

Luca Turchet

Date and place of birth: 28/10/1982 in Verona (Italy)
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Lab website: www.cimil.disi.unitn.it
Co-founded company website: www.elk.audio
Founded IEEE committee: <https://ios.committees.comsoc.org>
Founded research network: www.internetofsounds.net



Current positions

JAN. 2022 – PRESENT **Associate Professor and Head** of the Creative, Intelligent and Multisensory Interactions Lab, Department of Information Engineering and Computer Science of University of Trento
MAR. 2023 – PRESENT **Chair** of IEEE Emerging Technology Initiative on the Internet of Sounds
OCT. 2014 – PRESENT **Co-founder and Advisor** at Elk Audio (former MIND Music Labs)

Research interests

New interfaces for musical expression, Musical Metaverse, generative music AI, music information retrieval, extended reality, human-computer interaction, Internet of Things, real-time audio embedded systems, haptic technology, affective computing, semantic web, sonic interaction design, multimodal perception, sonification, brain-computer interfaces, ethics

Education

AUG. 2013 – APR. 2015 **Master of Arts in Electronic Music**

- Institution: Royal College of Music in Stockholm
- Final mark: Pass (according to the institution's policy, there is not a final grade)

FEB. 2010 – JAN. 2013 **Ph.D. in Media Technology**

- Institution: Aalborg University Copenhagen, Dept. of Media Technology
- Thesis: "Audio-Haptic Feedback for Natural Interactive Walking: Interfaces, Simulations & Perceptual Phenomena"

DEC. 2004 – SEP. 2006 **Master of Science in Intelligent and Multimedia Systems**

- Institution: University of Verona, Dept. of Computer Science
- Thesis: "Granular Synthesis & ReacTable"
- Final mark: 110 e lode (Magna cum laude)

SEP. 2001 – DEC. 2004 **Bachelor of Science in Multimedia Information Technology**

- Institution: University of Verona, Dept. of Computer Science
- Thesis: "Multimodal Display of surface textures"
- Final mark: 110 e lode (Magna cum laude)

OCT. 2006 – MAR. 2009 **Master of Arts in Composition** (Specialisation in Electronic Music)

- Institution: Conservatory of Music of Verona
- Final mark: 110 e lode (Magna cum laude)

SEP. 1999 – JUNE 2007 **Master of Arts in Classical Guitar**

- Institution: Conservatory of Music of Verona
- Final mark: 10 e lode (Magna cum laude)

SEP. 1996 – JULY 2001 **Diploma of Secondary School focusing on Humanities**

- Institution: Liceo Classico Scipione Maffei of Verona

Previous academic positions

JAN. 2019 – JAN. 2022 **Assistant Professor (tenure track)** at University of Trento, Dept. of Information Engineering and Computer Science

NOV. 2018 – NOV. 2021 **Honorary Senior Research Associate** at University College London, Institute of Education

MAY 2017 – JAN. 2019 **Marie-Curie Postdoctoral Research Fellow** at Queen Mary University of London, Center for Digital Music

NOV. 2016 – FEB. 2017 **Postdoctoral researcher** at KTH Royal Institute of Technology, Dept. of Network and Systems Engineering

JUNE 2016 – AUG. 2016	Associate Research Scientist at Columbia University, Dept. of Mechanical Engineering
FEB. 2013 – JAN. 2016	Independent post-doc researcher at Aalborg University Copenhagen, Dept. of Media Technology, funded by the Danish Council for Independent Research
FEB. 2010 – JAN. 2013	PhD student at Aalborg University Copenhagen, Dept. of Media Technology
MAR. 2009 – JAN. 2010	Research assistant at Aalborg University Copenhagen, Dept. of Media Technology

Visiting research periods

JUNE 2018	McGill University, Centre for Interdisciplinary Research in Music Media and Technology
SEP. 2015 – MAY 2016	KTH Royal Institute of Technology, Dept. of Automatic Control
JUNE 2015 – JULY 2015	Queen Mary University of London, Center for Digital Music
APR. 2015 – MAY 2015	KTH Royal Institute of Technology, Dept. of Automatic Control
JAN. 2015 – MAR. 2015	University of Verona, Dept. of Neurological and Movement Sciences
SEP. 2014 – DEC. 2014	KTH Royal Institute of Technology, Dept. of Automatic Control
JUNE 2014 – AUG. 2014	University of Verona, Dept. of Neurological and Movement Sciences
SEP. 2013 – MAY 2014	KTH Royal Institute of Technology, Dept. of Media Technology and Interaction Design
JUNE 2013 – AUG. 2013	University of Verona, Dept. of Neurological and Movement Sciences
SEP. 2012 – DEC. 2012	University of Padova, Dept. of Information Engineering
APR. 2012 – JULY 2012	KTH Royal Institute of Technology, Dept. of Speech, Music and Hearing
JULY 2011 – AUG. 2011	University of Verona, Dept. of Neurological and Movement Sciences
MAY 2010 – JUNE 2010	University of Rennes, Institut National de Recherche en Informatique et en Automatique
SEP. 2008 – FEB. 2009	Cork Institute of Technology/Cork School of Music
APR. 2006 – AUG. 2006	Pompeu Fabra University (Barcelona), Music Technology Group

Funding acquisition

SCIENTIFIC GRANTS

FEB. 2025	University of Trento research grant for “5 x 1000 fundraising campaign”, PI , €20.000
JULY 2024	EIC Pathfinder Open Grant for project “Musical Metaverse made in Europe: an innovation lab for musicians and audiences of the future” (www.musmet.eu), PI , funded by the European Innovation Council, €556.000 for UniTn (Consortium total amount: €4.5 M), Acceptance rate: 3.5% .
JULY 2023	PRIN Grant (Projects of Relevant National Interest) of Italian Ministry of University and Research for project “Musical Metaverse”, PI , €97.000 for UniTn (Consortium total amount: €253.000). First-ranked among 287 applications.
MAY 2022	Grant of Italian Ministry of University and Research for a PhD position of the national doctoral consortium in “Artificial Intelligence”, PI , €40.000
MAY 2022	Grant of Italian Ministry of University and Research for a PhD position of the national doctoral consortium in “Sustainable Development and Climate Change”, PI , €40.000
OCT. 2020	Grant of University of Trento for “Strategic projects for COVID-19”, PI , €35.000
SEP. 2020	2-year grant of European Space Agency ARTES IAP 5G for L’ART Cultural Heritage, for the project “Next generation of augmented reality tourism: enhancing cultural heritage preservation”, PI for University of Trento , €100.000
DEC. 2019	Starting Grant Young Researchers of University of Trento for application to competitive European calls for projects, PI , €10.000
DEC. 2019	1-year Innovation grant from EIT Digital - European Institute of Technology, for project “Longjam: a smart box for remote music playing”, PI , €137.000 for UniTn (Consortium total amount: €528.000)
APR. 2019 – JUNE 2019	Grant of Fondazione C.M. Lericci/Italian institute of Culture in Stockholm for the research project “The Smart Flute”, PI , €2.500
JAN. 2019	1-year Leadership Fellowship of the Arts and Humanities Research Council of United Kingdom (declined for position at the University of Trento), PI , €180.000
JUNE 2017 – DEC. 2017	Grant of Fondazione C.M. Lericci/Italian institute of Culture in Stockholm for the research project “Augmentation of the Neapolitan mandolin”, PI , €3.000
FEB. 2017	2-year EU Marie Curie Individual Fellowship for the project “Towards the Internet of Musical Things - An ecosystem of interoperable devices connecting performers and audiences”, fellow (de-facto PI) , €186.000
JUNE 2014 – SEP. 2014	Grant of Fondazione C.M. Lericci/Italian institute of Culture in Stockholm for the research project “Augmentation of Traditional Italian Instruments”, PI , €3.700
FEB. 2013	3-year grant of the Danish Research Council for Independent Research for the project “Audio-haptic walking simulations for virtual reality, entertainment and rehabilitation applications”, PI , €475.000
JULY 2012	Grant of Otto Mønsted foundation for the research project “Footstep sounds localization”, €2.500

- MAY 2010 – JUNE 2010 EU Sonic Interaction Design SID-COST grant for the research project “Footstep sounds in desktop VR”, €2.500
- APR. 2006 – AUG. 2006 Erasmus grant for the research period of 5 months at Music Technology Group of Pompeu Fabra University on the project “Granular Synthesis and ReacTable”, €1.500

INNOVATION GRANTS

- JUNE 2020 “Finding new ways in the time of a crisis” of Swedish Innovation Agency VINNOVA for Elk, €70.000
- MAY. 2020 EIT Digital grant for financing one industrial PhD student at company GTEC, **PI**, €75.000
- APR. 2020 EIT Digital grant for co-financing one industrial PhD student at company Elk, **PI**, €40.000
- DEC. 2019 1-year Innovation grant from EIT Digital - European Institute of Technology, for Elk €280.000
- OCT. 2018 Innovation grant “Audience of the Future: Design Foundations Competition” of the Industrial Strategy Challenge Fund, UK Research and Innovation (**Co-I**), €65.000
- NOV. 2017 “Innovative startups – Phase II 2017” of Swedish Innovation Agency VINNOVA for Elk, €90.000
- APR. 2017 “RunnerUp 2017” grant of Swedish Innovation Agency VINNOVA for Elk, €50.000
- FEB. 2017 “Innovative startups – Phase I 2017” of Swedish Innovation Agency VINNOVA for Elk, €30.000
- DEC. 2014 “VFT-1” grant of KTH Innovation for Elk, €5.500
- DEC. 2014 “ALMI grant” of Swedish Innovation Agency ALMI for Elk, €2.000
- SEP. 2014 “VFT-0” grant of KTH Innovation for Elk

TEACHING GRANTS

- MAR. 2025 EIT Digital grant for project “Advanced Realities for Cultural Innovation in Europe”, **PI for UniTn**, funded by the European Health and Digital Executive Agency, €130.000 for UniTn (Consortium total amount: €4 M)
- MAY. 2025 “Teaching grant” of Euregio Mobility Fund for PhD course “Sound processing and Internet of Sounds”, €2.500

FUNDING FROM COMPANIES

- MAR. 2025 Smart Keyboard system; customer: Studio Logic (Italy); €5.000
- MAY 2024 VR Medical Training application; customer: Digital Mosaik – Metaverse Studio (Italy); €3.500

ARTISTIC GRANTS

- APR. 2017 “Movin’Up” Grant of Fondazione Giovani Artisti Italiani for the mobility project “Hypermandolin@NYCEMF”, €1.000
- SEP. 2008 – FEB. 2009 **Scholarship of Italian Ministry of Foreign Affairs and Government of Ireland** for the music residency period of 6 months at Cork Institute of Technology/School of Music, €17.500

OTHER GRANTS

- MAY. 2025 “TC Innovation Fund” of IEEE Communications Society, \$6.000
- MAY. 2024 “TC Innovation Fund” of IEEE Communications Society, \$6.000
- MAY 2023 “TC Innovation Fund” of IEEE Communications Society, \$5.000
- NOV. 2018 “Micro-grant” of Marie Curie Alumni Association, €1.000
- SEP. 2018 Grant for open access fee from Queen Mary University Library, £1.000
- JULY 2018 “Micro-grant” of Marie Curie Alumni Association, €1.000
- SEP. 2015 Wenner-Gren Foundation scholarship for 2 years subsidy at the Wenner-Gren Center Guest Researchers’ Apartments, €10.000
- FEB. 2004 With cultural association Novallys, grant of Provincia di Verona for the project “Danze e Musiche tradizionali Europee”, €600
- AUG. 2004 University of Verona grant for 1-month English course at Nottingham Trent University, €1.000

Awards**SCIENTIFIC AWARDS**

- 2022 – NOW **World’s top 2% scientist** since 2022 according to Stanford University
- MAR. 2026 **Honourable Mention Award** at CHI 2026 for paper “Looking inside the VR Music Scene: Mapping Platforms, Events and People”
- DEC. 2024 **IEEE ComSoc Distinguished Lecturer** (position for years 2025 and 2026)
- MAY 2024 **Fellow** of the European Alliance for Innovation (EAI)
- DEC. 2023 National Scientific Qualification for full professor position in Computer Science, awarded by the Italian Ministry for Education, University and Research
- MAR. 2023 **IEEE Senior Member**
- MAY 2019 National Scientific Qualification for associate professor position in Computer Science, awarded by the Italian Ministry for Education, University and Research

NOV. 2018	Best demo and best poster award at the IEEE Open Innovations Association FRUCT 2018
DEC. 2013	Best poster award at the Interactive Sonification Workshop 2013
OCT. 2010	Top 10% paper award at IEEE International Workshop on Multimedia Signal Processing 2010
MAR. 2010	Selected among 10 best papers at IEEE VR Conference 2010 and invited to submit an extended journal paper for IEEE Transactions on Visualization and Computer Graphics

INNOVATION AWARDS

AUG. 2023	Finalist at the MIDI Innovation Award 2023, for the smart guitar prototype developed at University of Trento
JAN. 2019	With Elk, Best New Technology Award at National Association of Music Merchants Trade Show 2019 (Los Angeles) awarded by Sonicstate.com
NOV. 2017 – NOV. 2019	With Elk, 6 times awarded of the Seal of Excellence from the European Commission (SME Instrument Phase 2)
JUNE 2017	Graduated as STING Alumnus for the 18-month incubator programme of Stockholm Innovation and Growth
APR. 2017	With Elk, Seal of Excellence from the European Commission (SME Instrument Phase 1 - Open Disruptive Scheme)
OCT. 2016	With Elk, winner of Music Tech Summit (San Francisco)
AUG. 2016	With Elk, finalist of Startup Competition at BIME Startup Summit (Bilbao)
JUNE 2016	With Elk, winner of Midemlab 2016 Music Startup Competition
JUNE 2016	With Elk, awarded of the first prize at Midemlab 2016 international pitching competition in the Hardware/Internet of Things category
JUNE 2016	With Elk, awarded of the second prize at Sonar+D Startup Garden Competition
JUNE 2016	With Elk, awarded of the third prize at Stockholm TechCrunch event
NOV. 2014	Course for entrepreneurs “STING’s start-up ICT program” awarded by Stockholm Innovation & Growth

ARTISTIC AWARDS

MAR. 2025	Best demonstration award for “Esteso: an AI Music Duet Based on Extended Double Bass Techniques”, at DIMMI 2024 (Dizionario Musicale Multidisciplinare Integrato)
SEP. 2024	Selected for the music programme of International Conference on New Interfaces for Musical Expression 2024
APR. 2018	Selected for the music programme of International Conference on New Interfaces for Musical Expression 2018
SEP. 2017	Selected for the music programme of Audio Mostly Conference 2017
MAR. 2017	Selected for the music programme of New York City Electronic Music Festival 2017
MAR. 2007 – JUNE 2007	First prizes as classical solo guitarist at Val Tidone International Music Competition (Piacenza), at International Competition of Musical Interpretation “Cogololetto 2007” (Genova), and at Concorso Musicale per Giovani Talenti (Rivarolo Canavese)
SEP. 2007	Prize for the best graduated in classical guitar at Conservatory of Music of Verona

Non-academic work experience

MARCH 2025 – PRESENT	Consultant for Studio Logic
MAY 2022 – MAY 2024	Consultant for Digital Mosaik – Metaverse Studio
JAN 2019 – PRESENT	Advisor at Elk Audio
OCT. 2014 – JAN 2019	Head of Sound and Interaction Design at Elk Audio. Main activities: project management, product management, inventions and patent writing, sound design, interaction design, software development
OCT. 2014	Co-funder of the company Elk Audio (former Mind Music Labs)
NOV. 2013 – SEP. 2014	Consultant for Benincaso Guitars AB. Main activities: sound design
OCT. 2007 – SEP. 2008	IT Consultant for Volkswagen Group Italia. Main activities: Business Intelligence, SAS and Java programming, datawarehouse and server administration
OCT. 2006 – SEP. 2007	Freelance programmer. Main activities: Web design, JSP and Servlet
MAR. 2004 – JUNE 2004,	Trainee at Computer Music Dept. of Conservatory of Music of Verona. Main activities: C++
JAN. 2006 – APR. 2006	and Processing programming

Organization of scientific meetings

OCT. 2026	Chair of the 3rd IEEE International Workshop on the Musical Metaverse (Cannes, France)
OCT. 2026	Chair of the 4th IEEE International Workshop on Networked Immersive Audio (Cannes, France)
OCT. 2025	Chair of the 2nd IEEE International Workshop on the Musical Metaverse (L'Aquila, Italy)
OCT. 2025	Chair of the 3rd IEEE International Workshop on Networked Immersive Audio (L'Aquila, Italy)
OCT. 2024	Chair of the 1st IEEE International Workshop on the Musical Metaverse (Erlangen, Germany)
OCT. 2024	Chair of the 2nd IEEE International Workshop on Networked Immersive Audio (Erlangen, Germany)
NOV. 2023	Co-chair of the Technical Program Committee of the 12th EAI International Conference: Art-sIT, Interactivity & Game Creation (Campinas, Brazil)
OCT. 2023	Chair of the 1st International Workshop on Networked Immersive Audio (Pisa, Italy)
OCT. 2022	Paper Chair of the 23rd Colloquio di Informatica Musicale (Ancona, Italy)
SEP. 2022	Chair of the 3rd International Workshop on the Internet of Sounds (St. Polten, Austria)
SEP. 2021	Chair of the 2nd International Workshop on the Internet of Sounds (Trento, Italy)
SEP. 2021	Chair of the ACM Audio Mostly Conference (Trento, Italy)
SEP. 2020	Chair of the 27th IEEE FRUCT Conference (Trento, Italy)
SEP. 2020	Chair of the 1st International Workshop on the Internet of Sounds (Trento, Italy)
MAY 2017	Staff member in the organization of the London Audio and Music Hackaton (Center for Digital Music of the Queen Mary University of London, UK)
JUNE 2010	Staff member in the organization of the Haptic-Audio Interaction Design Conference 2010 (Aalborg University Copenhagen, Denmark)

Commissions of trust

MAY 2025 – PRESENT	Steering Committee Member of the IEEE Metaverse Initiative (part of IEEE Future Directions)
MAR. 2023 – PRESENT	Chair of the IEEE Emerging Technology Initiative on the Internet of Sounds
2023 – PRESENT	Board Member of IEEE Tactile Internet Committee (technical committee of the IEEE Communications Society)
JAN. 2023 – 2024	Mentor at The Sound of AI Accelerator
2023 – 2025	Member of the Teaching Board for the Doctorate on Digital Humanities of Telematic University Pegaso
NOV. 2022 – PRESENT	Founder and President of the Internet of Sounds Research Network (www.internetofsounds.net)
AUG. 2022 – DEC. 2022	Appointed consultant for the German Council on Foreign Relations for a “Comparative study on Ethics and AI in China and EU”
OCT. 2022 – PRESENT	Board Member of the Italian section of the Audio Engineering Society (AES Italia)
OCT. 2022 – PRESENT	Board Member of the Italian Association of Music Informatics (AIMI)
NOV. 2020 – PRESENT	Member of the scientific committee of the “Dictionary for Multidisciplinary Music Integration” conference at Trento Conservatory of Music
JAN. 2020 – PRESENT	General Chair of the International Symposium on the Internet of Sounds
OCT. 2021 – PRESENT	Steering Committee Member of the Audio Mostly International Conference
JAN. 2019 – 2024	Board Member of the “IEEE WG_1599 - Working Group for XML Musical Application teaching and research”, IEEE standardization activity

EVALUATOR OF GRANT PROPOSALS

- EU Marie Skłodowska-Curie Individual Fellowships (2020 – present)
- Spanish Ministry of Universities (2023 – present)
- Natural Sciences & Engineering Research Council of Canada (2022 – present)
- Estonian Research Council (2022 – present)
- Research Council of Norway (2020 – present)
- Israel Science Foundation (2020 – present)

ASSISTANT PROFESSOR EXTERNAL EXAMINER

- University of Genova, Department of Informatics, Bioengineering, Robotics and Systems Engineering, 2022

DOCTORAL THESIS EXTERNAL EXAMINER

- Dr. Rômulo Vieira, Department of Computer Science, Fluminense Federal University, Brazil, 2025
- Dr. Matteo Sacchetto, Department of Electronics and Telecommunications, Politecnico di Torino, Italy, 2025
- Dr. Eleonora Di Fina, Department of Engineering and Information and Mathematics Sciences, University of L'Aquila, Italy, 2024
- Dr. Mohamed Nabih, Fondazione Bruno Kessler, Italy, 2023

MASTER'S THESIS EXTERNAL EXAMINER

- Master's theses in Electrical & Computer Engineering at McGill University (2023 – present)
- Master's theses at Faculty of Fine Arts and Music of The University of Melbourne (2022 – present)
- Master's theses in Music, Communication and Technology at the University of Oslo (2022 – present)

PC MEMBER

- International Conference on New Interfaces for Musical Expression 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026
- International Conference on Digital Audio Effects 2018, 2019, 2020, 2021, 2022, 2024, 2025
- ACM Audio Mostly International Conference 2017, 2018, 2019, 2020, 2021, 2022, 2025
- ACM Creativity & Cognition 2022, 2023, 2024, 2025, 2026
- Sound and Music Computing Conference 2018, 2019, 2020, 2021, 2022
- AES International Conference on Artificial Intelligence and Machine Learning for Audio
- Web Audio Conference 2022
- Workshop on Haptic & Audio Interaction Design 2022
- Audio Engineering Society Convention 2022, 2023, 2024
- Workshop on Ubiquitous Music 2018, 2019, 2020, 2021, 2022
- IEEE Conference of Open Innovations Association FRUCT 2018, 2019, 2020, 2021
- International Symposium on Computer Music Multidisciplinary Research 2017
- International Conference on Technologies for Music Notation and Representation 2023

PANEL CHAIR

- 1st IEEE International Workshop on the Musical Metaverse 2024
- 1st International Workshop on Networked Immersive Audio 2023

SESSION CHAIR

- International Audio Mostly Conference 2020
- International Symposium on Computer Music Multidisciplinary Research 2017

Service to the Department

INSTITUTIONAL RESPONSIBILITIES

- **Delegate** for Third Mission activities at DISI – University of Trento (Nov. 2024 – present)
- **President** of the PhD selection committee at University of Trento (May 2023 – Sep 2023)
- **Delegate** for the activities of internships at DISI – University of Trento (Feb. 2019 – Nov. 2024)
- **Member** of the Teaching Board for the **ICT Doctoral School** at DISI – University of Trento (Mar. 2019 – present)
- **Coordinator** for Trento node of the **EIT Digital Master School in “Human-Computer Interaction and Design” - specialization in Cognitive Interaction** - European Institute of Innovation and Technology (Jan. 2019 – present)
- **Delegate** for Master's Degree in Human-Computer Interaction – University of Trento (Feb. 2019 – present)
- **Coordinator** of the teaching and research “Multisensory Interaction Laboratories” at DISI – University of Trento (Jan. 2019 – present)

OTHER SERVICES TO THE DEPARTMENT

- **Organization of hackathons:** Hackathon on brain-computer interfaces, part of the worldwide hackathon <https://www.br41n.io/> (2024). My students won the first prize in the category “BCI Programming & Art projects”.

- **Organization of seminars:** Prof. Jeremy Cooperstock from McGill University (2019); Prof. Balandino di Donato from Edinburgh Napier University (2019); Dr. Valerio Velardo from the Sound of AI Accelerator (2023); Prof. Michel Buffa from Université Côte d’Azur (2024); Prof. Raul Masu from Conservatory of Trento (2026).
- **Organization staff of ICT days 2021**
- **Participation to ICT days** (every year since 2019)
- **Labs open doors** for high school students (every year since 2019)
- **Creation of conventions** with Conservatories of Music of: Pescara, Verona, Venezia, La Spezia, L’Aquila

Teaching experience

JAN 2019 – PRESENT

At University of Trento:

- **Lecturer** for the full module “Immersive Technologies” (graduate), 48 hours, 6 ECTS
- **Lecturer** for the full module “Human-Computer Interaction” (undergraduate and graduate), 48 hours, 6 ECTS
- **Lecturer** for the full module “Multisensory Interactive Systems” (graduate), 48 hours, 6 ECTS
- **Lecturer** for the full module “Programming in Python” (undergraduate), 60 hours, 6 ECTS
- **Lecturer** for the PhD course on “Audio processing and Internet of Sounds” (PhD students), 4 hours
- **Guest Lecturer and examiner** for module “ICT Innovation” (graduate), 24 hours
- **Supervision** of post-docs, PhDs, research assistants, and master and bachelor students
 - **Completed supervisions:** Domenico Stefani (PhD), Luca Vignati (PhD), Matteo Tomasetti (PhD), Nishal Silva (PhD), Ngadhnjim Sutaj (research assistant), Marco Lanini (research assistant), Laura Corso (research assistant), Michele Romani (research assistant)
 - **Ongoing postdocs supervision** of: Alberto Boem, Domenico Stefani, Nishal Silva
 - **Ongoing PhD supervision** of: Francesco Manenti, Michele Rossi, Gregorio Andrea Giudici, Filippo Daniotti
- **Member** of the committee assessing the qualifying exams of PhD students

MAY 2017 – DEC. 2018

At Queen Mary University of London:

- Guest lecturer for the course of “Sound Recording and Production Techniques”
- Co-supervision of 1 PhD student

DEC. 2014 – APR. 2015

At KTH Royal Institute of Technology:

- Guest lecturer for the course of “Internet of Things”
- Co-supervision (de facto main supervisor) of 2 Erasmus Placement students
- Co-supervision (de facto main supervisor) of 1 master student
- Supervisor of 1 bachelor and 1 master student for the Individual Course in Media Technology

FEB. 2010 – MAR. 2012

At Aalborg University Copenhagen (teaching assistant for a total of 729 hours):

- Frontal lessons for the courses “Audio Design”, “Audio-Visual Production”, “Procedural Programming”, “Sound and Music Computing” and “ \LaTeX typesetting program” (about 50 students per course)
- Laboratory supervision for the courses “Sound and Music Computing”, “C++ programming” and “Linear algebra”
- Supervision of 10 projects of groups of 3-6 undergraduate students
- Examiner for all courses mentioned above and for courses “Image Processing”, “Statistics”, and “Problem-based learning”

Invited talks at scientific meetings

10 OCT. 2025

Invited talk at symposium “Nel prisma del suono: multimodalità percettive e ibridi sensoriali” at University of Verona, Italy; talk title: “Musical Haptics for the listener”

3 OCT. 2025

IEEE Distinguished Lecturer at Texas A&M University, College Station, USA; lecture title: “From the Internet of Musical Things to the Musical Metaverse: enabling technologies and open challenges”

- 27 MAY 2025 **IEEE Distinguished Lecturer** at MIT Media Lab, Massachusetts Institute of Technology, Boston, USA; lecture title: “From the Internet of Musical Things to the Musical Metaverse: enabling technologies and open challenges”
- 16 APR. 2025 **IEEE Distinguished Lecturer** at CCRMA: Center for Computer Research in Music and Acoustics, Stanford University, Stanford, USA; lecture title: “From the Internet of Musical Things to the Musical Metaverse: enabling technologies and open challenges”
- 18 MAR. 2025 **IEEE Distinguished Lecturer** at School of Music, Carnegie Mellon University, Pittsburgh, USA; lecture title: “From the Internet of Musical Things to the Musical Metaverse: enabling technologies and open challenges”
- 28 SEP. 2024 **Keynote speaker** at 1st VR/AR in Music Education Symposium, Osnabrück, Germany; keynote title: “Opportunities and Challenges for the Musical Metaverse”
- 26 JUNE 2024 **Keynote speaker** at 29th IEEE Symposium on Computers and Communications - Workshop “Next-Generation Multimedia Services at the Edge”, Paris, France; keynote title: “The Emerging Field of the Internet of Musical Things: Enabling Technologies and Open Challenges”
- 28 MAY 2024 **Panelist** at 13th Journée d’Études of the Extended Reality Research and Creative Center (XR2C2) - Université Côte d’Azur, Sophia-Antipolis, France
- 28 MAY 2024 **Keynote speaker** at 13th Journée d’Études of the Extended Reality Research and Creative Center (XR2C2) - Université Côte d’Azur, Sophia-Antipolis, France; keynote title: “Opportunities and Challenges for the Musical Metaverse”
- 24 MARCH 2024 **Keynote speaker** at 11th International Conference on New Music Concepts, Treviso, Italy; “The Emerging Field of the Internet of Musical Things: Enabling Technologies and Open Challenges”
- 15 JUNE 2021 **Tutorial** on “The Emerging Field of the Internet of Musical Things: Enabling Technologies and Open Challenges”. 7th IEEE World Forum on Internet of Things, New Orleans, Louisiana, USA
- 21 MAY 2021 **Talk** on “The Internet of Musical Things” at the “Computer Networks Meet Music Instruments” seminars organized by University of Vienna, Austria
- 25 JAN. 2019 **Panelist** at the International Workshop on Multilayer Music Representation and Processing, Milan, Italy
- 14 DEC. 2018 **Seminar** on “The Internet of Musical Things” at the Mixed Reality Lab of University of Nottingham, United Kingdom
- 14 NOV. 2018 **Keynote speaker** at IEEE FRUCT/IEEE International Workshop on Semantic Audio and the Internet of Things, Advanced Research Center on Electronic System of University of Bologna, Bologna, Italy; keynote title: “The Internet of Musical Things”
- 12 JUNE 2018 **Seminar** on “Multimodal locomotion interfaces” at the Dept. of Mechanical Engineering, McGill University (Montreal, Canada)
- 11 JUNE 2018 **Seminar** on “Smart Musical Instruments” at the Centre for Interdisciplinary Research in Music Media and Technology, McGill University (Montreal, Canada)
- 14 JUNE 2017 **Seminar** on “Smart Instruments and the Internet of Musical Things” at Center for Digital Music, Queen Mary University of London
- 16 MAY 2017 **Lecture** on “Smart Instruments” at Dept. of Network and Systems Engineering, KTH Royal Institute of Technology
- 1 JUNE 2016 **Seminar** on “Multimodal locomotion interfaces” at Dept. of Mechanical Engineering of Columbia University (New York, USA)
- 22 JAN. 2013 **Seminar** on “Multimodal locomotion interfaces” at Dept. of Engineering of University of Modena and Reggio (Italy)

Editorial service

- 2024 – PRESENT **Associate Editor** of IEEE Transactions on Human-Machine Systems
- 2021 – 2025 **Associate Editor** of the Journal of the Audio Engineering Society
- 2020 – 2025 **Associate Editor** of IEEE Access
- 2025 **Leading guest editor** of the special issue on the “Ethical Innovation with/in Music Technology” topic at the IEEE Transactions on Technology and Society. Editors: Luca Turchet, Nick Bryan-Kynns, James Brusseau, Pamela Burnard.
- 2024 **Leading guest editor** of the special issue on the “Haptics for the Arts” topic at the IEEE Transactions on Haptics. Editors: Luca Turchet, Jeremy Cooperstock, Mounia, Yongjae Yoo
- 2024 **Leading guest editor** of the special issue on the “Signal Processing for the Internet of Sounds” topic at the EURASIP Journal on Audio, Speech, and Music Processing. Editors: Luca Turchet, Nils Peters, Toon van Waterschoot, Tuomas Virtanen.
- 2024 **Leading guest editor** of the special issue on the “Internet of Sounds” topic at the IEEE Communications Magazine. Editors: Luca Turchet, Maximo Cobos, Woon Seng Gan, Hossein Shokri Ghadikolaei
- 2024 **Editor** of the Proceedings of the 2024 IEEE 5th International Symposium on the Internet of Sounds published in the IEEEExplore Library

2023	Editor of the Proceedings of the 2023 International Symposium on the Internet of Sounds published in the IEEEExplore Library
2023	Guest editor of the special issue on the topic “Ubimus contributions to digital creative practices” at the Digital Creativity Journal. Editors: Damian Keller, Victor Lazzarini, Luca Turchet, Anthony Brooks
2022	Guest editor of the special issue on the topic “New Materials and Technologies for Haptics that Enhance VR and AR” of the Frontiers in Virtual Reality. Editors: Jin Ryong Kim; Luca Turchet, Tae-Heon Yang, Hye Kim
2022	Leading guest editor of the special issue on the topic “Sonic Experiences: Interaction, Connectivity, and Multi-Sensory Technologies” at the Journal of Personal and Ubiquitous Computing. Editors: Luca Turchet, Alan Chamberlain, Maria Kallionpää
2022	Editor of the Proceedings of the 2022 Audio Mostly Conference published in the ACM Digital Library
2021	Leading guest editor of the special issue on the “Internet of Sounds” topic at the Journal of the Audio Engineering Society (resulted in 2 volumes). Editors: Luca Turchet, George Fazekas, Cristina Rottondi, Carlo Fischione
2020	Editor of the book “Ubiquitous Music Ecologies”, Routledge Press, 2020. Editors: Victor Lazzarini, Damian Keller, Nuno Otero, Luca Turchet

Reviewing activities

GRANT PROPOSALS

- Marie Skłodowska-Curie Individual Fellowships of the European Commission (37 proposals)
- Research Council of Norway (26 proposals)
- Natural Sciences & Engineering Research Council of Canada (1 proposal)
- Spanish Ministry of Universities (1 proposal)
- Estonian Research Council (1 proposal)
- Israel Science Foundation (1 proposal)

JOURNALS

- IEEE Transactions on Audio, Speech and Language Processing (1 paper)
- IEEE Transactions on Affective Computing (2 papers)
- IEEE Transactions on Haptics (1 paper)
- IEEE Transactions on Visualization and Computer Graphics (1 paper)
- IEEE Transactions on Technology and Society (1 paper)
- IEEE Transactions on Industrial Informatics (1 paper)
- IEEE Internet of Things Journal (1 paper)
- IEEE Multimedia (1 paper)
- IEEE Open Journal of the Computer Society (1 paper)
- IEEE Pervasive Computing (1 paper)
- IEEE Access (4 papers)
- ACM Transactions on Human-Robot Interaction (1 paper)
- International Journal of Human-Computer Studies (3 papers)
- International Journal of Human-Computer Interaction (1 paper)
- Scientific Reports (1 paper)
- Journal of the Audio Engineering Society (4 papers)
- EURASIP Journal on Audio, Speech, and Music Processing, 2025 (1 paper)
- Journal of New Music Research (1 paper)
- Journal of the Royal Musical Association (1 paper)
- Personal and Ubiquitous Computing (2 papers)
- Computers in Human Behavior Reports (1 paper)
- Computer Music Journal (1 paper)
- Organized Sounds (1 paper)
- Leonardo Music Journal (1 paper)
- Applied Acoustics (1 paper)
- Frontiers in Psychology (1 paper)
- Acta Psychologica (1 paper)
- HardwareX (1 paper)

CONFERENCES

- International Conference on New Interfaces for Musical Expression 2018 - **mostly meta-reviewer** - (8 papers), 2019 (5 papers), 2020 (7 papers), 2021 (4 papers), 2022 (3 papers), 2023 (2 papers), 2024 (2 papers), 2025 (2 papers), 2026 (2 papers)

- Audio Engineering Society Convention 2022 (1 paper), 2023 (1 paper), 2024 (1 paper)
- IEEE International Symposium on the Internet of Sounds 2020 (3 papers), 2021 (3 papers), 2022 (3 papers), 2023 (3 papers), 2024 (3 papers)
- IEEE Virtual Reality Conference 2016 (1 paper), 2018 (1 paper), 2024 (1 paper)
- IEEE International Symposium on Mixed and Augmented Reality 2022 (1 paper)
- IEEE World Haptics Conference 2019 (1 paper)
- IEEE GLOBECOM 2024 (1 paper)
- IEEE Symposium on Computers and Communications 2024 (2 papers)
- IEEE International Conference on Semantic Computing 2018 (1 paper)
- ACM CHI Conference on Human Factors in Computing Systems 2019 (2 papers), 2021 (1 paper), 2023 (1 paper), 2024 (1 paper), 2025 (1 paper)
- ACM International Conference on Multimodal Interaction 2021 (1 paper), 2022 (1 paper), 2023 (1 paper)
- ACM Creativity & Cognition 2019 (1 paper), 2022 (1 paper), 2023 (1 paper), 2026 (1 paper)
- ACM International Conference on Interactive Media Experiences 2023 (1 paper)
- ACM Symposium on Spatial User Interaction 2023 (1 paper)
- Audio Mostly Conference 2017 (3 papers and 2 music submissions), 2018 (5 papers), 2019 (2 papers), 2020 (2 papers), 2021 (5 papers), 2022 (2 papers), 2025 (3 papers)
- Digital Audio Effects Conference 2018 (2 papers), 2020 (1 paper), 2021 (1 paper), 2022 (1 paper), 2024 (2 papers), 2025 (1 paper)
- Sound and Music Computing Conference 2012 (3 papers), 2013 (2 papers), 2018 (2 papers), 2019 (2 papers), 2020 (2 papers), 2021 (2 papers), 2022 (3 papers)
- AES International Conference on Artificial Intelligence and Machine Learning for Audio 2025 (2 papers)
- Conference of Open Innovations Association FRUCT 2018 (3 papers), 2019 (1 paper), 2020 (2 papers)
- Workshop on Ubiquitous Music 2018 (2 papers), 2019 (1 paper), 2020 (1 paper), 2020 (2 papers)
- Workshop on Haptic & Audio Interaction Design 2022 (1 paper)
- Web Audio Conference 2022 (1 paper)
- Eurohaptics 2018 (2 papers), 2026 (2 papers)
- International Symposium on Computer Music Multidisciplinary Research 2017 (2 papers)
- Colloquio di Informatica Musicale 2014 (1 paper), 2022 (7 papers)
- International Conference on Technologies for Music Notation and Representation 2023 (1 paper)
- European Control Conference 2023 (1 paper)
- Dictionary for Multidisciplinary Music Integration 2024 (2 papers)

Industrial outputs

2025	Together with Studio Logic, Prototype: smart keyboard
2020	Together with Elk, Product: Elk Live networked music performance system
2018	Together with Elk, Product: Elk Audio OS embedded operating system
2016	Together with Elk, Product and Registered Design Trademark: the Sensus Smart Guitar
2016	Together with Elk, 2 international patents
2016-2019	Together with Elk, Showcases at NAMM (Los Angeles), Websummit (Dublin), Slush Music (Helsinki), MTV Digital Days (Barcelona)

Third mission

TV, RADIO, YOUTUBE

6 MAR. 2025	Radio interview about "Music and AI" and "Musical Metaverse" at Radio Capodistria (Koper, Slovenia)
7 JULY 2022	Online interview on "Musical Haptics" at Haptics Club YouTube channel
9 JUNE 2022	Online interview on "The Internet of Musical Things" at Italian Music Tech Meetup YouTube channel
12 JUNE 2020	Online interview on "The Internet of Musical Things" at IoT Radar
20 JULY 2016	Radio Interview about Sensus Smart Guitar by Elk at GearGuysRadio (New Jersey, USA)

PRESS, ONLINE PRESS

14 AUG. 2025	Article in press "From Motion to Emotion: Vibrations synchronized with music help cochlear implant users have a more immersive listening experience" (American Scientist)
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- 11 AUG. 2025 **Article in press** “Testato da AOUI il giubbotto che permette ai non udenti di «sentire» la musica” (Verona Sera)
- 10 AUG. 2025 **Article in press** “Il giubbotto che fa sentire la musica ai sordi: i primi test mondiali a Verona” (Corriere del Veneto)
- 09 AUG. 2025 **Press release** of University of Verona “Otorinolaringoiatria, il giubbotto che permette ai sordi di “sentire” la musica” (Verona, Italy)
- 10 JULY 2025 **Article in press** “Un gilet speciale e i non udenti possono ascoltare la musica: «Un’esperienza sinestetica»” (L’Arena)
- 16 JUNE 2025 **Article in online press** “Il tocco della musica: pubblicato da Scientific Reports lo studio di UniTrento sulle persone sorde” (Agenzia Internazionale Stampa Estero)
- 15 JUNE 2025 **Article in online press** “Stimoli tattili migliorano l’ascolto per chi ha deficit uditivi” (altoadige.it)
- 14 JUNE 2025 **Article in online press** “Stimoli tattili migliorano l’ascolto per chi ha deficit uditivi” (ANSA.it)
- 13 JUNE 2025 **Press release** of University of Trento “Il tocco della musica” (Trento, Italy)
- 13 JUNE 2025 **Article in press** “La musica? Grazie a un gilet vibrotattile e a un algoritmo è possibile «sentirla» anche con il corpo” (Corriere della Sera, national Italian newspaper)
- 11 MAR. 2025 **Interview** about the “Musical Metaverse” at SUPSI Magazine (Lugano, Switzerland)
- 4 MAR. 2025 **Interview** about the Musical Metaverse at UniTn Magazine (Trento, Italy)

INVITED TALKS

- 10 FEB. 2026 **Seminar** on the initial results of the MUSMET project at the Doctoral School of the Conservatory of Music of Pescara (Pescara, Italy)
- 15 DEC. 2025 **Seminar** on Internet of Musical Things at the high school Liceo Scientifico Galilei (Trento, Italy)
- 30 NOV. 2025 **Invited talk** at the festival “ATEM Biennial - Alternative Thoughts on the Emerging Metaverse”, Dusseldorf, Germany; talk title: “The MUSMET project”
- 04 NOV. 2025 **Invited talk** at STOA workshop “Empowered by Music in the Age of Innovation” at European Parliament, Bruxelles, Belgium; talk title: “The MUSMET project”
- 16 MAY 2025 **Panelist** on “Metaverso ed Atelier Viturali” at Distori Heritage (Ancona, Italy)
- 23 NOV. 2024 **Panelist** at Milano Music Week on the “Musical Metaverse” topic
- 12 NOV. 2023 **Invited talk** on “Music, AI and interaction: the case of Smart Musical Instruments and the Internet of Musical Things” at SoundMIT International Synth Expo, Torino, Italy
- 23 JUNE 2023 **Invited talk** on “Music, AI and interaction: the case of Smart Musical Instruments and the Internet of Musical Things” at The Sound of AI Accelerator (online)
- 28 MAR. 2023 **Seminar** on Internet of Musical Things at the high school Liceo Scientifico Galilei (Trento, Italy)
- 27 OCT. 2020 **Panelist** on “Network as a place” at “Physically Distant #3: the network, the pandemic, and telematic performance”, at Ecology, Site And Place – Piteã Performing Arts Biennial 2020.
- 2 MAY 2018 **Talk** “Towards the Internet of Musical Things” at Re:publica media convention (Berlin, Germany)

PUBLIC DEMOS

- 26 SEP. 2025 **Public demo** of metaverse technologies at the European Researchers Night event held at MUSE museum in Trento, Italy
- 11 NOV. 2023 **Public demo** of “a smart musical instrument-based real time pattern detection system” at SoundMIT International Synth Expo, Torino, Italy
- 27 SEP. 2019 **Public demo** of “Smart Musical Instruments” at European Researchers’ Night at Trento Science Museum (Trento, Italy)
- 21 SEP. 2019 **Public demo** and presentation of “Smart Musical Instruments” at Trento Smart City Week (Trento, Italy)
- 28 SEP. 2018 **Public demo** at European Researchers’ Night at Natural History Museum (London, UK)
- 3 DEC. 2015 **Public demo** of the Sensus Smart Guitar at the EIT Digital Demo Day - European Institute of Innovation and Technology (Stockholm, Sweden)

Involvement in national and international research projects as key researcher

- MAY 2017 – JAN. 2019 “Audio Commons”, project funded by the European Union’s Horizon 2020 research and innovation programme
- SEP. 2016 – SEP. 2018 “Tactile cyber-physical networks”, SRA ICT TNG Swedish Research Council
- OCT. 2015 – OCT. 2016 “Joint Project”, University of Verona, University Hospital of Verona, and Cochlear Ltd
- MAR. 2009 – OCT. 2012 “Natural Interactive Walking”, European Union’s Seventh Framework Programme under FET-Open grant agreement 222107

Demos at international scientific events

29–31 OCT. 2025	“Demos of CIMIL technologies” at the 6th IEEE International Symposium on the Internet of Sounds 2025, University of L’Aquila, Italy
29–30 Nov. 2024	“Demos of CIMIL technologies” at DIMMI 2024, Trento, Italy
1–2 OCT. 2024	“Demos of CIMIL technologies” at the 5th IEEE International Symposium on the Internet of Sounds 2024, Fraunhofer Institute, Erlangen, Germany
19 SEP. 2024	“Demo of a smart musical instrument-based real time pattern detection system” at Audio Mostly Conference, Milan, Italy
9 NOV. 2023	“Demo of a smart musical instrument-based real time pattern detection system” at the Conference of the International Society for Music Information Retrieval 2023 (Milano, Italy)
8 SEP. 2020	Demo of a “Voice-based interface for soundscape composition: composing soundscapes by vocally querying online sounds repositories” at the IEEE Open Innovations Association FRUCT 2020 (Trento, Italy)
16 Nov. 2018	Demo of a “semantically-enriched Internet of Musical Things architecture” at the IEEE Open Innovations Association FRUCT 2018 (Bologna, Italy)
4 JUNE 2018	Demo of “Smart Mandolin–Musical Haptic Wearables interactions” at the International Conference on New Interfaces for Musical Expression (Blacksburg, USA)
8 MARCH 2018	Demo of “Embodied Interactions with E-Textiles and the Internet of Sounds for Performing Arts” at the International Conference on Tangible, Embedded, and Embodied Interaction (Stockholm, Sweden)

Artistic skills and competences

MUSICIAN	Classical and acoustic guitar, mandolin, percussions, hurdy-gurdy and bagpipe
COMPOSER	Classical contemporary music, folk music, computer music and live electronics
DANCER	Traditional European dances
BACKGROUND ACTOR	Played various extra roles in the lyric operas Carmen, Aida, Turandot, Madama Butterfly, Nabucco, and Così fan tutte, for four lyric seasons (2002–2005) both at the amphitheater Arena and at the theatre Filarmonico of Verona. Directed by various worldwide famous directors including Franco Zeffirelli.
WRITER	Author of the book “Folk Soul”, ISBN 978-1-291-60240-1 (available in English, Italian and French)
OTHER	President and artistic director of the cultural association Novallys, from September 2005 to September 2008

Artistic production and performances (selected)

COMPOSITIONS

2019	“Skeppis” – fantasy on traditional Swedish themes, for solo Smart Mandolin
2018	“Dialogues with Folk-RNN”, for solo Smart Mandolin
2017	“Omaggio a Stoccolma”, for solo Hyper-Mandolin
2015	“The Integrated Consciousness” – for Hyper-Hurdy-Gurdy, chamber orchestra and live electronics
2014	“Incantesimo” – for Hyper-Hurdy-Gurdy and live electronics
2009	“The love which moves the sun and the other stars” – for flute, soprano, video and live electronics
2008	“2008 TIBET” – for video and live electronics

PERFORMANCES

10 Nov. 2025	Multisensory Mixed Reality concert, University of Trento (Italy). Video: https://youtu.be/axEHkdnxFB8
11 MAY 2019	Smart Mandolin soloist performance at TED X Trento Salonen, University of Trento (Italy). Video: https://www.youtube.com/watch?v=kbJ89_wOmAY
6 JUNE 2018	Smart Mandolin soloist performance at International Conference on New Interfaces for Musical Expression 2018 (Blacksburg, Virginia, USA). Video: https://www.youtube.com/watch?v=VmJdLqejb-E
20 Nov. 2017	Smart Mandolin soloist performance at Being Human Festival 2017 (London, United Kingdom). Video: www.youtube.com/watch?v=1XOVajLpfYY
20 SEP. 2017	Hyper Mandolin soloist performance at International Audio Mostly Conference 2017 (London, United Kingdom). Video: www.youtube.com/watch?v=rRJBTQziBEA
29 APR. 2017	Hyper Mandolin soloist performance at Kulturnatt Stockholm 2017 (Stockholm, Sweden). Video: www.youtube.com/watch?v=ecCooDhatj4

9 DEC. 2015	Live electronics performance at “LJUDBIO II - Electronic Music Festival”, Slottsbiografen (Uppsala, Sweden)
22 JULY 2015	Hyper Hurdy-Gurdy soloist performance at Performance Lab of the Center For Digital Music della Queen Mary University of London (London, United Kingdom)
5 APR. 2015	Performance for Hyper Hurdy Gurdy, chamber orchestra and live electronics, at “LjudOljud 2015” contemporary music festival, Auditorama concert venue (Stockholm, Sweden)
11 APR. 2014	Hyper Hurdy-Gurdy soloist performance at “LjudOljud 2014” contemporary music festival, Auditorama concert venue (Stockholm, Sweden)
16 MAY 2009	Performance for flute, soprano and live electronics at Cork Institute of Technology/School of Music a Cork (Cork, Ireland)
18 FEB 2009	Performance for flute, soprano and live electronics at Cork Institute of Technology/School of Music a Cork (Cork, Ireland). Video: www.youtube.com/watch?v=AXrZnODhzX4

RECORDINGS

2012	Guest musician in the album Melodeonía of Giuliano Gabriele & Ensemble. www.giulianogabriele.it
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Memberships

2021 – PRESENT	AES member: Audio Engineering Society
2010 – PRESENT	IEEE Senior member (since 2023), IEEE Member (2010–2023): Institute of Electrical and Electronics Engineers
2023 – 2025	Member of IEEE Tactile Internet Committee (IEEE ComSoc)
2017 – PRESENT	ACM member: Association for Computer Machinery
2011 – PRESENT	AIMI member: Associazione Informatica Musicale Italiana

Publications

EDITORIAL WORKS

- [E1] V. Lazzarini, D. Keller, N. Otero, and **L. Turchet**. “Ubiquitous Music Ecologies”, Routledge, 2020.

JOURNAL PAPERS

- [J1] F. Daniotti, L. Vignati and **L. Turchet**. *On the importance of Loss Functions in Deep Learning-based Music Packet Loss Concealment*. EURASIP Journal on Audio, Speech, and Music Processing, 2026 (In press).
- [J2] N. Silva and **L. Turchet**. *Real-Time Audio Pattern Detection for Smart Musical Instruments*. Journal of the Audio Engineering Society, 2025 (In press).
- [J3] M. Rossi, G. Iacca and **L. Turchet**. *Advancing Guitar Emotion Recognition through Audio Data Augmentation to Enhance Smart Musical Instruments*. EURASIP Journal on Audio, Speech, and Music Processing, 2025 (In press).
- [J4] **L. Turchet**, J. Tomelleri, A. Molinari and P. Bouquet. *The Musician’s Context Ontology: modeling the context for smart musical applications*. Journal of Web Semantics, 2025 (In press). Elsevier.
- [J5] A. Boem, M. Tomasetti, A. Gabriele, A. di Scipio, A. Micalizzi and **L. Turchet**. *Imagining the Musical Metaverse: A Study on the Needs and Creative Practices of Composers and Musicians*. Digital Creativity, 2025 (In press).
- [J6] A. Boem, M. Tomasetti and **L. Turchet**. *Between Immersion and Usability: A Comparative Study of 2D and Mixed Reality Interfaces for Remote Music Making*. International Journal of Human-Computer Studies, 2025 (In press).
- [J7] L. Vignati and **L. Turchet**. *On the lack of a perceptually-motivated evaluation metric for Packet Loss Concealment in Networked Music Performances*. Journal of the Audio Engineering Society, 2025 (In press).
- [J8] **L. Turchet**, C. Marotta and A. Boem. *Multisensory Music Listening in Affective Virtual Environments*. IEEE Transactions on Affective Computing, 2025 (In press).
- [J9] **L. Turchet**, R. Rosaia, A. Diodati, and M. Carner. *Exposure to vibrotactile music improves audiometric performances in individuals with cochlear implants*. Scientific Reports, 2025 (In press).
- [J10] D. Stefani and **L. Turchet**. *Real-Time Playing Technique Recognition Embedded in a Smart Acoustic Guitar*. EURASIP Journal on Audio, Speech, and Music Processing, 2025 (In press).
- [J11] D. Stefani, M. Binelli, A. Farina and **L. Turchet**. *Improved Real-Time Six-degrees-of-freedom Dynamic Auralization Through Non-uniformly Partitioned Convolution*. Journal of the Audio Engineering Society, 2025 (In press).
- [J12] **L. Turchet**, F. Gentilini, S. Malandra, A. Veccia, A. Antonelli, C. Scoffone. *Medical Training in Virtual Reality: a Gamification Approach*. Virtual Reality, 2025 (In press).
- [J13] M. Tomasetti, B. Van Kerrebroeck, M. M. Wanderley, D. Stefani and **L. Turchet**. *SonoSpacia: a Virtual Reality Interface for the Creation of 3D Spatial Audio Trajectories*. Journal of the Audio Engineering Society, 2025 (In press).
- [J14] G.A. Giudici, F. Caspe, L. Gabrielli, S. Squartini and **L. Turchet**. *Distilling DDSP: Exploring Real-Time Audio Generation on Embedded Systems*. Journal of the Audio Engineering Society, 2025 (In press).
- [J15] M. Carner, L. Bianconi, L. Sacchetto, V. Arietti, R. Nocini, M. S. Salvetta, G. Maulu, A. Diodati and **L. Turchet**. *The “symbiotic” regulation approach in bimodal hearing adults*. Indian Journal of Otolaryngology and Head & Neck Surgery, 77, 2239-2246, 2025.
- [J16] A. Boem, M. Tomasetti and **L. Turchet**. *Issues and Challenges in Audio Technologies for the Musical Metaverse*. Journal of the Audio Engineering Society, 2025 (In press).

18. [J17] O. Hödl and **L. Turchet**. *The TMAP Framework: describing the design space of Technology-Mediated Audience Participation in live music*, IEEE Access, 2025 (In press).
19. [J18] S. Ppali, E. Ppali, S. Scorer, A. Boem, B. Branch, **L. Turchet**, C. Siang Ang, and A. Covaci. *The Virtual Concert-goer: Audience Perspectives on Remote Music Performances*. Proceedings of the ACM on Human-Computer Interaction, 2025 (In press).
20. [J19] **L. Turchet**, C. Sassi, D. Vecchia and G.P. Picco. *Real-time Musical Haptics with Ultra-wideband: A Study on Latency, Reliability, and Perception*. IEEE Transactions on Haptics, 2025 (In press).
21. [J20] L. Gabrielli, E. Principi and **L. Turchet**. *Sustainability and the Internet of Sounds: analysis of some case studies*. IEEE Transactions on Technology and Society, 6(2), 165-180, 2025.
22. [J21] J. Brusseau and **L. Turchet**. *An Ethics Framework for the Internet of Musical Things*. IEEE Transactions on Technology and Society, 6(2), 155-164, 2025.
23. [J22] **L. Turchet**, M. Cobos, W.S. Gan, H.S. Ghadikolaei. *Guest Editorial: Internet of Sounds*. IEEE Communications Magazine, 62(12), 16-17, 2024.
24. [J23] **L. Turchet** and S. Krustulovic. *DSP as a Service: Foundations and Directions*. IEEE Open Journal of the Communications Society (2024, In press).
25. [J24] **L. Turchet**. *Entangled Internet of Musical Things and People: A more-than-human design framework for networked musical ecosystems*. IEEE Transactions on Technology and Society, 2024 (In press).
26. [J25] M. Tomasetti and **L. Turchet**. *Handheld controller-based locomotion in Virtual Reality as an approach to interactive music composition: insights from composers' preferences*. Digital Creativity, 2024 (In press).
27. [J26] **L. Turchet** D. Stefani and J. Pauwels. *Musician-AI partnership mediated by emotionally-aware smart musical instruments*. International Journal of Human-Computer Studies, 2024 (In press).
28. [J27] **L. Turchet**, B. O'Sullivan, R. Ortner and C. Guger. *Emotion Recognition of Playing Musicians from EEG, ECG, and Acoustic Signals*. IEEE Transactions on Human-Machine Systems, 2024 (In press).
29. [J28] **L. Turchet** and P. Casari. *On the Impact of 5G Slicing on an Internet of Musical Things System*. IEEE Internet of Things Journal, 2024 (In press).
30. [J29] **L. Turchet**, C. Rinaldi, C. Centofanti, L. Vignati, and C. Rottondi. *5G-enabled Internet of Musical Things Architectures for Remote Immersive Musical Practices*. IEEE Open Journal of the Communications Society, 2024 (In press).
31. [J30] R. Masu, N. Merendino, A. Rodà and **L. Turchet**. *Sustainable Internet of Musical Things: Strategies to Account for Environmental and Social Sustainability in Network-Based Interactive Music Systems*. IEEE Access, 2024 (In press).
32. [J31] A. Boem and **L. Turchet**. *Selection as Tapping: an evaluation of 3D input techniques for timing tasks in musical Virtual Reality*. International Journal of Human-Computer Studies, 185, 103231, 1–23, 2024.
33. [J32] L. Vignati, G. Nardini, M. Centenaro, P. Casari, S. Lagén, B. Bojovic, S. Zambon and **L. Turchet**. *Is Music in the Air? Evaluating 4G and 5G Support for the Internet of Musical Things*. IEEE Access, 2024 (In press).
34. [J33] **L. Turchet**, S. Luiten, T. Treub, M. Van Der Burgt, C. Siani, A. Boem. *Hearing loss prevention at loud music events via real-time visuo-haptic feedback*. Journal on Multimodal User Interfaces, 18, 43–53, 2024.
35. [J34] D. Keller, V. Lazzarini, **L. Turchet** and A. L. Brooks. *Ubimus contributions to digital creative practices (Editorial)*. Digital Creativity, 35:1, 1–12. 2024.
36. [J35] **L. Turchet** and P. Casari. *Latency and Reliability Analysis of a 5G-Enabled Internet of Musical Things system*. IEEE Internet of Things Journal, 11(1), 1228–1240, 2024.
37. [J36] M. Tomasetti and **L. Turchet**. *Playing with others using headphones: musicians prefer binaural audio with head tracking over stereo*. IEEE Transactions on Human-Machine Systems, 53(3), 501–511, 2023.
38. [J37] **L. Turchet**, M. Lagrange, C. Rottondi, G. Fazekas, N. Peters, J. Østergaard, F. Font, T. Bäckström, and C. Fischione. *The Internet of Sounds: Convergent Trends, Insights and Future Directions*. IEEE Internet of Things Journal, 10(13), 11264–11292, 2023.
39. [J38] **L. Turchet**, C. Zanotto and J. Pauwels. *“Give Me Happy Pop Songs in C Major and with a Fast Tempo”: a Vocal Assistant for Content-Based Queries to Online Music Repositories*. International Journal of Human-Computer Studies, 173, 103007, 2023, Elsevier.
40. [J39] **L. Turchet**. *Musical Metaverse: vision, opportunities and challenges*. Personal and Ubiquitous Computing Journal, 17, 1811–1827, 2023.
41. [J40] **L. Turchet** and M. De Cet. *A web-based distributed system for integrating mobile music in choral performance*. Personal and Ubiquitous Computing Journal, 27, 1829–1842, 2023.
42. [J41] **L. Turchet** and F. Antoniazzi. *Semantic Web of Musical Things: achieving interoperability in the Internet of Musical Things*. Journal of Web Semantics, 75, 100758, 2023. Elsevier.
43. [J42] **L. Turchet**, M. Carraro and M. Tomasetti. *FreesoundVR: soundscape composition in Virtual Reality using online sound repositories*. Virtual Reality, 2022 (In press).
44. [J43] **L. Turchet** and C. Rottondi. *On the relation between the fields of Networked Music Performances, Ubiquitous Music, and Internet of Musical Things*. Personal and Ubiquitous Computing Journal, 2022 (In press).
45. [J44] **L. Turchet**. *Musical haptics for the listener: reflections of a design practitioner*. Multimodality & Society, 2(4), 379–385, 2022.
46. [J45] J. Lohman and **L. Turchet**. *Evaluating Cybersickness of Walking on an Omnidirectional Treadmill in Virtual Reality*. IEEE Transactions on Human-Machine Systems, 52(4), 613-623, 2022.
47. [J46] **L. Turchet** and C. N. Ngo. *Blockchain-based Internet of Musical Things*. Blockchain: Research and Applications, 3(3), 100083, 2022. Elsevier.
48. [J47] **L. Turchet** and J. Pauwels. *Music emotion recognition: intention of composers-performers versus perception of musicians, non-musicians, and listening machines*. IEEE Transactions on Audio, Speech and Language Processing, 30, 305–316, 2022.
49. [J48] L. Vignati, S. Zambon, and **L. Turchet**. *A Comparison of Real-time Linux-Based Architectures for Embedded Musical Applications*. Journal of the Audio Engineering Society, 70 (1/2), 83–93, 2022.
50. [J49] **L. Turchet**, P. Bouquet, A. Molinari, G. Fazekas. *The Smart Musical Instruments Ontology*. Journal of Web Semantics, 73, 100687, 2022.

51. [J50] N. Sutaj, M. Walchshofer, L. Schreiner, **L. Turchet**, H. Pretl, and C. Guger. *Evaluating a novel P300-Based Real-Time Image Ranking BCI*. *Frontiers in Computer Science*, 3, 1–11, 2021.
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