. Teaching duration: **22 hours**.

2024 Teaching activities on behalf of Boosting Innovation in Poliba. CTE Matera project. Lesson title: **UX Design**. Duration of activity: **3 hours**.

from 2024 Expert trainer in PNRR courses for the "Vittorino digital training" project (Training of school staff for the digital transition in state schools (Ministerial Decree 66/2023)) at the Vittorino da Feltre Institute of Human Sciences - Taranto. Teaching: **Immersive Learning: Use of AR, VR, and MR for Educational Innovation**. Teaching duration: **10 hours**, repeated over 2 courses.

2024 Expert trainer in PNRR courses for the project "Hidden Talents" (Actions to prevent and combat early school leaving (Ministerial Decree 170/2022)) at the "Luigi Santarella – Severina De Lilla" Professional Institute – Bari. Teaching: **Virtual Reality Laboratory (Metaverse)**. Teaching duration: **30 hours**.

from 2024 Lecturer on the PNRR course on active guidance in the transition from school to university. Teaching: **Introduction to Mixed Reality**. Teaching duration: **15 hours**.
The above course has already been taught at the Vittorino da Feltre Institute of Human Sciences High School – Taranto in April-May 2024.

2023 Lecturer for the "Naval Designer" course at the Polytechnic University of Bari. Teaching: **Technical Representation Methods**. Teaching duration: **14 hours**.

2022 Lecturer for automotive training activities on behalf of the company Eliapos. Teaching: **Reading Technical Drawings**. Teaching duration: **14 hours**.

2022 Lecturer for training activities on behalf of Ifoa, as part of the course "Baker Hughes – Nuovo Pignone Staff Academy 2." Teaching: **CAD Systems Computer-Aided Design (CAD)**. Teaching duration: **24 hours**.

2021 Lecturer for training activities on behalf of C&P Service srl, as part of the course "Mechanics applied to the maintenance department of GE Avio srl in Brindisi." Teaching: **Applied Mechanics**. Teaching duration: **18 hours**.

2020 Lecturer for training activities on behalf of Ifoa, as part of the course "ADECCO: Baker Hughes - Nuovo Pignone Global Supply Chain Academy." Teaching: **CAD Systems Computer-Aided Design (CAD)**. Teaching duration: **16 hours**.

2020 Lecturer for training activities on behalf of the company Ifoa, as part of the course "ADECCO: Baker Hughes - Nuovo Pignone Staff Academy." Teaching: **CAD systems Computer-aided design (COMPUTER AIDED DESIGN)**. Teaching duration: **16 hours**.

Since 2018, Michele Gattullo has been included in the Provincial Substitute Teacher Rankings for competition classes A47, A36, A37, A42, A32, A38, and A60. In the 2019/2020 academic year, he worked as a short-term substitute teacher (4 hours per week) for Technology (competition class A60) at the Convitto Nazionale Statale "D. Cirillo" – Bari.

PARTICIPATION IN RESEARCH DOCTORATES AND TUTORSHIP

From 2022 to 2023, Michele Gattullo was a member of the teaching staff of the accredited PhD program in Mechanical and Management Engineering (DRIMEG) offered by the Polytechnic University of Bari. From 2022 to 2025, he was supervisor of PhD student Sara Romano (XXXVIII cycle). In 2022, he was appointed co-supervisor of PhD student Enricoandrea Laviola (XXXVI cycle). From 2023 to the present, he has been a member of the teaching staff of the accredited PhD program in Mechanical and Energy Engineering (DRIME) offered by the Polytechnic University of Bari. He is currently supervisor of PhD student Valerio Pulcini (XXXIX cycle), supervisor of PhD student Luana Marangelli (40th cycle), co-supervisor of PhD student Desirè Laviola (40th cycle), and supervisor of PhD student Mona Yavari (41st cycle).

RESPONSIBILITY FOR RESEARCH PROJECTS FUNDED THROUGH COMPETITIVE CALLS

2023-2026 Principal Investigator of PRIN 2022 PNRR “BIOphilic design of Extended Reality working Environments (BIOXRE),” PRIN 2022-PNRR, CUP D53D23017380001.

PARTECIPAZIONE A PROGETTI DI RICERCA FINANZIATI MEDIANTE BANDI COMPETITIVI

2024-present Research and Development Project "QUOTA - Ensuring the Quality of Food Products through Innovative Monitoring Techniques in Production and Logistics. Agreements for Innovation Ministerial Decree December 31, 2021

2024-present PNRR Project "Vittorino_Eduverso." Mission 4 - Education and Research - Component 1 - Enhancing the provision of education services: from nurseries to universities - Investment 3.2 "School 4.0: innovative schools, cabling, new learning environments, and laboratories."

2021-2023 PON Project "CONTACT - CustOm-made aNTibacterical/bioActive/bioCoated prostheses." PON R&I 2014-2020 and FSC call for proposals.

2020-2023 PON Project "FabriCARE- FABRIcation of Customized bioActive pRosthetic devicEs." Call for proposals "Businesses and Competitiveness" 2014-2020 ERDF Axis I - Innovation, Action 1.1.3.

2020-2022 BRIC Project "SPIRiT - Secure Personalized Immersive Reality innovative Trainer." INAIL research activities - 2019-2021 Research Activity Plan - Scientific Research. BRIC Call for Proposals - 2019 edition.

2018-2020 POR InnoNetwork Project "GreenMill 4.0." Project co-financed under the POR Puglia ERDF-ESF 2014-2020 - Priority Axis 1 - Research, technological development, innovation - Action 1.6 "Interventions to strengthen the regional and national innovation system and increase collaboration between businesses and research structures and their enhancement."

2018-2020 POR InnoNetwork Project "OMNI-AGV 4.0 - Omnidirectional automatic guided vehicle, enabling Industry 4.0 specifications." Intervention co-financed under the POR Puglia FESR-FSE 2014-2020 – Priority axis 1 – Research, technological development, innovation – Action 1.6 “Interventions to strengthen the regional and national innovation system and increase collaboration between businesses and research facilities and their enhancement”

2018-2019 POR FESR 2014-2020 Project "VIReCo (Vapor Injected Reciprocating Compressor)." Research project funded by the Umbria Region as part of the Call for Proposals in support of complex Research & Development projects POR FESR 2014-2020.

2018-2020 PONRI Project “EXTREME - Innovative technologies for EXTREMely Efficient spark ignited engines.” AXIS 2 - Action II.2 - Sustainable Mobility.

2014-2016 Project "VirtualMurgia - Ubiquitous Multisensory Intelligent System for the Promotion of Apulian Culture and Traditions in the Murgia Region." Line of action "Research and Innovation" - action "Interventions for Innovative Start-ups" - line 2 "Culture with Increased Impact."

2012-2015 PONREC Project "VIS4FACTORY – Visual Information System for Factory." PON Research and Competitiveness 2007-2013, Funded through the measure "High-Tech Districts and Public-Private Laboratories" – AXIS I.

PARTICIPATION IN RESEARCH AND TECHNOLOGY TRANSFER PROJECTS

2024	Training activities on behalf of Boosting Innovation at Poliba. CTE Matera Project.
2023-2024	Expert Design Engineer with certifications in Mixed Reality - Augmented Reality - Virtual Reality Applications, for the implementation of the Executive Design for the setting up of 1 laboratory at the Vivante headquarters (Bari) for the use of AR/VR services in the Tourism and Culture economic sector. PNRR Project Mission 4 - Education and Research - Component 1 - Enhancement of education services: from nurseries to universities - Investment 3.2 "School 4.0: innovative schools, cabling, new learning environments, and laboratories."
2023	Consultancy activities on behalf of Research Innovation Group Up S.r.l., aimed at designing a platform for teaching in the Metaverse.
2021-2023	Third-party research project "Upgrading goes digital" between the Department of Mechanics, Mathematics, and Management of the Polytechnic University of Bari and Upgrading Services SpA.
2022	Training activities in the automotive sector on behalf of Eliapos.
2022	Training activities on behalf of the company Ifoa, as part of the course "Baker Hughes - Nuovo Pignone Staff Academy 2."
2021	Training activities on behalf of C&P Service srl, as part of the course "Mechanics applied to the maintenance department of GE Avio srl in Brindisi."
2020	Training activities on behalf of Ifoa, as part of the course "ADECCO: Baker Hughes – Nuovo Pignone Global Supply Chain Academy."
2020	Training activities on behalf of Ifoa, as part of the course "ADECCO: Baker Hughes – Nuovo Pignone Staff Academy."
2020	Research activity on behalf of Idea 75 srl on "an innovative TIMER applicator for brachytherapy."
2016-2017	Research activity on behalf of DES service srl on "visual-based maintenance documentation."
2016	Research activity on behalf of Polimech srl on "innovative design solutions for hydraulic demolition tools."

PARTICIPATION IN NATIONAL AND INTERNATIONAL RESEARCH GROUPS

- Collaboration with the research group of **Prof. Antonio E. Uva** of the **Polytechnic University of Bari**, Virtual Reality and Reality Reconstruction Laboratory (VR3Lab). The collaboration began with the specialist thesis and continued with the doctorate of Michele Gattullo, for whom Prof. Uva was the tutor. The collaboration then continued through research grants: (i) 2017-2020, postdoctoral research grant for research entitled "Management and use of technical information in Augmented Reality from an Industry 4.0 perspective;" (ii) 2020-2022, postdoctoral research grant for research entitled "Development and experimental validation of a prototype educational platform based on an immersive virtual environment." At the end of the research grant period, Michele Gattullo was hired in the IIND-03/B (formerly ING-IND/15) sector as a fixed-term researcher. The collaboration has led to the publication of more than thirty works produced by Michele Gattullo.
- Collaboration with the research group of **Prof. Joseph L. Gabbard** of **Virginia Tech**, COGnitive Engineering for Novel Technologies (COGENT) Lab, Blacksburg (USA). Main activities: (i) definition of a taxonomy of visual elements to be used in AR applications for the visualization of different types of information, including instructions for industrial operators and data for sailing navigation; (ii)

development of a context-aware system for the use of information in AR. To date, the collaboration has led to the publication of papers IJ3, IJ18, IJ22, IJ24, IJ25, IC9, and IC12, involving members of both research groups. The collaboration also gave PhD student Enricoandrea Laviola, co-supervised by Michele Gattullo, the opportunity to spend time abroad with Prof. Gabbard's research group.

- Collaboration with **Prof. Francesco Ferrise**'s research group at the **Politecnico di Milano**, Knowledge Aided Engineering Manufacturing and Related Technologies (KAEMaRT), Milan (Italy). Main activities: (i) development of an AR-supported remote maintenance system; (ii) definition of a vocabulary of symbols for AR communication of recurring actions in assembly and maintenance operations. To date, the collaboration has led to the publication of papers IJ9, IJ11, NJ2, IC4, IC5, and IC10, involving members of both research groups.
- Collaboration with **Prof. André Stork**'s research group at the Competence Center for Interactive Engineering Technologies, **Fraunhofer-Institut für Graphische Datenverarbeitung**, Darmstadt (Germany). Main activities: (i) 3D modeling of a Fischertechnik robot using CATIA software to create a digital twin of the robot; (ii) creation of scripts for AR visualization and robot movement using sliders in the user interface. The collaboration took place during Michele Gattullo's period abroad while pursuing his doctorate.
- Collaboration with the research group of **Prof. Jan Schmitt** of the Faculty of Business and Engineering at the **University of Applied Sciences Würzburg-Schweinfurt (FHWS)**, Schweinfurt (Germany). Main activity: collection of data on AR visualization preferences for basic assembly information. The collaboration gave two thesis students, for whom Michele Gattullo was co-supervisor, the opportunity to carry out their thesis work with Prof. Schmitt's research group. To date, the collaboration has led to the publication of the IC13 paper, involving members of both research groups.
- ollaboration with the research groups of **Prof. Mariano Luis Alcaniz Raya**, **Prof. Manuel Contero**, and **Prof. Eugenio Ivorra** of the **Polytechnic University of Valencia (UPV)**, Valencia (Spain). The collaboration began following an Erasmus+ mobility program carried out by Michele Gattullo and gave his doctoral student Sara Romano the opportunity to spend time abroad with the Spanish professors' research group.
- Collaboration with the research group of **Prof. Carmine Pappalettere** of the **Polytechnic University of Bari**. The collaboration took place through a scholarship for graduates in specialized or master's mechanical engineering. Main activity: implementation and development of an assembly and maintenance demonstrator.

ORGANIZATION OR PARTICIPATION AS A SPEAKER AT SCIENTIFIC CONFERENCES IN ITALY OR ABROAD

The following table lists all the events (conferences, workshops, summer schools) of international importance in which Michele Gattullo has participated since 2013 as a member of the organizing committee, member of the scientific committee, keynote speaker, moderator (chairman), and presenting author. For each event, the name, date, and location, scientific contribution, and role played are listed.

Conferenza	Luogo e data	Contributo scientifico	Ruolo
34th IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR 2027)	Melbourne, Australia, 27 Feb – 03 Mar 2027		Scientific Committee
32nd ACM Symposium on Virtual Reality Software and Technology (VRST 2026)	Sendai, Japan, 16-18 Nov 2026		Scientific Committee
3rd International Conference on Extended Reality (ICXR 2026)	Guangzhou, China, 05-06 Nov 2026		Scientific Committee
23th EuroXR International Conference (EuroXR 2026)	Valencia, Spain, 02-06 Nov 2026	Laviola D., Evangelista A., Gattullo M., Manghisi V. M., Uva, A. E., *"Enhancing Cultural Heritage Experience through AI-Driven*	Scientific Committee Organizing Committee (Poster&Demo Program Chair,

		Augmented Reality: The Role of Spatial Positioning and Transparency"	Poster&Demo Awards Committee)
14th ACM International Symposium on Spatial User Interaction (SUI 2026)	Bari, Italy, 10-11 Oct 2026		Organizing Committee (General Chair)
25th IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2026)	Bari, Italy, 05-09 Oct 2026		Organizing Committee (Local Arrangements Chair) Scientific Committee
33th IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR 2026)	Daegu, South Korea, 21-25 Mar 2026		Scientific Committee
24th IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2025)	Daejeon, South Korea, 08-12 Oct 2025	Romano, S., Marangelli, L., Laviola, E., Uva, A.E., Gattullo, M., *"Can AI Inspire Biophilic Design in Immersive Virtual Reality Workspaces to Enhance Well-Being?"*	Organizer of a joint workshop: "The 1st International Workshop on Working Enhancement with Extended Reality" Scientific Committee Chairman Presenting Author
22nd EuroXR International Conference (EuroXR 2025)	Winterthur, Switzerland, 03-05 Sep 2025		Scientific Committee Organizing Committee (Poster Awards Committee)
32nd IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR 2025)	Saint Malo, France, 08-12 Mar 2025	Laviola, E., Gattullo, M., Romano, S., Uva, A.E., *"Which Side is the Top? A User Study to Compare Visual Assets for Component Orientation in Assembly with Augmented Reality"* Gattullo, M., Laviola, E., Marangelli, L., Romano, S., *"Presenting BIOXRE: Project on BIOphilic design of Extended Reality working Environments"*	Presenting Author
EuroXR Summer School "Advancing Education through the Power of Techology"	Lecco, Italy, 30 Jun - 05 Jul 2025	Gattullo M., "*The Biophilic Enrichment of XR Environments"*	Invited Lecturer
21st EuroXR International Conference (EuroXR 2024)	Athens, Greece, 27-29 Nov 2024		Scientific Committee
3rd IEEE International Conference on Metrology for eXtended Reality, Artificial Intelligence and Neural Engineering (MetroXRAINE 2024)	St Albans, London, UK, 21-23 Oct 2024		Organizing Committee (Organizer of the Special session #28, "Leveraging XR and AI in innovative industrial applications")
23rd IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2024)	Seattle, USA, 21-25 Oct 2024		Scientific Committee
ADM International Conference (ADM 2024)	Palermo, Italy, 11-13 Sep 2024		Scientific Committee
20th EuroXR International Conference (EuroXR 2023)	Rotterdam, Netherlands, 29 Nov – 01 Dec 2023		Organizing Committee (Awards Committee) Scientific Committee

5th International Conference on Industry 4.0 and Smart Manufacturing (ISM 2023)	Lisbon, Portugal, 22-24 Nov 2023		Organizing Committee (Organizer of the Track "Extended Reality for Industry 4.0")
22nd IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2023)	Sidney, Australia, 16-20 Oct 2023		Scientific Committee
ADM International Conference (ADM 2023)	Florence, Italy, 06-08 Sep 2023		Scientific Committee
21st IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2022)	Singapore, 17-21 Oct 2022	Gattullo M., Laviola E., Romano S., Evangelista A., Manghisi V. M., Fiorentino M., Uva, A. E., *"Biophilic Enriched Virtual Environments for Industrial Training: a User Study"*	Organizing Committee (Workshop&Tutorial Chair) Chairman Presenting Author
19th EuroXR International Conference (EuroXR 2022)	Stuttgart, Germany, 14-16 Sep 2022		Organizing Committee (Awards Committee) Scientific Committee
11th International Joint Conference on Mechanics, Design Engineering and Advanced Manufacturing (JCM 2022)	Ischia, Italy, 01-03 Jun 2022	Gattullo M., Laviola E., Uva, A. E., *"From Therbligs to Visual Assets: a Technique to Convey Work Instructions in Augmented Reality Technical Documentation"*	Scientific Committee Presenting Author
20th IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2021)	Online, 04-08 Oct 2021		Organizing Committee (Web Chair)
19th IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2020)	Online, 09-13 Nov 2020	Gattullo M., Evangelista A., Uva A. E., Fiorentino M., Gabbard, J. L., *"What, how, and why are visual assets used in industrial augmented reality? A systematic review and classification in maintenance, assembly, and training (from 1997 to 2019)"*	Invited Speaker
16th EuroVR International Conference (EuroVR 2019)	Tallinn, Estonia, 23-25 Oct 2019	Gattullo M., Evangelista A., Uva A. E., Fiorentino M., Boccaccio A., Manghisi V. M., *"Exploiting Augmented Reality to Enhance Piping and Instrumentation Diagrams for Information Retrieval Tasks in Industry 4.0 Maintenance"*	Presenting Author
ADM International Conference (ADM 2019)	Modena, Italy, 09-10 Sep 2019	Gattullo M., Scurati, G. W., Evangelista A., Ferrise F., Fiorentino M., Uva A. E., *"Informing the Use of Visual Assets in Industrial Augmented Reality"*	Presenting Author
Summer School "Smart city today and tomorrow"	Novosibirsk, Russia, 01-05 Jul 2019	Gattullo M., "*Use of VR and AR in the smart cities"*	Keynote Speaker
ADM Workshop 2017	Pisa, Italy, 14-15 Sep 2017	Gattullo M., Uva A. E., Fiorentino M., Boccaccio A., Manghisi V. M., Monno G., *"Evolution of technical documentation in the age of Industry 4.0"*	Presenting Author
27th International Conference on Flexible Automation and Intelligent Manufacturing (FAIM 2017)	Modena, Italy, 27-30 Jun 2017	Gattullo M., Uva A. E., Fiorentino M., Scurati, G. W., Ferrise F., *"From Paper Manual to AR Manual: Do We Still Need Text?"* Masoni R., Ferrise F., Bordegoni, M., Gattullo M., Uva A. E., Fiorentino M., Carrabba E., Di	Presenting Author

		Donato M., *"Supporting Remote Maintenance in Industry 4.0 through Augmented Reality"*	
ADM Workshop 2017	Milan, Italy, 14-15 Feb 2017	Gattullo M., Uva A. E., Fiorentino M., *"Exploring the use of Augmented Reality for Industry 4.0"*	Presenting Author
Workshop on the State of the art and Challenges Of Research Efforts @ POLIBA (Score@POLIBA)	Bari, 03-05 Dec 2014	Gattullo M., *"How to Make Reality the Industrial Augmented Reality: a Solution for Manual Working Stations"*	Presenting Author
Workshop "Urban Augmented Reality" within the 5th International UBI Summer School 2014	Oulu, Finland, 09-14 Jun 2014	Gattullo M., Dong J., Mameli, E., *"Usefunner: augment your city"*	Presenting Author
ADM Workshop 2014	Rome, Italy, 23-24 Jan 2014	Gattullo M., *"Augmented Reality in industrial environments"*	Presenting Author
Workshop "Designing Mobile Augmented Reality Interfaces" within the 4th International UBI Summer School 2013	Oulu, Finland, 10-15 Jun 2013	Sorrentino F., Gattullo M., Di Donato M., *"VisitAR: a mobile application for tourism using AR"*	Presenting Author

PARTICIPATION IN JOURNAL EDITORIAL COMMITTEES

2025-present Member of the Editorial Board – *Journal of Ambient Intelligence and Humanized Computing* (Q1 – Computer Science). Guest Editor of the special issue "XR for Knowledge Work and Workplace Enhancement: Human-Centered, Productive, and Ethical XR Workspaces."

2025-present Member of the Editorial Board – *Computer Animation and Virtual Worlds* (Q3 – Computer Graphics and Computer-Aided Design).

2023-present Member of the Reviewer Board – *Frontiers in Computer Science – Computer Graphics and Visualization* (Q1 – Computer Science).

PEER REVIEW ACTIVITIES

International journals:

From 2025 Journal of Ambient Intelligence and Humanized Computing

From 2024 Advanced Engineering Informatics
IEEE Computer Graphics and Applications
Journal of Industrial Information Integration

From 2023 Production & Manufacturing Research
Signal Processing: Image Communication
Frontiers in Computer Science
Virtual Reality

From 2022 MDPI Journal of Imaging
MDPI Education

From 2021 ACM Transactions on Applied Perception Journal
Computers in Biology and Medicine
ISMAR Journal papers

From 2020 Engineering Reports Journal
IEEE VR Journal papers
Journal of Mechanical Design

From 2019 MDPI Energies

	IEEE Transactions on Visualization and Computer Graphics Computers in Industry
From 2018	International Journal of Human-Computer Interaction AIMS Electronics and Electrical Engineering journal ASME Journal of Computing and Information Science in Engineering IEEE Access The International Journal of Advanced Manufacturing Technology IEEE Transactions on Industrial Informatics
From 2017	Computer Standards & Interfaces journal
From 2015	Advances in Manufacturing

International conferences:

2027	34th IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR 2027)
2026	33rd IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR 2026) 25th IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2026) 32nd ACM Symposium on Virtual Reality Software and Technology (VRST 2026) 3rd International Conference on Extended Reality (ICXR 2026) 23rd EuroXR International Conference (EuroXR 2026)
2025	32nd IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR 2025) 24th IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2025) 22nd EuroXR International Conference (EuroXR 2025)
2024	17th International Conference on Advanced Visual Interfaces (AVI 2024) ADM International Conference (ADM 2024) 3rd IEEE International Conference on Metrology for eXtended Reality, Artificial Intelligence and Neural Engineering (MetroXRAINE 2024) 23rd IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2024) 6th International Conference on Industry 4.0 and Smart Manufacturing (ISM 2024) 21st EuroXR International Conference (EuroXR 2024)
2023	ADM International Conference (ADM 2023) 22nd IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2023) 5th International Conference on Industry 4.0 and Smart Manufacturing (ISM 2023) 20th EuroXR International Conference (EuroXR 2023)
2022	11th International Joint Conference on Mechanics, Design Engineering and Advanced Manufacturing (JCM 2022) 21st IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2022) 4th International Conference on Industry 4.0 and Smart Manufacturing (ISM 2022) 19th EuroXR International Conference (EuroXR 2022)
2021	20th IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2021) 3rd International Conference on Industry 4.0 and Smart Manufacturing (ISM 2021)
2020	27th IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR 2020) 13th International Conference on Advanced Visual Interfaces (AVI 2020) 19th IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2020)
2019	26th IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR 2019) 18th IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2019) 25th ACM Symposium on Virtual Reality Software and Technology (VRST 2019)
2018	25th IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR 2018) 11th International Conference on Advanced Visual Interfaces (AVI 2018) Eurohaptics International Conference 2018

	10th International Joint Conference on Mechanics, Design Engineering and Advanced Manufacturing (JCM 2018) 5th International Conference on on Augmented Reality, Virtual Reality and Computer Graphics (SALENTO AVR 2018) 17th IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2018)
2017	27th International Conference on Flexible Automation and Intelligent Manufacturing (FAIM 2017)

In 2023, Michele Gattullo also reviewed a book proposal for Elsevier entitled: "Beyond the Horizon: Exploring the Challenges and Applications of the Metaverse."

AFFILIATIONS

2025-present 2022-2023	IEEE Member
2021-present	Ordinary member of ADM (National Association of Industrial Engineering Design and Methods)
2020-present	Member of the EuroXR association

AWARDS AND RECOGNITIONS

- Zanichelli Award, second prize - ADM International Conference (ADM 2023), Florence, 06-08 Settembre 2023, for the manuscript *"Virtual Mirror for Maintenance: An Augmented Reality Support Tool"* (IC27).
- Award for the year 2024, reserved for professors of the Department of Mathematical Mechanics and Management who have distinguished themselves for the excellence of their research, established by decree no. 104/2024 of March 13, 2024.

SCIENTIFIC PRODUCTION

§ Publications indexed [SCOPUS] and/or [WOS] are indicated in parentheses

[IJ] International Journals

IJ1 Debernardis, S.; Fiorentino, M.; Gattullo, M.; Monno, G.; Uva, A. E. Text Readability in Head-Worn Displays: Color and Style Optimization in Video versus Optical See-through Devices. IEEE Trans Vis Comput Graph 2014, 20 (1), 125–139. https://doi.org/10.1109/TVCG.2013.86 [SCOPUS] [WOS]

IJ2 Fiorentino, M.; Uva, A. E.; Gattullo, M.; Debernardis, S.; Monno, G. Augmented Reality on Large Screen for Interactive Maintenance Instructions. Comput Ind 2014, 65 (2), 270–278. https://doi.org/10.1016/j.compind.2013.11.004 [SCOPUS] [WOS]

IJ3 Gattullo, M.; Uva, A. E.; Fiorentino, M.; Gabbard, J. L. Legibility in Industrial AR: Text Style, Color Coding, and Illuminance. IEEE Comput Graph Appl 2015, 35 (2), 52–61. https://doi.org/10.1109/MCG.2015.36 [SCOPUS] [WOS]

IJ4 Gattullo, M.; Uva, A. E.; Fiorentino, M.; Monno, G. Effect of Text Outline and Contrast Polarity on AR Text Readability in Industrial Lighting. IEEE Trans Vis Comput Graph 2015, 21 (5), 638–651. https://doi.org/10.1109/TVCG.2014.2385056 [SCOPUS] [WOS]

IJ5 Di Donato, M.; Fiorentino, M.; Uva, A. E.; Gattullo, M.; Monno, G. Text Legibility for Projected Augmented Reality on Industrial Workbenches. Comput Ind 2015, 70, 70–78. https://doi.org/10.1016/j.compind.2015.02.008 [SCOPUS] [WOS]

IJ6 Manghisi, V.; Gattullo, M.; Fiorentino, M.; Uva, A. E.; Marino, F.; Bevilacqua, V.; Monno, G. Predicting Text Legibility over Textured Digital Backgrounds for a Monocular Optical See-through Display.

Presence: Teleoperators and Virtual Environments 2017, 26 (1), 1–15. https://doi.org/10.1162/PRES_a_00285 [SCOPUS] [WOS]

IJ7 Manghisi, V. M.; Fiorentino, M.; Gattullo, M.; Boccaccio, A.; Bevilacqua, V.; Cascella, G. L.; Dassisti, M.; Uva, A. E. Experiencing the Sights, Smells, Sounds, and Climate of Southern Italy in VR. IEEE Comput Graph Appl 2017, 37 (6), 19–25. https://doi.org/10.1109/MCG.2017.4031064 [SCOPUS] [WOS]

IJ8 Uva, A. E.; Gattullo, M.; Manghisi, V. M.; Spagnulo, D.; Cascella, G. L.; Fiorentino, M. Evaluating the Effectiveness of Spatial Augmented Reality in Smart Manufacturing: A Solution for Manual Working Stations. International Journal of Advanced Manufacturing Technology 2018, 94 (1–4), 509–521. https://doi.org/10.1007/s00170-017-0846-4 [SCOPUS] [WOS]

IJ9 Scurati, G. W.; Gattullo, M.; Fiorentino, M.; Ferrise, F.; Bordegoni, M.; Uva, A. E. Converting Maintenance Actions into Standard Symbols for Augmented Reality Applications in Industry 4.0. Comput Ind 2018, 98, 68–79. https://doi.org/10.1016/j.compind.2018.02.001 [SCOPUS] [WOS]

IJ10 Manghisi, V. M.; Uva, A. E.; Fiorentino, M.; Gattullo, M.; Boccaccio, A.; Monno, G. Enhancing User Engagement through the User Centric Design of a Mid-Air Gesture-Based Interface for the Navigation of Virtual-Tours in Cultural Heritage Expositions. J Cult Herit 2018, 32, 186–197. https://doi.org/10.1016/j.culher.2018.02.014 [SCOPUS] [WOS]

IJ11 Gattullo, M.; Scurati, G. W.; Fiorentino, M.; Uva, A. E.; Ferrise, F.; Bordegoni, M. Towards Augmented Reality Manuals for Industry 4.0: A Methodology. Robot Comput Integr Manuf 2019, 56, 276–286. https://doi.org/10.1016/j.rcim.2018.10.001 [SCOPUS] [WOS]

IJ12 Rodríguez-Montaño, Ó. L.; Cortés-Rodríguez, C. J.; Uva, A. E.; Fiorentino, M.; Gattullo, M.; Monno, G.; Boccaccio, A. Comparison of the Mechanobiological Performance of Bone Tissue Scaffolds Based on Different Unit Cell Geometries. J Mech Behav Biomed Mater 2018, 83, 28–45. https://doi.org/10.1016/j.jmbbm.2018.04.008 [SCOPUS] [WOS]

IJ13 Latorre, V.; Lorusso, M.; Schiraldi, C.; Sgaramella, A.; Moltalbo, D.; Ferrante, A.; Roselli, G.; Manca, R.; Castellana, C.; D'ippolito, A.; Gattullo M. LAI Effect on Management of Schizophrenia Spectrum Disorders in Community Mental Health Services. European Neuropsychopharmacology 2019, 29, S612–S613.

IJ14 Uva, A. E.; Fiorentino, M.; Manghisi, V. M.; Boccaccio, A.; Debernardis, S.; Gattullo, M.; Monno, G. A User-Centered Framework for Designing Midair Gesture Interfaces. IEEE Trans Hum Mach Syst 2019, 49 (5), 421–429. https://doi.org/10.1109/THMS.2019.2919719 [SCOPUS] [WOS]

IJ15 Rodríguez-Montaño, Ó. L.; Cortés-Rodríguez, C. J.; Naddeo, F.; Uva, A. E.; Fiorentino, M.; Naddeo, A.; Cappetti, N.; Gattullo, M.; Monno, G.; Boccaccio, A. Irregular Load Adapted Scaffold Optimization: A Computational Framework Based on Mechanobiological Criteria. ACS Biomater Sci Eng 2019, 5 (10), 5392–5411. https://doi.org/10.1021/acsbiomaterials.9b01023 [SCOPUS] [WOS]

IJ16 Latorre, V.; Papazacharias, A.; Lorusso, M.; Nappi, G.; Clemente, P.; Spinelli, A.; Carrieri, G.; D'Ambrosio, E.; Gattullo, M.; Uva, A. E.; Semisa, D. Improving the "Real Life" Management of Schizophrenia Spectrum Disorders by LAI Antipsychotics: A One-Year Mirror-Image Retrospective Study in Community Mental Health Services. PLoS One 2020, 15 (3). https://doi.org/10.1371/journal.pone.0230051 [SCOPUS] [WOS]

IJ17 Percoco, G.; Uva, A. E.; Fiorentino, M.; Gattullo, M.; Manghisi, V. M.; Boccaccio, A. Mechanobiological Approach to Design and Optimize Bone Tissue Scaffolds 3D Printed with Fused

Deposition Modeling: A Feasibility Study. Materials 2020, 13 (3). https://doi.org/10.3390/ma13030648 [SCOPUS] [WOS]

IJ18 Gattullo, M.; Evangelista, A.; Manghisi, V. M.; Uva, A. E.; Fiorentino, M.; Boccaccio, A.; Ruta, M.; Gabbard, J. L. Towards next Generation Technical Documentation in Augmented Reality Using a Context-Aware Information Manager. Applied Sciences (Switzerland) 2020, 10 (3). https://doi.org/10.3390/app10030780 [SCOPUS] [WOS]

IJ19 Rodríguez-Montaño, O. L.; Cortés-Rodríguez, C. J.; Uva, A. E.; Fiorentino, M.; Gattullo, M.; Manghisi, V. M.; Boccaccio, A. An Algorithm to Optimize the Micro-Geometrical Dimensions of Scaffolds with Spherical Pores. Materials 2020, 13 (18). https://doi.org/10.3390/ma13184062 [SCOPUS] [WOS]

IJ20 Manghisi, V. M.; Fiorentino, M.; Boccaccio, A.; Gattullo, M.; Cascella, G. L.; Toschi, N.; Pietroiusti, A.; Uva, A. E. A Body Tracking-Based Low-Cost Solution for Monitoring Workers' Hygiene Best Practices during Pandemics. Sensors (Switzerland) 2020, 20 (21), 1–17. https://doi.org/10.3390/s20216149 [SCOPUS] [WOS]

IJ21 Vaiani, L.; Migliorini, E.; Cavalcanti-Adam, E. A.; Uva, A. E.; Fiorentino, M.; Gattullo, M.; Manghisi, V. M.; Boccaccio, A. Coarse-Grained Elastic Network Modelling: A Fast and Stable Numerical Tool to Characterize Mesenchymal Stem Cells Subjected to AFM Nanoindentation Measurements. Materials Science and Engineering C 2021, 121. https://doi.org/10.1016/j.msec.2020.111860 [SCOPUS] [WOS]

IJ22 Fiorentino, M.; Laera, F.; Evangelista, A.; Boccaccio, A.; Manghisi, V. M.; Gattullo, M.; Uva, A. E.; Gabbard, J. L.; Foglia, M. M. Sailing Data Visualization in Augmented Reality: Systematic Review, Issues, and Perspectives. Mar Technol Soc J 2021, 55 (2), 64–80. https://doi.org/10.4031/MTSJ.55.2.2 [SCOPUS] [WOS]

IJ23 Migliorini, E.; Cavalcanti-Adam, E. A.; Uva, A. E.; Fiorentino, M.; Gattullo, M.; Manghisi, V. M.; Vaiani, L.; Boccaccio, A. Nanoindentation of Mesenchymal Stem Cells Using Atomic Force Microscopy: Effect of Adhesive Cell-Substrate Structures. Nanotechnology 2021, 32 (21). https://doi.org/10.1088/1361-6528/abe748 [SCOPUS] [WOS]

IJ24 Laera, F.; Fiorentino, M.; Evangelista, A.; Boccaccio, A.; Manghisi, V. M.; Gabbard, J.; Gattullo, M.; Uva, A. E.; Foglia, M. M. Augmented Reality for Maritime Navigation Data Visualisation: A Systematic Review, Issues and Perspectives. Journal of Navigation 2021, 74 (5), 1073–1090. https://doi.org/10.1017/S0373463321000412 [SCOPUS] [WOS]

IJ25 Gattullo, M.; Evangelista, A.; Uva, A. E.; Fiorentino, M.; Gabbard, J. L. What, How, and Why Are Visual Assets Used in Industrial Augmented Reality? A Systematic Review and Classification in Maintenance, Assembly, and Training (From 1997 to 2019). IEEE Trans Vis Comput Graph 2022, 28 (2), 1443–1456. https://doi.org/10.1109/TVCG.2020.3014614 [SCOPUS] [WOS]

IJ26 Laviola, E.; Gattullo, M.; Manghisi, V. M.; Fiorentino, M.; Uva, A. E. Minimal AR: Visual Asset Optimization for the Authoring of Augmented Reality Work Instructions in Manufacturing. International Journal of Advanced Manufacturing Technology 2022, 119 (3–4), 1769–1784. https://doi.org/10.1007/s00170-021-08449-6 [SCOPUS] [WOS]

IJ27 Gattullo, M.; Laviola, E.; Evangelista, A.; Fiorentino, M.; Uva, A. E. Towards the Evaluation of Augmented Reality in the Metaverse: Information Presentation Modes. Applied Sciences (Switzerland) 2022, 12 (24). https://doi.org/10.3390/app122412600 [SCOPUS] [WOS]

IJ28 Gattullo, M.; Laviola, E.; Boccaccio, A.; Evangelista, A.; Fiorentino, M.; Manghisi, V. M.; Uva, A. E. Design of a Mixed Reality Application for STEM Distance Education Laboratories. Computers 2022, 11 (4). https://doi.org/10.3390/computers11040050 [SCOPUS] [WOS]

IJ29 Laviola, E.; Gattullo, M.; Evangelista, A.; Fiorentino, M.; Uva, A. E. In-Situ or Side-by-Side? A User Study on Augmented Reality Maintenance Instructions in Blind Areas. Comput Ind 2023, 144. https://doi.org/10.1016/j.compind.2022.103795 [SCOPUS] [WOS]

IJ30 Laviola, E.; Uva, A. E.; Gattullo, M. The Minimal AR Authoring Approach: Validation in a Real Assembly Scenario. Comput Ind 2024, 154. https://doi.org/10.1016/j.compind.2023.104026 [SCOPUS] [WOS]

IJ31 Romano, S.; Laviola, E.; Gattullo, M.; Fiorentino, M.; Uva, A. E. More Arrows in the Quiver: Investigating the Use of Auxiliary Models to Localize In-View Components with Augmented Reality. IEEE Trans Vis Comput Graph 2023, 29 (11), 4483–4493. https://doi.org/10.1109/TVCG.2023.3320229 [SCOPUS] [WOS]

IJ32 Laviola, E.; Gattullo, M.; Romano, S.; Uva, A. E. Which Side is the Top? A User Study to Compare Visual Assets for Component Orientation in Assembly with Augmented Reality. IEEE Trans Vis Comput Graph 2025, 31 (5), 3470–3480. https://doi.org/10.1109/TVCG.2025.3549164 [SCOPUS] [WOS]

IJ33 Laviola, E.; Gattullo, M.; Uva, A. E. A comprehensive on-site authoring tool for creating augmented reality technical documentation (STAAR-TECH). International Journal of Human Computer Studies 2026, 208. https://doi.org/10.1016/j.ijhcs.2025.103722 [SCOPUS] [WOS]

[NJ] National Journals

NJ1 Fiorentino, M.; Buono, P.; Uva, A. E.; Manghisi, V. M.; Gattullo, M.; Boccaccio, A.; Monno, G. ARSAS: Invecchiamento Attivo Del Lavoratore Mediante La Spatial Augmented Reality. Italian Journal of Occupational and Environmental Hygiene 2017, 8 (4), 142.

NJ2 Di Donato, M.; Ferrise, F.; Bordegoni, M.; Gattullo, M.; Uva, A. E.; others. Augmented Reality Supporting Revamping Applications. IMPIANTISTICA ITALIANA 2017, 3, 32–37.

[C] Chapters

C1 Rodríguez-Montaño, L.; Cortés-Rodríguez, C. J.; Uva, A. E.; Fiorentino, M.; Evangelista, A.; Gattullo, M.; Manghisi, V. M.; Boccaccio, A. Geometry Optimization of Scaffolds for Bone Tissue Engineering; 2020. https://doi.org/10.1016/B978-0-12-819531-4.00012-2 [SCOPUS]

[IC] International Conferences

IC1 Gattullo, M.; Di Donato, M.; Sorrentino, F. VisitAR: A Mobile Application for Tourism Using AR. In SIGGRAPH Asia 2013 Symposium on Mobile Graphics and Interactive Applications, SA 2013; 2013. https://doi.org/10.1145/2543651.2543665 [SCOPUS]

IC2 Ćuković, S.; Gattullo, M.; Pankratz, F.; Devedžić, G.; Carrabba, E.; Baizid, K. Marker Based vs. Natural Feature Tracking Augmented Reality Visualization of the 3D Foot Phantom. In Proceedings of the International Conference on Electrical and Bio-medical Engineering, Clean Energy and Green Computing (EBECEGC2015); Dubai, 2015; pp 24–31.

IC3 Uva, A. E.; Fiorentino, M.; Gattullo, M.; Colaprico, M.; De Ruvo, M. F.; Marino, F.; Trotta, G. F.; Manghisi, V. M.; Boccaccio, A.; Bevilacqua, V.; Monno, G. Design of a Projective AR Workbench for Manual Working Stations. Lecture Notes in Computer Science (including subseries Lecture Notes in

Artificial Intelligence and Lecture Notes in Bioinformatics) 2016, 9768, 358–367. https://doi.org/10.1007/978-3-319-40621-3_25 [SCOPUS] [WOS]

IC4 Gattullo, M.; Uva, A. E.; Fiorentino, M.; Scurati, G. W.; Ferrise, F. From Paper Manual to AR Manual: Do We Still Need Text? In Procedia Manufacturing; 2017; Vol. 11, pp 1303–1310. https://doi.org/10.1016/j.promfg.2017.07.258 [SCOPUS] [WOS]

IC5 Masoni, R.; Ferrise, F.; Bordegoni, M.; Gattullo, M.; Uva, A. E.; Fiorentino, M.; Carrabba, E.; Di Donato, M. Supporting Remote Maintenance in Industry 4.0 through Augmented Reality. In Procedia Manufacturing; 2017; Vol. 11, pp 1296–1302. https://doi.org/10.1016/j.promfg.2017.07.257 [SCOPUS] [WOS]

IC6 Boccaccio, A.; Fiorentino, M.; Gattullo, M.; Manghisi, V. M.; Monno, G.; Uva, A. E. Geometry Modelling of Regular Scaffolds for Bone Tissue Engineering: A Computational Mechanobiological Approach. Lecture Notes in Mechanical Engineering 2019, 517–526. https://doi.org/10.1007/978-3-030-12346-8_50 [SCOPUS]

IC7 Boccaccio, A.; Cascella, G. L.; Fiorentino, M.; Gattullo, M.; Manghisi, V. M.; Monno, G.; Uva, A. E. Exploiting Augmented Reality to Display Technical Information on Industry 4.0 P&ID. Lecture Notes in Mechanical Engineering 2019, 282–291. https://doi.org/10.1007/978-3-030-12346-8_28 [SCOPUS]

IC8 Gattullo, M.; Evangelista, A.; Uva, A. E.; Fiorentino, M.; Boccaccio, A.; Manghisi, V. M. Exploiting Augmented Reality to Enhance Piping and Instrumentation Diagrams for Information Retrieval Tasks in Industry 4.0 Maintenance. Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 2019, 11883 LNCS, 170–180. https://doi.org/10.1007/978-3-030-31908-3_11 [SCOPUS] [WOS]

IC9 Gattullo, M.; Dalena, V.; Evangelista, A.; Uva, A. E.; Fiorentino, M.; Boccaccio, A.; Ruta, M.; Gabbard, J. L. A Context-Aware Technical Information Manager for Presentation in Augmented Reality. In 26th IEEE Conference on Virtual Reality and 3D User Interfaces, VR 2019 - Proceedings; 2019; pp 939–940. https://doi.org/10.1109/VR.2019.8798262 [SCOPUS] [WOS]

IC10 Gattullo, M.; Scurati, G. W.; Evangelista, A.; Ferrise, F.; Fiorentino, M.; Uva, A. E. Informing the Use of Visual Assets in Industrial Augmented Reality. Lecture Notes in Mechanical Engineering 2020, 106–117. https://doi.org/10.1007/978-3-030-31154-4_10 [SCOPUS] [WOS]

IC11 Manghisi, V. M.; Uva, A. E.; Fiorentino, M.; Gattullo, M.; Boccaccio, A.; Evangelista, A. Automatic Ergonomic Postural Risk Monitoring on the Factory Shopfloor -The Ergosentinel Tool. In Procedia Manufacturing; 2020; Vol. 42, pp 97–103. https://doi.org/10.1016/j.promfg.2020.02.091 [SCOPUS] [WOS]

IC12 Laera, F.; Foglia, M. M.; Evangelista, A.; Boccaccio, A.; Gattullo, M.; Manghisi, V. M.; Gabbard, J. L.; Uva, A. E.; Fiorentino, M. Towards Sailing Supported by Augmented Reality: Motivation, Methodology and Perspectives. In Adjunct Proceedings of the 2020 IEEE International Symposium on Mixed and Augmented Reality, ISMAR-Adjunct 2020; 2020; pp 269–274. https://doi.org/10.1109/ISMAR-Adjunct51615.2020.00076 [SCOPUS] [WOS]

IC13 Gattullo, M.; Dammacco, L.; Ruospo, F.; Evangelista, A.; Fiorentino, M.; Schmitt, J.; Uva, A. E. Design Preferences on Industrial Augmented Reality: A Survey with Potential Technical Writers. In Adjunct Proceedings of the 2020 IEEE International Symposium on Mixed and Augmented Reality, ISMAR-Adjunct 2020; 2020; pp 172–177. https://doi.org/10.1109/ISMAR-Adjunct51615.2020.00054 [SCOPUS] [WOS]

IC14 Gattullo, M.; Laviola, E.; Fiorentino, M.; Uva, A. E. Positive Computing in Virtual Reality Industrial Training. In Proceedings - 2021 IEEE International Symposium on Mixed and Augmented Reality Adjunct, ISMAR-Adjunct 2021; 2021; pp 364–366. https://doi.org/10.1109/ISMAR-Adjunct54149.2021.00083 [SCOPUS] [WOS]

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I declare, pursuant to and for the purposes of the provisions contained in Articles 46 and 47 of Presidential Decree No. 445 of December 28, 2000, and aware of the consequences of making false statements pursuant to Article 76 of the aforementioned Presidential Decree No. 445/2000, under my own responsibility that the information contained in this Curriculum Vitae is accurate and truthful. I authorize the processing of my personal data, including sensitive data, pursuant to and for the purposes of Legislative Decree No. 196/2003.

Bari, 23/10/2026