

Luca Turchet



Date and place of birth: 28/10/1982 in Verona (Italy)
Nationality: Italian
E-mail: luca.turchet@unitn.it
Personal website: www.lucaturchet.it
Own company website: www.elk.audio

Current positions

JAN. 2019 – PRESENT **Assistant Professor**, Department of Information Engineering and Computer Science of University of Trento
NOV. 2018 – PRESENT **Honorary Senior Research Associate**, Institute of Education of University College London
OCT. 2014 – PRESENT **Co-founder and Advisor** at Elk (former MIND Music Labs)

Research interests

Internet of Musical Things, smart musical instruments, real-time audio embedded systems, new interfaces for musical expression, human-computer interaction, sonic interaction design, haptic technology, multimodal perception, sonification, virtual reality, affective computing

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

Academic positions

JAN. 2019 – PRESENT **Assistant Professor** at University of Trento, Dept. of Information Engineering and Computer Science
NOV. 2018 – PRESENT **Honorary Senior Research Associate** at University College London, Institute of Education
MAY 2017 – JAN. 2018 **Marie-Curie Postdoctoral Research Fellow** at Queen Mary University of London, Center for Digital Music
NOV. 2016 – FEB. 2017 **Research Engineer** 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 Research Council
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

DEC. 2019	Starting Grant Young Researchers of University of Trento, PI, €10.000
DEC. 2019	1-year Innovation grant from EIT Digital - European Institute of Technology, PI, €137.000
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”, 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

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-Investigator), €65.000
NOV. 2017	“Innovative startups – Phase II 2017” of Swedish Innovation Agency VINNOVA for MIND Music Labs, €90.000
APR. 2017	“RunnerUp 2017” grant of Swedish Innovation Agency VINNOVA for MIND Music Labs, €50.000
FEB. 2017	“Innovative startups – Phase I 2017” of Swedish Innovation Agency VINNOVA for MIND Music Labs, €30.000
DEC. 2014	“VFT-1” grant of KTH Innovation for MIND Music Labs, €5.500
DEC. 2014	“ALMI grant” of Swedish Innovation Agency ALMI for MIND Music Labs, €2.000

SEP. 2014 “VFT-0” grant of KTH Innovation for MIND Music Labs

ARTISTIC GRANTS

APR. 2017 “Movin’Up” Grant of Fondazione Giovani Artisti Italiani for the mobility project “Hypermandolin@NYCEMF”, €1.000

SEP. 2008 – FEB. 2009 **Grant of Italian Minister 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 the 1 month course of English at the Nottingham Trent University, €1.000

Awards

SCIENTIFIC AWARDS

MAY. 2019 National Scientific Qualification, 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 the 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

ENTREPRENEURIAL

AWARDS

JAN. 2019 With MIND Music Labs, **Best New Technology Award** at National Association of Music Merchants Trade Show 2019 (Los Angeles) awarded by Sonicstate.com

NOV. 2017 – NOV. 2019 With MIND Music Labs, **5 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 MIND Music Labs, Seal of Excellence from the European Commission (SME Instrument Phase 1 - Open Disruptive Scheme)

OCT. 2016 With MIND Music Labs, **winner of Music Tech Summit** (San Francisco)

AUG. 2016 With MIND Music Labs, finalist of Startup Competition at BIME Startup Summit (Bilbao)

JUNE 2016 With MIND Music Labs, **winner of Midemlab 2016 Music Startup Competition**

JUNE 2016 With MIND Music Labs, awarded of the **first prize at Midemlab 2016 international pitching competition in the Hardware/Internet of Things category**

JUNE 2016 With MIND Music Labs, awarded of the second prize at Sonar+D Startup Garden Competition

JUNE 2016 With MIND Music Labs, 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 “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

JAN 2019 – PRESENT	Advisor at Elk (former MIND Music Labs)
OCT. 2014 – JAN 2019	Head of Sound and Interaction Design at Elk (former MIND Music Labs). Main activities: project management, product management, sound design, interaction design, software development
OCT. 2014	Co-funder of the company Elk (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

Involvement in national and international research projects

MAY 2017 – JAN. 2019	“Towards the Internet of Musical Things – An ecosystem of interoperable devices connecting performers and audiences”, Marie-Curie Individual Fellowship of the European Union’s Horizon 2020 research and innovation programme, under grant agreement 749561. Fellow (de facto principal investigator)
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
FEB. 2013 – JAN. 2016	“Audio-haptic walking simulations for virtual reality, entertainment and rehabilitation applications”, Danish Council for Independent Research. Principal Investigator.
MAR. 2009 – OCT. 2012	“Natural Interactive Walking”, European Union’s Seventh Framework Programme under FET-Open grant agreement 222107

Teaching experience

JAN 2019 – PRESENT	At University of Trento: <ul style="list-style-type: none"> • Full module “Human-Computer Interaction” (undergraduate and graduate), 48 hours, 6 ECTS • Full module “Multisensory Interactive Systems” (graduate), 48 hours, 6 ECTS • Guest Lecturer and examiner for module “ICT Innovation” (graduate), 20 hours • Supervised 2 bachelor students
MAY 2017 – PRESENT	At Queen Mary University of London: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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 student for the Individual Course in Media Technology • Supervisor of 1 master student for the Individual Course in Media Technology
FEB. 2010 – MAR. 2012	At Aalborg University Copenhagen (729 hours): <ul style="list-style-type: none"> • Frontal lessons for the courses “Audio Design”, “Audio-Visual Production”, “Procedural Programming”, “Sound and Music Computing” and “L^AT_EX 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”

Commission of trust

MAR. 2019 – PRESENT	Member of the Teaching Board for the ICT Doctoral School at DISI – University of Trento
FEB. 2019 – PRESENT	Delegate for the activities of internships and relationship with companies at DISI –University of Trento
JAN. 2019 – PRESENT	Coordinator for Trento node of the EIT Digital Master School in “Human-Computer Interaction and Design” - European Institute of Innovation and Technology
PC MEMBER	<ul style="list-style-type: none"> • International Conference on New Interfaces for Musical Expression 2018, 2019, 2020 • Audio Mostly 2017, 2018, 2019 • International Conference on Digital Audio Effects 2018, 2019 • Sound and Music Computing Conference 2018, 2019 • IEEE Conference of Open Innovations Association FRUCT 2018, 2019 • International Symposium on Computer Music Multidisciplinary Research 2017 • Workshop on Ubiquitous Music 2018, 2019
PANELIST	<ul style="list-style-type: none"> • International Workshop on Multilayer Music Representation and Processing 2019
SESSION CHAIR	<ul style="list-style-type: none"> • International Symposium on Computer Music Multidisciplinary Research 2017
ORGANIZING ACTIVITIES	<ul style="list-style-type: none"> • Audio and Music Hackaton, Center for Digital Music of the Queen Mary University of London 2017 • Haptic-Audio Interaction Design Conference 2010, Aalborg University Copenhagen 2010

Invited talks

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 MIND Music Labs 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)

Invited demos

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

HARDWARE

- Smart Guitar (with MIND Music Labs)
- 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
- 2 wearables: armband-based wearable, e-textiles-based jacket

SOFTWARE

- 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 Smart Guitar (with MIND Music Labs)
- Max/MSP and Pure Data effect libraries for Hyper-Hurdy-Gurdy, Hyper-Zampogna, Hyper-Mandolin, Smart Cajón, Smart Mandolin
- 4 Max for Live devices for the communication between the Sensus Smart Guitar and Ableton Live

Reviewing activities

JOURNALS

- IEEE Transactions on Haptics (1 paper)
- Personal and Ubiquitous Computing (2 papers)
- Frontiers in Psychology (1 paper)
- IEEE/ACM Transactions on Audio, Speech and Language Processing (1 paper)
- Journal of the Audio Engineering Society (1 paper)
- IEEE Transactions on Visualization and Computer Graphics (1 paper)
- Applied Acoustics (1 paper)

CONFERENCES

- International Conference on New Interfaces for Musical Expression 2018 (8 papers), 2019 (5 papers), 2020
- Audio Mostly Conference 2017 (3 papers and 2 music submissions), 2018 (5 papers), 2019 (2 papers)
- Ubimus Workshop 2018 (2 papers), 2019 (1 paper)
- Creativity & Cognition 2019 (1 paper)
- Sound and Music Computing Conference 2012 (3 papers), 2013 (2 papers), 2018 (2 papers), 2019 (2 papers)
- IEEE World Haptics Conference 2019 (1 paper)
- Digital Audio Effects Conference 2018 (2 papers)
- ACM International Conference on Human-Computer Interaction CHI 2019 (2 papers)
- IEEE Conference of Open Innovations Association FRUCT 2018 (3 papers)
- Eurohaptics 2018 (2 papers)
- IEEE International Conference on Semantic Computing 2018 (1 paper)
- International Symposium on Computer Music Multidisciplinary Research 2017 (2 papers)
- IEEE Virtual Reality Conference 2016 (1 paper)
- Colloquio di Informatica Musicale 2014 (1 paper)

Computer skills and competences

OPERATING SYSTEMS

Mac, Linux, Windows, ELK music operating system

PROGRAMMING EXPERIENCES

Python, C, C++, Java, Max/MSP and Pure Data (and their native code for externals), JUCE framework, MATLAB, Octave, Processing, CSound, R statistical software, SAS, HTML, PHP, CSS, XML, Json, SQL, 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, 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, Auditorium concert venue (Stockholm, Sweden)
11 APR. 2014	Hyper Hurdy-Gurdy soloist performance at “LjudOljud 2014” contemporary music festival, Auditorium 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

27 TH SEP. 2019	Demo at European Researchers' Night at Trento Science Museum (Trento, Italy)
21 ST SEP. 2019	Demo at Trento Smart City Week (Trento, Italy)
25 TH FEB. 2019	Demo at ICT Days of University of Trento (Trento, Italy)
28 TH SEP. 2018	Demo at European Researchers' Night at Natural History Museum (London, UK)

Publications

EDITORIAL ACTIVITIES AND BOOKS

- [E1] V. Lazzarini, D. Keller, N. Otero, and **L. Turchet**. "Ubiquitous Music Ecologies", Routledge, 2020 (to appear).

JOURNAL PAPERS

- [J1] **L. Turchet**, F. Antoniazzi, F. Viola, F. Giunchiglia, and G. Fazekas. *The Internet of Musical Things Ontology*. Journal of Web Semantics, 2020 (In press)
- [J2] **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, 2020 (In press)
- [J3] 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, 2019 (In press).
- [J4] **L. Turchet** and M. Barthet. *An ubiquitous smart guitar system for collaborative musical practice*. Journal of New Music Research, 48(4), 352–365, 2019.
- [J5] **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.
- [J6] **L. Turchet**. *Smart Musical Instruments: vision, design principles, and future directions*. IEEE Access, 7, 8944–8963, 2019.
- [J7] **L. Turchet**, C. Fischione, G. Essl, D. Keller, and M. Barthet. *Internet of Musical Things: Vision and Challenges*. IEEE Access, 6, 61994–62017, 2018.
- [J8] **L. Turchet**, A. McPherson, and M. Barthet. *Real-time hit detection in a Smart Cajón*. Frontiers in ICT, 5:16, 2018.
- [J9] **L. Turchet**, A. McPherson, and M. Barthet. *Co-design of a Smart Cajón*. Journal of the Audio Engineering Society, 66(4), 1–11, 2018.
- [J10] **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.
- [J11] **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.
- [J12] **L. Turchet** and A. Rodà. *Emotion rendering in auditory simulations of imagined walking styles*. IEEE Transactions on Affective Computing, 8(2), 241–253, 2017.
- [J13] **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.
- [J14] 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.
- [J15] **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.
- [J16] **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.
- [J17] **L. Turchet**. *Designing presence for real locomotion in immersive virtual environments: an affordance-based experiential approach*. Virtual Reality, 19(3), 277–290, 2015
- [J18] **L. Turchet** and R. Bresin. *Effects of interactive sonification on emotionally expressive walking styles*. IEEE Transactions on Affective Computing, 6(2), 152–164, 2015.
- [J19] **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.
- [J20] **L. Turchet**. *Custom made wireless systems for interactive footstep sounds synthesis*. Applied Acoustics, 83, 22–31, 2014.
- [J21] **L. Turchet** and S. Serafin. *Semantic congruence in the audio-haptic simulation of footstep sounds*. Applied Acoustics, 75(1), 59–66, 2014.
- [J22] **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.
- [J23] **L. Turchet**, P. Burelli and S. Serafin. *Haptic feedback for enhancing realism in walking simulations*. IEEE Transactions on Haptics, 6 (1), 35–45, 2013.
- [J24] **L. Turchet** and S. Serafin. *Investigating the amplitude of interactive footstep sounds and soundscape reproduction*. Applied Acoustics, 74 (4), 566–574, 2013.
- [J25] **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.
- [J26] 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.
- [J27] 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

- [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), 2020 (to appear).
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41. [C1] **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.
42. [C2] **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.
43. [C3] **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.
44. [C4] 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 (accepted).
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72. [C32] R. Nordahl, S. Serafin, and **L. Turchet**. *Sound synthesis and evaluation of interactive footsteps for virtual reality applications*. In Proceedings of the IEEE Virtual Reality Conference, 147–153, 2010. **[Top 10 paper award]**.
73. [C33] **L. Turchet**, S. Serafin, S. Dimitrov, and R. Nordahl. *Physically based sound synthesis and control of footsteps sounds*. In Proceedings of Digital Audio Effects Conference, 161–168, 2010.
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75. [C35] S. Serafin, **L. Turchet**, and R. Nordahl. *Do you hear a bump or a hole? An experiment on temporal aspects in footsteps recognition*. In Proceedings of Digital Audio Effects Conference, 169–173, 2010.
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79. [C39] S. Serafin, **L. Turchet**, and R. Nordahl. *Extraction of ground reaction forces for real-time synthesis of walking sounds*. In Proceedings of the Audio Mostly Conference, 99–105, 2009.

PATENTS

- M. Benincaso, A. De Angelis, C. Fischione, **L. Turchet**, S. Zambon. *Method to control the timbre of a target stringed instrument in real-time*, 2018, (PCT/SE2016/050494).
- M. Benincaso, A. De Angelis, C. Fischione, **L. Turchet**, S. Zambon. *Method for applying sensors on a stringed instrument*, 2018 (PCT/SE2016/050493).

SUMMARY OF BIBLIOMETRIC INDICATORS

N. publications	79
N. books	1
N. journal articles	26
N. book chapters	12
N. conference articles	39
N. first-authored articles	53 (67%)
N. last-authored articles	8
N. first + last-authored articles	60 (76%)
N. awarded articles	4
N. international patents	2
N. citations on Scopus	441
N. citations on Google Scholar	795
H-index on Scopus	12
H-index on Google Scholar	15