Luca Turchet

Date and place of birth: 28/10/1982 in Verona (Italy)
Nationality: Italian
ORCID: https://orcid.org/0000-0003-0711-8098
E-mail: luca.turchet@unitn.it
Personal website: www.lucaturchet.it
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, extended reality, human-computer interaction, Internet of Things, real-time audio embedded systems, haptic technology, sonic interaction design, multimodal perception, sonification, brain-computer interfaces, affective computing, semantic web

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

Grants

Scientific Grants

July 2023	PRIN Grant (Projects of Relevant National Interest) of Italian Ministry of University and Research for project "Musical Metaverse", **PI**, €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 (Consortium total amount: €528.000)
Apr. 2019 – June 2019	Grant of Fondazione C.M. Lerici/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
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
June 2017 – Dec. 2017	Grant of Fondazione C.M. Lerici/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. Lerici/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

Entrepreneurial 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

Artistic Grants

Apr. 2017	"Movin'Up" Grant of Fondazione Giovani Artisti Italiani for the mobility project "Hyper-mandolin@NYCEMF", €1.000
Sep. 2008 – Feb. 2009	**Scholarship of Italian Ministry of Foreign Affairs** for the music residency period of 6 months at Cork Institute of Technology/Cork School of Music, €17.500

Other Grants

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

Dec 2023	National Scientific Qualification for full professor position in Computer Science, awarded by the Italian Ministry for Education, University and Research
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 and entrepreneurial 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

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 "Cogololeto 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

May 2022 – present	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, Jan. 2006 – Apr. 2006	Trainee at Computer Music Dept. of Conservatory of Music of Verona. Main activities: C++ and Processing programming

Organization of scientific meetings

Oct. 2024	**Chair** of the 1st International Workshop on the Musical Metaverse (Erlangen, Germany)
Oct. 2024	**Chair** of the 2nd International Workshop on Networked Immersive Audio (Erlangen, Germany)
Nov. 2023	**Co-chair** of the Technical Program Committee of the 12th EAI International Conference: ArtsIT, 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)

Commission of trust

Mar. 2023 – present	**Chair** of the IEEE Emerging Technology Initiative on the Internet of Sounds
Jan. 2023 – present	**Mentor** at The Sound of AI Accelerator
2023 – present	**Board Member** of IEEE Tactile Internet Committee (technical committee of the IEEE Communications Society)
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 DIMMI 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 – present	**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 Sklodowska-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)

Doctoral thesis examiner

- Dr. , Department of Engineering and Information and Mathematics Sciences, University of L'Aquila, 2024
- Dr. Mohamed Nabih, Fondazione Bruno Kessler, 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
- ACM Audio Mostly International Conference 2017, 2018, 2019, 2020, 2021, 2022
- International Conference on Digital Audio Effects 2018, 2019, 2020, 2021, 2022, 2024
- Sound and Music Computing Conference 2018, 2019, 2020, 2021, 2022
- Creativity & Cognition 2022, 2023, 2024
- 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

Panelist

- Online meeting "Physically Distant #3: the network, the pandemic, and telematic performance", October 2020
- International Workshop on Multilayer Music Representation and Processing 2019

Session Chair

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

Service to the Department

INSTITUTIONAL RESPONSIBILITIES	• **President** of the PhD selection committee at University of Trento (May 2023 – Sep 2023) • **Member** of the Teaching Board for the **Doctorate on Digital Humanities** of Telematic University Pegaso (May 2023 – present) • **Member** of the evaluation committee for Assistant Professor positions – University of Genova, Department of Informatics, Bioengineering, Robotics and Systems Engineering (Nov. 2022) • **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"** - European Institute of Innovation and Technology (Jan. 2019 – present) • **Delegate** for the activities of internships and relationship with companies at DISI – University of Trento (Feb. 2019 – present) • **Coordinator** of the teaching and research "Multisensory Interaction Laboratories" at DISI – University of Trento (Jan. 2019 – present)
SERVICE TO THE DEPARTMENT	• **Organization of hackathons:** Hackhathon on brain-computer interfaces, part of the worldwide hackathon https://www.br41n.io/ (2024). • **Organization of seminars:** Prof. Jeremy Cooperstock from McGill University (2019); Prof. Balandino di Donato from Edinburgh Napier University (2019); Valerio Velardo from the Sound of AI Accelerator (2023) • **Participation to ICT days** (every year since 2019) • **Labs open doors** for high school students (every year since 2019)

Teaching experience

JAN 2019 – PRESENT	At University of Trento:
	• **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
	• **Guest Lecturer and examiner** for module "ICT Innovation" (graduate), 20 hours
	• **Supervision** of post-docs, PhDs, master and bachelor students, and research assistants
	  • **Completed staff supervisions**: Domenico Stefani (PhD), Luca Vignati (research assistant), Ngadhnjim Sutaj (research assistant), Marco Lanini (research assistant)
	  • **Ongoing postdocs supervision** of: Alberto Boem, Domenico Stefani
	  • **Ongoing PhD supervisor** of: Luca Vignati, Nishal Silva, Matteo Tomasetti, Michele Rossi, Gregorio Andrea Giudice, Laura Corso, Michele Romani, Davide Lionetti
	  • 13 Completed master students supervisions
	  • 28 Completed bachelor students supervisions
	• **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

28 September 2024	**Keynote speaker** at 1st VR/AR in Music Education Symposium, Osnabrück, Germany
26th June 2024	**Keynote speaker** at 29th IEEE Symposium on Computers and Communications - Workshop "Next-Generation Multimedia Services at the Edge", Paris, France
24th March 2024	**Keynote speaker** at 11th International Conference on New Music Concepts, Treviso, Italy
12 November 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)
7th July 2022	**Invited talk** on "Musical Haptics" at Haptics Club (online)
9th June 2022	**Invited talk** on "The Internet of Musical Things" at Italian Music Tech Meetup (online)
15th 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
21st May 2021	**Invited talk** on "The Internet of Musical Things" at the "Computer Networks Meet Music Instruments" seminars organized by University of Vienna
12th June 2020	**Invited online interview** on "The Internet of Musical Things" at IoT Radar
14th Dec. 2018	**Invited seminar** on "The Internet of Musical Things" at the Mixed Reality Lab of University of Nottingham (United Kingdom)
14th 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)
12th June 2018	**Invited seminar** on "Multimodal locomotion interfaces" at the Dept. of Mechanical Engineering, McGill University (Montreal, Canada)
11th June 2018	**Invited seminar** on "Smart Musical Instruments" at the Centre for Interdisciplinary Research in Music Media and Technology, McGill University (Montreal, Canada)
2nd May 2018	**Invited talk** "Towards the Internet of Musical Things" at Re:publica media convention (Berlin, Germany)
14th June 2017	**Invited seminar** on "Smart Instruments and the Internet of Musical Things" at Center for Digital Music, Queen Mary University of London
16th May 2017	**Invited lecture** on "Smart Instruments" at Dept. of Network and Systems Engineering, KTH Royal Institute of Technology
20th July 2016	**Invited radio Interview** about Sensus Smart Guitar by Elk at GearGuysRadio (New Jersey, USA)
1st June 2016	**Invited seminar** on "Multimodal locomotion interfaces" at Dept. of Mechanical Engineering of Columbia University (New York, USA)
22nd Jan. 2013	**Invited seminar** on "Multimodal locomotion interfaces" at Dept. of Engineering of University of Modena and Reggio (Italy)

Editorial service

2021 – present	**Associate Editor** of the Journal of the Audio Engineering Society
2020 – present	**Associate Editor** of IEEE Access
2023	**Leading guest editor** of the special issue on the "Internet of Sounds" topic at the IEEE Communications Magazine
2023	**Editor** of the Proceedings of the 2023 International Symposium on the Internet of Sounds published in the IEEEXplore Library

2023	**Guest editor** of the special issue on the topic "Ubimus contributions to digital creative practices" at the Digital Creativity Journal (forthcoming)
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 Journal
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
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
2020	**Editor of the book** "Ubiquitous Music Ecologies", Routledge Press, 2020 (V. Lazzarini, D. Keller, N. Otero, and L. Turchet Eds.)

Reviewing activities

GRANT PROPOSALS

- Marie Sklodowska-Curie Individual Fellowships of the European Commission (24 proposals)
- Spanish Ministry of Universities (1 proposal)
- Natural Sciences & Engineering Research Council of Canada (1 proposal)
- Estonian Research Council (1 proposal)
- Research Council of Norway (26 proposals)
- Israel Science Foundation (1 proposal)

JOURNALS

- IEEE/ACM Transactions on Audio, Speech and Language Processing (1 paper)
- IEEE Transactions on Haptics (1 paper)
- IEEE Transactions on Visualization and Computer Graphics (1 paper)
- IEEE Access (4 papers)
- IEEE Transactions on Industrial Informatics (1 paper)
- IEEE Transactions on Human-Robot Interaction (1 paper)
- International Journal of Human-Computer Studies (1 paper)
- International Journal of Human-Computer Interaction (1 paper)
- Scientific Reports (1 paper)
- Personal and Ubiquitous Computing (2 papers)
- Journal of the Audio Engineering Society (4 papers)
- Journal of New Music Research (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)

CONFERENCES

- International Conference on New Interfaces for Musical Expression 2018 (8 papers), 2019 (5 papers), 2020 (7 papers), 2021 (4 papers), 2022 (3 papers), 2023 (2 papers), 2024 (2 papers)
- 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)
- 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)
- IEEE International Symposium on the Internet of Sounds 2020 (3 papers), 2021 (3 papers), 2022 (3 papers), 2023 (3 papers)
- IEEE World Haptics Conference 2019 (1 paper)
- IEEE International Symposium on Mixed and Augmented Reality 2022 (1 paper)
- IEEE Virtual Reality Conference 2016 (1 paper)
- IEEE Conference of Open Innovations Association FRUCT 2018 (3 papers), 2019 (1 paper), 2020 (2 papers)
- IEEE International Conference on Semantic Computing 2018 (1 paper)
- Digital Audio Effects Conference 2018 (2 papers), 2020 (1 paper), 2021 (1 paper), 2022 (1 paper)
- ACM CHI Conference on Human Factors in Computing Systems 2019 (2 papers), 2021 (1 paper), 2023 (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), 2024
- ACM International Conference on Interactive Media Experiences 2023 (1 paper)
- ACM Symposium on Spatial User Interaction 2023 (1 paper)
- 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)
- Audio Engineering Society Convention 2022 (1 paper), 2023 (1 paper), 2024 (1 paper)
- Web Audio Conference 2022 (1 paper)
- Eurohaptics 2018 (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)

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 events

11TH NOV. 2023	"Demo of a smart musical instrument-based real time pattern detection system" at SoundMIT International Synth Expo, Torino, Italy
9TH 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)
8TH 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)
16TH NOV. 2018	Demo of a "semantically-enriched Internet of Musical Things architecture" at the IEEE Open Innovations Association FRUCT 2018 (Bologna, Italy)
4TH JUNE 2018	Demo of "Smart Mandolin–Musical Haptic Wearables interactions" at the International Conference on New Interfaces for Musical Expression (Blacksburg, USA)
8TH 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)
3RD DEC. 2015	Demo of the Sensus Smart Guitar at the EIT Digital Demo Day - European Institute of Innovation and Technology (Stockholm, Sweden)

Realizations (selected)

HARDWARE
- Emotionally-aware smart piano and smart guitar
- Smart guitar recognizing in real-time pre-defined monophonic and polyphonic patterns (from MIDI and audio signals)
- Sensus Smart Guitar (with Elk). Video: https://youtu.be/fqzEQnsSIoY
- Sensor technology for Hyper-Hurdy-Gurdy, Hyper-Zampogna, Hyper-Mandolin, Smart Cajón, Smart Mandolin
- 4 locomotion interfaces: Audio-Tactile Shoes, Smart Shoes, Augmented Floor, Mocap-Based System for foot-floor interactions
- Smart mandolin
- 2 wearables: armband-based wearable, e-textiles-based jacket

SOFTWARE
- Pipeline for running machine learning algorithms on low-latency audio processing operating system Elk Audio OS
- Audio-Haptic Footstep Synthesis Engine (for Max/MSP and Pure Data)
- Various app for mobile phones related to the Smart Shoes and all the smart musical instruments
- Various mockups of apps for mobile phones related to the Sensus Smart Guitar (with Elk)
- Max/MSP and Pure Data effect libraries for Hyper-Hurdy-Gurdy, Hyper-Zampogna, Hyper-Mandolin, Smart Cajòn, Smart Mandolin
- 4 Max for Live devices for the communication between the Sensus Smart Guitar and Ableton Live

Computer skills and competences

OPERATING SYSTEMS	Mac, Linux, Windows, Elk Audio OS
PROGRAMMING EXPERIENCES	Python, C, C++, Java, Max/MSP and Pure Data (and their native code for externals), JUCE framework, Unity 3D, MATLAB, Processing, CSound, R statistical software, SAS, HTML, PHP, CSS, XML, Json, SPARQL, Visual Basic script
HARDWARE	Embedded Systems, Sensors Technology, Motion Capture System Technology, Head Mounted Displays Technology (e.g., Oculus Rift)
AUDIO, VIDEO AND GRAPHICS APPLICATIONS	Audition, Logic, Ableton Live, Audacity, Polyphone Soundfont Editor, Sonic Visualizer, Gimp, Photoshop, Premiere
SERVER	Apache, Tomcat, IIS

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

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 (Blacksbourg, Virgina, 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, Audiorama concert venue (Stockholm, Sweden)
11 Apr. 2014	Hyper Hurdy-Gurdy soloist performance at "LjudOljud 2014" contemporary music festival, Audiorama 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 |

Personal skills and competences

| TONGUES | Italian (mother tongue), English (fluent), Spanish (fluent), French (good), Swedish (basic), Danish (basic) |
| MANAGEMENT | Project management, product management, financial management, planning, human resources coordination, leadership, independent thinking |

Third mission

28th Mar. 2023	Seminar on Internet of Musical Things at the high school Liceo Scientifico Galilei (Trento, Italy)
27th Sep. 2019	Demo at European Researchers' Night at Trento Science Museum (Trento, Italy)
21st Sep. 2019	Demo at Trento Smart City Week (Trento, Italy)
25th Feb. 2019	Demo at ICT Days of University of Trento (Trento, Italy)
28th Sep. 2018	Demo at European Researchers' Night at Natural History Museum (London, UK)

Memberships

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

Publications

Editorial works

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

Journal papers

2. [J1] 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, 2023 (In press).
3. [J2] 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).
4. [J3] **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, 2023 (In press).
5. [J4] **L. Turchet** and P. Casari. *Latency and Reliability Analysis of a 5G-Enabled Internet of Musical Things system.* IEEE Internet of Things Journal, 2023 (In press).
6. [J5] T. 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.
7. [J6] **L. Turchet**, M. Lagrange, C. Rottondi, G. Fazekas, N. Peters, J. Østergaard, F. Font, T. Bäkström, and C. Fischione. *The Internet of Sounds: Convergent Trends, Insights and Future Directions.* IEEE Internet of Things Journal, 10(13), 11264–11292, 2023.
8. [J7] **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.
9. [J8] **L. Turchet**. *Musical Metaverse: vision, opportunities and challenges.* Personal and Ubiquitous Computing Journal, 2023 (In press).
10. [J9] **L. Turchet** and M. De Cet. *A web-based distributed system for integrating mobile music in choral performance.* Personal and Ubiquitous Computing Journal, 2023 (In press).
11. [J10] **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.
12. [J11] **L. Turchet**, M. Carraro and M. Tomasetti. *FreesoundVR: soundscape composition in Virtual Reality using online sound repositories.* Virtual Reality, 2022 (In press).
13. [J12] **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).
14. [J13] **L. Turchet**. *Musical haptics for the listener: reflections of a design practitioner.* Multimodality & Society, 2(4), 379–385, 2022.
15. [J14] 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.
16. [J15] **L. Turchet** and C. N. Ngo. *Blockchain-based Internet of Musical Things.* Blockchain: Research and Applications, 3(3), 100083, 2022. Elsevier.
17. [J16] **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.
18. [J17] 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.
19. [J18] **L. Turchet**, P. Bouquet, A. Molinari, G. Fazekas. *The Smart Musical Instruments Ontology.* Journal of Web Semantics, 73, 100687, 2022.
20. [J19] 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.
21. [J20] **L. Turchet** and D. Golishev. *SMIF: a format for the offline exchange of Smart Musical Instruments configuration and data.* Journal of the Audio Engineering Society, 69(12), 946–955, 2021.
22. [J21] **L. Turchet** and E. Rinaldo. *Technical performance assessment of the Ableton Link protocol over Wi-Fi.* Journal of the Audio Engineering Society, 69(10), 748–756. 2021.
23. [J22] **L. Turchet** and C. Fischione. *Elk Audio OS: an open source operating system for the Internet of Musical Things.* ACM Transactions on the Internet of Things, 2(2), 1–18, 2021.
24. [J23] **L. Turchet**, R. Hamilton and A. Çamci. *Music in Extended Realities.* IEEE Access, 9, 15810–15832, 2021.
25. [J24] **L. Turchet**, G. Fazekas, M. Lagrange, S. Ghadikolaei, and C. Fischione. *The Internet of Audio Things: state-of-the-art, vision, and challenges.* IEEE Internet of Things Journal, 7(10), 10233–10249, 2020.
26. [J25] **L. Turchet**, T. West, and M.M. Wanderley. *Touching the audience: Musical Haptic Wearables for augmented and participatory live music performances.* Personal and Ubiquitous Computing Journal, 1–21, 2020.
27. [J26] **L. Turchet**, F. Antoniazzi, F. Viola, F. Giunchiglia, and G. Fazekas. *The Internet of Musical Things Ontology.* Journal of Web Semantics, 60, 100548, 2020.
28. [J27] **L. Turchet**, J. Pauwels, C. Fischione, and G. Fazekas. *Cloud-Smart Musical Instrument Interactions: Querying a Large Music Collection with a Smart Guitar.* ACM Transactions on the Internet of Things, 1(3), 1–29, 2020
29. [J28] M. Mannone, F. Favali, B. Di Donato, and **L. Turchet**. *Quantum GestART: Identifying and Applying Correlations between Mathematics, Art, and Perceptual Organization.* Journal of Mathematics and Music, 1–33, 2020.
30. [J29] **L. Turchet** and M. Barthet. *An ubiquitous smart guitar system for collaborative musical practice.* Journal of New Music Research, 48(4), 352–365, 2019.
31. [J30] **L. Turchet** and M. Barthet. *Co-design of Musical Haptic Wearables for electronic music performer's communication.* IEEE Transactions on Human-Machine Systems, 49(2), 183–193, 2019.

32. [J31] **L. Turchet**. *Smart Musical Instruments: vision, design principles, and future directions.* IEEE Access, 7, 8944–8963, 2019.

33. [J32] **L. Turchet**, C. Fischione, G. Essl, D. Keller, and M. Barthet. *Internet of Musical Things: Vision and Challenges.* IEEE Access, 6, 61994–62017, 2018.

34. [J33] **L. Turchet**, A. McPherson, and M. Barthet. *Real-time hit detection in a Smart Cajón.* Frontiers in ICT, 5:16, 2018.

35. [J34] **L. Turchet**, A. McPherson, and M. Barthet. *Co-design of a Smart Cajón.* Journal of the Audio Engineering Society, 66(4), 1–11, 2018.

36. [J35] **L. Turchet**, I. Camponogara, F. Nardello, P. Zamparo, and P. Cesari. *Interactive footsteps sounds modulate the sense of effort without affecting the kinematics and metabolic parameters during treadmill-walking.* Applied Acoustics, 129, 379–385, 2018.

37. [J36] **L. Turchet**, D. Zanotto, A. Rodà, S. Minto and S. K. Agrawal. *Emotion rendering in plantar vibro-tactile simulations of imagined walking styles.* IEEE Transactions on Affective Computing, 8(3), 340–354, 2017.

38. [J37] **L. Turchet** and A. Rodà. *Emotion rendering in auditory simulations of imagined walking styles.* IEEE Transactions on Affective Computing, 8(2), 241–253, 2017.

39. [J38] **L. Turchet**, D.J. Moffat, A. Tajadura-Jiménez, J. Reiss, and T. Stockman. *What do your footsteps sound like? An investigation on interactive footstep sounds adjustment.* Applied Acoustics, 111, 77–85, 2016.

40. [J39] I. Camponogara, **L. Turchet**, M. Carner, and P. Cesari. *To hear or not to hear: sound availability modulates the sensory-motor integration.* Frontiers in Neuroscience, 10 (22), 1–7, 2016.

41. [J40] **L. Turchet**, S. Spagnol, M. Geronazzo and F. Avanzini. *Localization of self generated synthetic footstep sounds on different walked-upon materials through headphones.* Virtual Reality, 20 (1), 1–16, 2016.

42. [J41] **L. Turchet**. *Footstep sounds synthesis: design, implementation, and evaluation of foot-floor interactions, surface materials, shoe types, and walkers' features.* Applied Acoustics, 107, 46–68, 2016.

43. [J42] **L. Turchet**. *Designing presence for real locomotion in immersive virtual environments: an affordance-based experiential approach.* Virtual Reality, 19(3), 277-290, 2015

44. [J43] **L. Turchet** and R. Bresin. *Effects of interactive sonification on emotionally expressive walking styles.* IEEE Transactions on Affective Computing, 6(2), 152–164, 2015.

45. [J44] **L. Turchet**, I. Camponogara and P. Cesari. *Interactive footstep sounds modulate the perceptual-motor aftereffect of treadmill walking.* Experimental Brain Research, 233(1), 205–214, 2015.

46. [J45] **L. Turchet**. *Custom made wireless systems for interactive footstep sounds synthesis.* Applied Acoustics, 83, 22–31, 2014.

47. [J46] **L. Turchet** and S. Serafin. *Semantic congruence in the audio-haptic simulation of footstep sounds.* Applied Acoustics, 75(1), 59–66, 2014.

48. [J47] **L. Turchet**, S. Serafin, and P. Cesari. *Walking pace affected by interactive sounds simulating stepping on different terrains.* ACM Transactions on Applied Perception, 10(4), 23:1–23:14, 2013.

49. [J48] **L. Turchet**, P. Burelli and S. Serafin. *Haptic feedback for enhancing realism in walking simulations.* IEEE Transactions on Haptics, 6 (1), 35–45, 2013.

50. [J49] **L. Turchet** and S. Serafin. *Investigating the amplitude of interactive footstep sounds and soundscape reproduction.* Applied Acoustics, 74 (4), 566–574, 2013.

51. [J50] **L. Turchet** and S. Serafin. *Temporal and amplitude aspects in sonically simulating walking over bumps, holes and flat surfaces.* Acoustical Science and Technology, 33(5), 1–10, 2012.

52. [J51] R. Nordahl, S. Serafin, **L. Turchet**, N.C. Nilsson. *A multimodal architecture for simulating natural interactive walking in virtual environments.* PsychNology, 9(3), 245–268, 2012.

53. [J52] R. Nordahl, **L. Turchet** and S. Serafin. *Sound synthesis and evaluation of interactive footsteps and environmental sounds rendering for virtual reality applications.* IEEE Transactions on Visualization and Computer Graphics, 17(9), 1234–1244, 2011.

BOOK CHAPTERS

54. [B1] V. Lazzarini, D. Keller, N. Otero, and **L. Turchet**. *The ecologies of ubimus.* Ubiquitous Music Ecologies, Routledge (Ed. V. Lazzarini, D. Keller, N. Otero, and L. Turchet), 1–22, 2020.

55. [B2] **L. Turchet**, G. Essl, and C. Fischione. *Ubiquitous music in the Internet of Musical Things.* Ubiquitous Music Ecologies, Routledge (Ed. V. Lazzarini, D. Keller, N. Otero, and L. Turchet), 154–169, 2020.

56. [B3] **L. Turchet** and J. Hueller. *Promoting awareness on sustainable behaviors thorough an AR-based art gallery.* In: De Paolis L., Bourdot P. (eds) Augmented Reality, Virtual Reality, and Computer Graphics. AVR 2020. Lecture Notes in Computer Science, vol 12243. Springer, Cham, 53–65, 2020.

57. [B4] M. Mannone and **L. Turchet**. *Shall we (math and) dance?* In: M. Montiel, F. Gomez-Martin, O. Agustín-Aquino. (eds) Mathematics and Computation in Music. MCM 2019. Lecture Notes in Computer Science, vol 11502, 84–97. Springer, Cham.

58. [B5] **L. Turchet** and M. Barthet. *Smart Musical Instruments: Key Concepts and Do It Yourself Tutorial.* Foundations in Sound Design for Embedded Media. Routledge (Ed. M. Filimowicz), 275–296, 2019.

59. [B6] N.C. Nilsson, R. Nordahl, **L. Turchet** and S. Serafin. *Audio-haptic simulation of walking on virtual ground surfaces to enhance realism.* HAID 2012, LNCS 7468, 61–70, Springer-Verlag Berlin Heidelberg, 2012.

60. [B7] **L. Turchet**, N.C. Nilsson and S. Serafin. *Inside the boundaries of the physical world: audio-haptic feedback as support for the navigation in virtual environments.* EuroHaptics 2012, Part I, LNCS 7282, 577–588, Springer-Verlag Berlin Heidelberg, 2012.

61. [B8] N.C. Nilsson, R. Nordahl, E. Sikström, **L. Turchet** and S. Serafin. *Haptically Induced Illusory Self-motion and the Influence of Context of Motion.* EuroHaptics 2012, Part I, LNCS 7282, 349–360, Springer-Verlag Berlin Heidelberg, 2012.

62. [B9] R. Nordahl, A. Lècuyer, S. Serafin, **L. Turchet**, S. Papetti and F. Fontana. *Evaluation of multimodal ground cues.* Walking with the senses - Perceptual techniques for walking in simulated environments, 2011

63. [B10] S. Serafin, F. Fontana, **L. Turchet**, and S. Papetti. *Auditory rendering and display techniques.* Walking with the senses - Perceptual techniques for walking in simulated environments, 2011

64. [B11] **L. Turchet** and S. Serafin. *An investigation on temporal aspects in the audio-haptic simulation of footsteps.* Time and

Time Perception 2010, 101–115, Springer-Verlag Berlin Heidelberg 2011.

65. [B12] **L. Turchet**, S. Serafin, S. Dimitrov, and R. Nordahl. *Conflicting audio-haptic feedback in physically based simulation of walking sounds.* Haptic and Audio Interaction Design, 97–106, Springer-Verlag Berlin Heidelberg 2010.

66. [B13] R. Nordahl, A. Berrezag, S. Dimitrov, **L. Turchet**, V. Hayward, and S. Serafin. *Preliminary experiment combining virtual reality haptic shoes and audio synthesis.* Haptics: Generating and Perceiving Tangible Sensations, 123–129, Springer-Verlag Berlin Heidelberg 2010.

ARTICLES IN CONFERENCE PROCEEDINGS

67. [C1] L. Vignati, S. Dallona and **L. Turchet**. *PLC Testbench: a modular tool for the study and comparison of audio Packet Loss Concealment algorithms.* In Proceedings of the 4th International Symposium on the Internet of Sounds, 2023 (accepted).

68. [C2] **L. Turchet**, F. Vella and S. Fiore. *The potential of high-performance computing for the Internet of Sounds.* In Proceedings of the 4th International Symposium on the Internet of Sounds, 2023 (accepted).

69. [C3] **L. Turchet** and P. Casari. *Assessing a Private 5G SA and a Public 5G NSA Architecture for Networked Music Performances.* In Proceedings of the 4th International Symposium on the Internet of Sounds, 2023 (accepted).

70. [C4] A. Boem and **L. Turchet**. *Musical Metaverse Playgrounds: exploring the design of shared virtual sonic experiences on web browsers.* In Proceedings of the 4th International Symposium on the Internet of Sounds, 2023 (accepted).

71. [C5] D. Stefani and **L. Turchet**. *Real-Time Embedded Deep Learning on Elk Audio OS.* In Proceedings of the 4th International Symposium on the Internet of Sounds, 2023 (accepted).

72. [C6] M. Mannone and **L. Turchet**. *Theoretical Quantum Modeling of Improvisation in Networked Music Performances to Regulate the Behaviour of Artificial Musicians.* In Proceedings of the 4th International Symposium on the Internet of Sounds, 2023 (accepted).

73. [C7] M. Rossi, G. Iacca and **L. Turchet**. *Explainability and Real-Time in Music Information Retrieval: Motivations and Possible Scenarios.* In Proceedings of the 4th International Symposium on the Internet of Sounds, 2023 (accepted).

74. [C8] **L. Turchet** and M. Tomasetti. *Immersive networked music performance systems: identifying latency factors.* In Proceedings of the International Conference on Immersive and 3D Audio, 2023 (accepted).

75. [C9] M. Tomasetti and **L. Turchet**. *Latency of spatial audio plugins: a comparative study.* In Proceedings of the International Conference on Immersive and 3D Audio, 2023 (accepted).

76. [C10] M. Tomasetti, A. Boem and **L. Turchet**. *How to Spatial Audio with the WebXR API: a survey of the tools and techniques for creating immersive sonic experiences on the browser.* In Proceedings of the International Conference on Immersive and 3D Audio, 2023 (accepted).

77. [C11] **L. Turchet**, N. Garau, and N. Conci. *Networked Musical XR: where's the limit? A preliminary investigation on the joint use of point clouds and low-latency audio communication.* In Proceedings of Audio Mostly Conference, 226–230, 2022.

78. [C12] T. Borgogno and **L. Turchet**. *ImproScales: a self-tutoring web system for using scales in improvisations.* In Proceedings of Audio Mostly Conference,219–225, 2022.

79. [C13] D. Cocchiara and **L. Turchet**. *Democratizing access to collaborative music making over the network using air instruments.* In Proceedings of Audio Mostly Conference, 211–218, 2022.

80. [C14] L. Gabrielli and **L. Turchet**. *Towards a Sustainable Internet of Sounds* In Proceedings of Audio Mostly Conference, 231–238, 2022.

81. [C15] N. Silva and **L. Turchet**. *A Structural Similarity Index Based Method to Detect Symbolic Monophonic Patterns in Real-Time.* In Proceedings of the Digital Audio Effects Conference, 161–168, 2022.

82. [C16] D. Stefani and **L. Turchet**. *On the Challenges of Embedded Real-Time Music Information Retrieval.* In Proceedings of the Digital Audio Effects Conference, 177–184, 2022.

83. [C17] D. Stefani and **L. Turchet**. *A Comparison of Deep Learning Inference Engines for Embedded Real-Time Audio Classification.* In Proceedings of the Digital Audio Effects Conference, 256–263, 2022.

84. [C18] D. Stefani and **L. Turchet**. *Bio-Inspired Optimization of Parametric Onset Detectors.* In Proceedings of the Digital Audio Effects Conference, 268–275, 2021.

85. [C19] **L. Turchet** and P. Bouquet. *Smart Musical Instruments preset sharing: an ontology-based data access approach.* In Proceedings of the 7th IEEE World Forum on Internet of Things, 1–6, 2021.

86. [C20] **L. Turchet**, T. Stockman and D. Baker. *Musical Haptic Wearables for Synchronisation of Visually-impaired Performers: a Co-design Approach.* In Proceedings of the ACM International Conference on Interactive Media Experiences, 20–27, 2021.

87. [C21] W. Sahqani and **L. Turchet**. *Co-designing Employees' Data Privacy: a Technology Consultancy Company Use Case.* In Proceedings of the IEEE Conference of Open Innovations Association (FRUCT), 398-406, 2021.

88. [C22] F. Macchi, P. Rosin, J. M. Mervi and **L. Turchet**. *Image-based Approaches for Automating GUI Testing of Interactive Web-based Applications.* In Proceedings of the IEEE Conference of Open Innovations Association (FRUCT), 278-285, 2021.

89. [C23] **L. Turchet**, S. Willis, G. Andersson, A. Gianelli, and M. Benincaso. *On making physical the control of audio plugins: the case of the Retrologue Hardware Synthesizer.* In Proceedings of Audio Mostly Conference, 146–151, 2020.

90. [C24] **L. Turchet** and A. Zanetti. *Voice-based interface for accessible soundscape composition: composing soundscapes by vocally querying online sounds repositories.* In Proceedings of Audio Mostly Conference,160–167, 2020.

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92. [C26] **L. Turchet**, G. Zhu, and P. Bouquet. *Populating the Smart Musical Instruments Ontology with data.* In Proceedings of the IEEE Conference of Open Innovations Association (FRUCT), 260-267, 2020.

93. [C27] N. Silva, C. Fischione, and **L. Turchet**. *Towards Real-Time Detection of Symbolic Musical Patterns: Probabilistic vs. Deterministic Methods.* In Proceedings of the IEEE Conference of Open Innovations Association (FRUCT), 238-246, 2020.

94. [C28] D. Stefani and **L. Turchet**. *Demo of the TimbreID-VST Plugin for Embedded Real-Time Classification of Individual Musical Instruments Timbres.* In Proceedings of the 27th Conference of FRUCT Association, 412-413, 2020.

95. [C29] A. Zanetti and **L. Turchet**. *Demo of Voice-based Interface for Soundscape Composition: Composing Soundscapes by Vocally Querying Online Sounds Repositories.* In Proceedings of the 27th Conference of FRUCT Association, 414-415, 2020.

96. [C30] **L. Turchet**. *Interactive sonification and the IoT: the case of smart sonic shoes for clinical applications.* In Proceedings of Audio Mostly Conference, 252–255, 2019.

97. [C31] **L. Turchet**, T. West, and M. M. Wanderley. *Smart Mandolin and Musical Haptic Gilet: effects of vibro-tactile stimuli during live music performance.* In Proceedings of Audio Mostly Conference, 168–175, 2019.

98. [C32] **L. Turchet** and M. Barthet. *Haptification of performer's control gestures in live electronic music performance.* In Proceedings of Audio Mostly Conference, 244–247, 2019.

99. [C33] S. D'Angelo, L. Gabrielli and **L. Turchet**. *Fast Approximation of the Lambert W Function for Virtual Analog Modelling.* In Proceedings of Digital Audio Effects Conference, 2019.

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SUMMARY OF BIBLIOMETRIC INDICATORS

N. publications	136
N. books	1
N. journal articles	52
N. book chapters	13
N. conference articles	68
N. international patents	2
N. first-authored articles	81
N. last-authored articles	33
N. first + last-authored articles	108
N. sole-authored articles	13
N. awarded articles	4
N. citations on Scopus	1533
N. citations on Google Scholar	2403
H-index on Scopus	22
H-index on Google Scholar	29

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