Curriculum Vitae

Gabriel Vigliensoni

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Profile

I am an artist and researcher who combines creative practice with extensive studies in sound and music, human-computer interaction, music information retrieval, and machine learning, to design novel approaches to sound and music-making. Currently, I am a full-time faculty member at Concordia University where I am investigating the creative capabilities and affordances of the artificial intelligence paradigm to support sound and music-making.

Education

2017 DOCTOR OF PHILOSOPHY, MUSIC TECHNOLOGY

McGill University Advisor: Ichiro Fujinaga

Recipient of Bicentennial Doctoral Grant, CONICYT, Gobierno de Chile; Scholarship for Academic

Excellence, SCD; and Graduate Excellence Fellowship, McGill University.

2011 MASTER OF ARTS, MUSIC TECHNOLOGY

McGill University

Advisor: Marcelo M. Wanderley

Recipient of Bicentennial Masters Grant, CONICYT, Gobierno de Chile

2004 BACHELOR OF ARTS, SOUND SCIENCES

Universidad de Chile

Professional experience

2023–PRESENT ASSISTANT PROFESSOR IN CREATIVE ARTIFICIAL INTELLIGENCE. DEPARTMENT OF DESIGN AND

COMPUTATION ARTS. FACULTY OF FINE ARTS. CONCORDIA UNIVERSITY

I joined Concordia University to strengthen the Computation Arts program in the field of creative artificial intelligence. In particular, in my research, teaching, and creative practice I explore the use of machine learning techniques to create novel and unique media work, especially in sound and music making. Current courses: CART 398 — Creative Artificial Intelligence and CART 210 — New Media Theory.

2022–2023 VISITING RESEARCHER AND POSTDOCTORAL RESEARCH FELLOW. CREATIVE COMPUTING

INSTITUTE. UNIVERSITY OF THE ARTS LONDON

Supported by the Fonds de recherche du Québec — Société et culture (FRQSC), I carried out the knowledge mobilization plan for the research-creation project "The human in the machine: Musical composition assisted by deep neural networks." The plan aimed at democratizing access for digital artists and musicans to state-of-the-art generative techniques by mobilizing advanced knowledge on artificial intelligence technologies and their application in sound and music-making contexts. The project involved the communities linked to five centres for the research of digital arts; one international festival on digital creativity and

electronic music; and one large international museum.

2020–2022 POSTDOCTORAL RESEARCH FELLOW. DEPARTMENT OF COMPUTING, GOLDSMITHS UNIVERSITY

OF LONDON

I was awarded multi-year funding by FRQSC to carry out the research-creation project titled "The human in the machine: Musical composition assisted by deep neural networks." In this project, I am assessing and experimenting with the creative affordances of deep neural networks as collaborative tools in the context of music composition and performance. Advisor: Rebecca Fiebrink.

2019-2020

RESEARCH ASSOCIATE. DEPARTMENT OF MUSIC RESEARCH, MCGILL UNIVERSITY

Led team of eight software developers per year in the design and implementation of web-based applications for optical music recognition. Helped to write and proofread grant applications to get funding from provincial and federal agencies and to organize the International Society for Music Information Retrieval and the Digital Libraries for Musicology conferences. Served as Music track co-Chair for the former and Proceedings Chair for the latter.

2017-2019

POSTDOCTORAL RESEARCHER. DEPARTMENT OF MUSIC RESEARCH, MCGILL UNIVERSITY

Applied deep neural networks for document segmentation and processing of music score images at large-scale. Led a team of students to design, implement, and integrate computational tools and neural networks into optical music recognition workflows. Hired by the Department of Music Research to work in the Single Interface for Music Score Searching and Analysis (SIMSSA) project, a seven-year grant funded by the Social Sciences and Humanities Research Council (SSHRC) of Canada.

2017-2018 | 2021

SOUND DESIGNER. APPLIED ACOUSTICS SYSTEMS (AAS)

Tuned a low-order physical model of virtual acoustics and designed a set of presets for end-user use. Designed and carried out a series of experiments to validate the coefficients and position of transducers in the virtual room. Designed a series of sound patches for the default library of the modular synthesizer Multiphonics CV-1 and CV-2.

2012-2019

LECTURER. SCHULICH SCHOOL OF MUSIC, MCGILL UNIVERSITY

Lectured several courses in the Department of Music Research at McGill University. Among them, "Fundamentals of New Media," "New Media Production," and "Music and the Internet". Topics included digital audio sampling theory and computer music fundamentals; MIDI sequencing and OSC; sound recording, editing, and mixing; synthesis techniques and audio effects; technologies and resources of the Internet for musicians; Web authoring; online music production and distribution tools; application programming interfaces (APIs) for musical data; music information retrieval fundamentals; and music recommendation.

2013-2015

RESEARCH ASSISTANT. DEPARTMENT OF MUSIC PERFORMANCE, McGILL UNIVERSITY

Implemented a real-time score following system that allowed a robotic harpsichord to realize a basso continuo part with cello and violin performers synchronically. This project was part of the SSHRC research grant Centre de Recherche sur l'Interprétation au Clavecin (CRIC).

2010-2017

RESEARCH ASSISTANT. DEPARTMENT OF MUSIC RESEARCH, McGILL UNIVERSITY

Designed heuristic approaches for the recognition and encoding of musical pitches in music score images of Gregorian chant. Applied deep neural networks for document segmentation and processing of music score images at large scale. Integrated music editors to examine image analysis techniques for early music prints and manuscripts.

2010-2011

TEACHING ASSISTANT. DEPARTMENT OF MUSIC RESEARCH, McGILL UNIVERSITY

Conducted laboratory sessions, graded assignments and final projects, had weekly TA office hours for the course "Fundamentals of New Media.". Topics include digital audio and sampling theory, MIDI and sequencing, audio editing and mixing, elementary sound recording, and score editing software.

2007-2010

CTO. ARMABLE ONLINE RADIO, SANTIAGO DE CHILE

Designed and deployed full radio automation systems that guaranteed variability in programming slots according to user-chosen musical descriptors. The radios served several large-scale retail clients and the general audience through our Internet streams.

2004-2009

PROGRAM DIRECTOR, SOUND ENGINEERING CURRICULUM. INSTITUTO DUOCUC, SANTIAGO DE CHILE

Revised and updated the curriculum based on industry needs; designed the intended learning outcomes for each module of the curriculum; and supervised the design of learning and assessment activities developed by each lecturer for the courses. Worked with more than 30 faculty members to teach a growing cohort of more than 300 students. Worked with industry partners to place graduate students and achieved an employment rate of 90 percent.

2000-2004 LECTURER. ESCUELA DE POSTGRADO, FACULTAD DE ARTES, UNIVERSIDAD DE CHILE, SANTIAGO

Taught the seminar "Plasticidad en la Banda Sonora" for the School of Graduate Studies of the Faculty of Arts at Universidad de Chile. Most students were visual and sound artists that wanted to learn about the creative possibilities of digital audio workstations and sound processing. I taught them sound recording,

editing, and mixing techniques; as well as sound synthesis and processing fundamentals.

2000-2008 RECORDING AND MIXING ENGINEER. OJOPARLANTE SOUND RECORDING STUDIOS, SANTIAGO

DE CHILE

Designed, set up, and co-ran a recording facility for sound and music production.

Awards and funding

2023-2025 EXPLORE AND CREATE | RESEARCH-CREATION

CANADA COUNCIL FOR THE ARTS

2023-2025 FACULTY RESEARCH DEVELOPMENT PROGRAM

CONCORDIA UNIVERSITY

2022-2023 KNOWLEDGE MOBILIZATION GRANT | RESEARCH-CREATION

FONDS DE RECHERCHE DU QUÉBEC — SOCIÉTÉ ET CULTURE (FRQSC)

POSTDOCTORAL RESEARCH-CREATION GRANT 2020-2022

FONDS DE RECHERCHE DU QUÉBEC — SOCIÉTÉ ET CULTURE (FRQSC)

2019 BURSARY AWARD

ALLIANCE OF DIGITAL HUMANITIES ORGANIZATIONS

2017 BEST REVIEWER AWARD

18th INTERNATIONAL SOCIETY FOR MUSIC INFORMATION RETRIEVAL (ISMIR) CONFERENCE

2016 BECA EXCELENCIA ACADÉMICA

SOCIEDAD CHILENA DEL DERECHO DE AUTOR (SCD), CHILE

2011-2015 BICENTENNIAL DOCTORAL GRANT

COMISIÓN NACIONAL DE CIENCIA Y TECNOLOGÍA (CONICYT), CHILE

2011-2012 GRADUATE EXCELLENCE FELLOWSHIP

SCHULICH SCHOOL OF MUSIC, McGILL UNIVERSITY

2011 SEYMOUR SCHULICH SCHOLARSHIP

SCHULICH SCHOOL OF MUSIC, McGILL UNIVERSITY

McGILL PROVOST'S GRADUATE FELLOWSHIP 2009-2010

GRADUATE AND POSTDOCTORAL STUDIES OFFICE, McGILL UNIVERSITY

2009-2011 BICENTENNIAL MASTERS GRANT

COMISIÓN NACIONAL DE CIENCIA Y TECNOLOGÍA (CONICYT), CHILE

RESEARCH OUTPUT

Publications

2023

Vigliensoni, G., and R. Fiebrink. 2023. Steering latent audio models through interactive machine learning. In Proceedings of the 14th International Conference on Computational Creativity (ICCC2023).

Vigliensoni, G., and R. Fiebrink. 2023. Interacting with neural audio synthesis models through interactive machine learning. In The First International Workshop on eXplainable AI for the Arts at the ACM Creativity and Cognition Conference (XAIxArts2023).

Vigliensoni, G., and R. Fiebrink. 2023. Re*col*lec*tions: Sharing sonic memories through interactive machine learning and neural audio synthesis models In Creative AI track of the 37th Conference on Neural Information Processing Systems (NeurIPS 2023).

Shimizu, J., I. Olowe, T. Broad, G. **Vigliensoni**, P. Thattai, and R. Fiebrink. 2023. Interactive machine learning for generative models. In *Proceedings of the Machine Learning for Creativity and Design Workshop*, 37th Conference on Neural Information Processing Systems (NeurIPS 2023).

Fujinaga, I, and G. **Vigliensoni**. 2023. Optical music recognition workflow for medieval music manuscripts. In *Proceedings of the 5th International Workshop on Reading Music Systems (WoRMS 2023)*.

2022

Vigliensoni, G., P. Perry, and R. Fiebrink. 2021. A small-data mindset for generative AI creative work. In *Proceedings of the Generative AI and HCI - Conference on Human Factors in Computing Systems Workshop (CHI2022)*. doi: https://doi.org/10.5281/zenodo.7086327.

Vigliensoni, G., L. McCallum, E. Maestre, and R. Fiebrink. 2022. R-VAE: Live latent space drum rhythm generation from minimal-size datasets. *Journal of Creative Music Systems* 1(1). doi: https://doi.org/10.5920/jcms.902.

2021

Vigliensoni, G., E. de Luca, and I. Fujinaga. 2021. Chapter 6: Repertoire: Neume Notation. In *Music Encoding Initiative Guidelines* edited by J. Kepper et al.

2020

Vigliensoni, G., L. McCallum, E. Maestre, and R. Fiebrink. 2020. Generation and visualization of rhythmic latent spaces. In *Proceedings of the 2020 Joint Conference on AI Music Creativity*. doi: https://doi.org/10.5281/zenodo.4285422.

Vigliensoni, G., L. McCallum, and R. Fiebrink. 2020. Creating latent spaces for modern music genre rhythms using minimal training data. In *Proceedings of the International Conference on Computational Creativity (ICCC'20)*. doi: https://doi.org/10.5281/zenodo.7415792.

Vigliensoni, G., E. Maestre, and R. Fiebrink. 2020. Web-based dynamic visualization of rhythmic latent space. In *Proceedings of the Sound, Image and Interaction Design Symposium (SIIDS2020)*. doi: https://doi:10.5281/zenodo.7438305.

Regimbal, J., G. **Vigliensoni**, C. Hutnik, and I. Fujinaga. 2020. IIIF-based lyric and neume editor for square-notation manuscripts. In *Proceedings of the Music Encoding Conference*.

2019

Fujinaga, I., and G. **Vigliensoni**. 2019. The art of teaching computers: The SIMSSA optical music recognition workflow system. In *Proceedings of the 27th European Signal Processing Conference*.

Vigliensoni, G., A. Daigle, E. Liu, J. Calvo-Zaragoza, J. Regimbal, M. A. Nguyen, N. Baxter, Z. McLennan, and I. Fujinaga. 2019. Overcoming the challenges of optical music recognition of Early Music with machine learning. *Digital Humanities Conference* 2019.

Vigliensoni, G., A. Daigle, E. Liu, J. Calvo-Zaragoza, J. Regimbal, M. A. Nguyen, N. Baxter, Z. McLennan, and I. Fujinaga. 2019. From image to encoding: Full optical music recognition of Medieval and Renaissance music. *Music Encoding Conference 2019*.

2018

Vigliensoni, G., J. Calvo-Zaragoza, and I. Fujinaga. 2018. Developing an environment for teaching computers to read music. In *Proceedings of 1st International Workshop on Reading Music Systems*.

Castellanos, F., J. Calvo-Zaragoza, G. **Vigliensoni**, and I. Fujinaga. 2018. Document analysis of music score images with selectional autoencoders. In *Proceedings of the 19th International Society for Music Information Retrieval Conference*.

Nápoles, N., G. **Vigliensoni**, and I. Fujinaga. 2018. Encoding matters. In *Proceedings of the 5th International Conference on Digital Libraries for Musicology*.

Calvo-Zaragoza, J., F. Castellanos, G. **Vigliensoni**, and I. Fujinaga. 2018. Deep neural networks for document processing of music score images. *Applied Sciences*, 8(5).

Vigliensoni, G., J. Calvo-Zaragoza, and I. Fujinaga. 2018. An environment for machine pedagogy: Learning how to teach computers to read music. In *Proceedings of the Intelligent Music Interfaces for Listening and Creation workshop*.

2017

Vigliensoni, G., D. Romblom, M. P. Verge, and C. Guastavino. 2017. Perceptual evaluation of a virtual acoustic room model. *The Journal of the Acoustical Society of America* 142(4).

Vigliensoni, G. 2017. Evaluating the performance improvement of a music recommendation model by using user-centric features. PhD dissertation. McGill University.

Vigliensoni, G. and I. Fujinaga. 2017. The music listening histories dataset. In *Proceedings of the 18th International Society for Music Information Retrieval Conference*. doi: https://doi.org/10.5281/zenodo.1417499.

Calvo-Zaragoza, J., G. **Vigliensoni**, and I. Fujinaga. 2017. One-step detection of background, staff lines, and symbols in medieval music manuscripts with convolutional neural networks. In *Proceedings of the 18th International Society for Music Information Retrieval Conference*.

Barone, M., K. Dacosta, G. **Vigliensoni**, and M. Woolhouse. 2017. GRAIL: Database linking music metadata across artist, release, and track. In *Proceedings of the 4th International Workshop on Digital Libraries for Musicology*.

Calvo-Zaragoza, J., G. Vigliensoni, and I. Fujinaga. 2017. Music document layout analysis through machine learning and human feedback. In *Proceedings of the 12th IAPR International Workshop on Graphics Recognition*.

Saleh, Z., K. Zhang, J. Calvo-Zaragoza, G. **Vigliensoni**, and I. Fujinaga. 2017. Pixel.js: Web-based pixel classification correction platform for ground truth creation. In *Proceedings of the 12th IAPR International Workshop on Graphics Recognition*.

Calvo-Zaragoza, J., G. **Vigliensoni**, and I. Fujinaga. 2017. Pixelwise classification for music document analysis. In *Proceedings of the 2017 Seventh International Conference on Image Processing Theory, Tools, and Applications*.

Calvo-Zaragoza, J., G. Vigliensoni, and I. Fujinaga. 2017. Pixel-wise binarization of musical documents with Convolutional Neural Networks. In *Proceedings of the 15th IAPR Conference on Machine Vision Applications*.

Calvo-Zaragoza, J., G. **Vigliensoni**, and I. Fujinaga. 2017. Staff-line detection on greyscale images with pixel classification. In *Proceedings of the 8th Iberian Conference on Pattern Recognition and Image Analysis*.

Barone, M., K. Dacosta, G. **Vigliensoni**, and M. Woolhouse. 2017. GRAIL: A general recorded audio identity linker. Late breaking session 17th International Society for Music Information Retrieval Conference.

Calvo-Zaragoza, J., G. **Vigliensoni**, and I. Fujinaga. 2017. A unified approach towards automatic recognition of heterogeneous music documents. In *Proceedings of the Music Encoding Conference*.

Calvo-Zaragoza, J., G. **Vigliensoni**, and I. Fujinaga. 2017. A machine learning framework for the categorization of elements in images of musical documents. In *Proceedings of the Third International Conference on Technologies for Music Notation and Representation*.

2016

Vigliensoni, G. and I. Fujinaga. 2016. Automatic music recommendation systems: Do demographic, profiling, and contextual features improve their performance? In *Proceedings of the 17th International Society for Music Information Retrieval Conference*. doi: https://doi.org/10.5281/zenodo.1417073.

Calvo-Zaragoza, J., G. **Vigliensoni**, and I. Fujinaga. 2016. Staff-line detection on greyscale images with pixel classification. Late breaking session 17th International Society for Music Information Retrieval Conference.

Calvo-Zaragoza, J., G. Vigliensoni, and I. Fujinaga. 2016. Document analysis for music scores via machine learning. 3rd International Digital Libraries for Musicology workshop.

2015

Fujinaga, I., G. **Vigliensoni**, and H. Knox. 2015. The making of a computerized harpsichord for analysis and training. *International Symposium on Performance Science*.

Barone, M., K. Dacosta, G. **Vigliensoni**, and M. Woolhouse. 2015. GRAIL: A music identity space collection and API. Late breaking session 16th International Society for Music Information Retrieval Conference.

2014

Vigliensoni, G., and I. Fujinaga. 2014. Time-shift normalization and listener profiling in a large dataset of music listening histories. *Fourth annual seminar on cognitively based music informatics research.*

Vigliensoni, G., and I. Fujinaga. 2014. Identifying time zones in a large dataset of music listening logs. In *Proceedings of the International Workshop on Social Media Retrieval and Analysis*.

2013

Vigliensoni, G., J. A. Burgoyne, and I. Fujinaga. 2013. Musicbrainz for the world: the Chilean experience. In *Proceedings of the International Society for Music Information Retrieval Conference*.

Vigliensoni, G., G. Burlet, and I Fujinaga. 2013. Optical measure recognition in common music notation. In *Proceedings of the International Society for Music Information Retrieval Conference*.

2012

Vigliensoni, G., and M. Wanderley. 2012. A quantitative comparison of position trackers for the development of a touch-less musical interface. In *Proceedings of the New Interfaces for Musical Expression Conference*.

Hankinson, A., J. A. Burgoyne, G. **Vigliensoni**, A. Porter, J. Thompson, W. Liu, R. Chiu, and I. Fujinaga. 2012. Digital document image retrieval using optical music recognition. In *Proceedings of the International Society for Music Information Retrieval Conference*.

Hankinson, A., J. A. Burgoyne, G. **Vigliensoni**, and I. Fujinaga. 2012. Creating a large-scale searchable digital collection from printed music materials. In *Proceedings of Advances in Music Information Research*.

2011

Vigliensoni, G. 2011. Touch-less gestural control of concatenative sound synthesis. Master's thesis, McGill University.

Vigliensoni, G., J. A. Burgoyne, A. Hankinson, and I. Fujinaga. 2011. Automatic pitch detection in printed square notation. In *Proceedings of the International Society for Music Information Retrieval Conference*.

Hankinson, A., G. **Vigliensoni**, J. A. Burgoyne, and I. Fujinaga. 2011. New tools for optical chant recognition. *International Association of Music Libraries Conference*. Dublin, Ireland.

Burgoyne, J. A., R. Chiu, G. **Vigliensoni**, A. Hankinson, J. Cumming, and I. Fujinaga. 2011. Creating a fully-searchable edition of the Liber Usualis. *Medieval and Renaissance Music Conference*. Barcelona, España.

2010

Vigliensoni, G., and M. Wanderley. 2010. Soundcatcher: Explorations in audio-looping and time-freezing using an open-air gestural controller. In *Proceedings of the International Computer Music Conference*.

McKay, C., J. A. Burgoyne, J. Hockman, J. B. L. Smith, G. **Vigliensoni**, and I. Fujinaga. 2010. Evaluating the performance of lyrical features relative to and in combination with audio, symbolic and cultural features. In *Proceedings of the International Society for Music Information Retrieval Conference*.

Vigliensoni, G., C. McKay, and I. Fujinaga. 2010. Using jWebMiner 2.0 to improve music classification performance by combining different types of features mined from the web. In *Proceedings of the International Society for Music Information Retrieval Conference*.

Datasets

The Music Listening Histories Dataset (MLHD). 2017. Vigliensoni, G., and I. Fujinaga.

Music Recommendation Dataset (KGRec-music). 2016. Oramas, S., V. C. Ostuni, and G. **Vigliensoni**. Licensed under Creative Commons CC BY-NC 3.0, except 3rd party data.

Sound Recommendation Dataset (KGRec-sound). 2016. Oramas, S., V. C. Ostuni, and G. **Vigliensoni**. Licensed under Creative Commons CC BY-NC 3.0, except 3rd party data.

Invited talks, workshops, presentations, panels, and posters

February, 2024	Workshop	Music AI workshop. 1st Kilele Summit Symposium on Music Technology & Innovation in East Africa. With Philippe Pasquier. Nairobi, Kenya
November, 2023	Presentation	Exploring the affordances of AI/ML in creative practice with sound and music. Human, Animal, Machine. Media Studies, University of Toronto.
November, 2023	Presentation	Creative opportunities, affordances, and omissions in sound and music making with AI. Discursive Design Research I. Faculty of Fine Arts. Concordia University.
June, 2023	Presentation	Steering latent audio models through interactive machine learning. 14th International Conference on Computational Creativity (ICCC2023). Waterloo, ON.
June, 2023	Panel	Interacting with neural audio synthesis models through interactive machine learning. The First International Workshop on eXplainable AI for the Arts at the ACM Creativity and Cognition Conference 2023 (XAIxArts2023). Online.
March, 2023	Presentation	Creative opportunities in sound- and music-making through machine learning. Computer Music Projects. Faculty of Arts and Social Sciences. Carleton University. Ottawa, ON. Online.
October, 2022	Workshop	Materia y memoria: Taller de práctica creativa con música, sonido, e inteligencia artificial. Museo de la Memoria y los Derechos Humanos. Santiago, Chile.

October, 2022	Artist talk	Clastic music: Modelamiento rítmico y creación musical con espacios latentes. <i>Departamento de Sonido</i> . Facultad de Artes, Universidad de Chile. Santiago, Chile.
September, 2022	Artist talk	Clastic music: Modelamiento rítmico y creación musical con espacios latentes. <i>Visiones Sonoras 18.</i> Centro Mexicano para la Música y las Artes Sonoras (CMMAS). Morelia, México.
September, 2022	Seminar	Rhythm modelling and music making with latent spaces. Seminar series Centre for Interdisciplinary Research in Music Media and Technology. Montréal, QC.
Agosto, 2022	Panel	Materia y memoria. Práctica artística sonora y las posibilidades creativas de la inteligencia artíficial. Museo de la Memoria y los Derechos Humanos. Santiago, Chile. Online.
July, 2022	Seminar	Clastic Music: From rhythmic latent spaces to a web-based music release. <i>Centre for Digital Music Seminar Series</i> , School of Electronic Engineering and Computer Science, Queen Mary University. London, UK.
July, 2022	Seminar	Music making with generative AI. <i>Creative Computing Institute.</i> University of the Arts London. London, UK.
April-May, 2022	Workshop	Interactive machine learning for musicians and artists workshop. Eastern Bloc. Montréal, QC.
April, 2022	Workshop	Introduction to machine learning for creative practice workshop. <i>Milieux Institute.</i> Montréal, QC.
November, 2021	Presentation	Sharing a pulse: Long-distance participation in the Chilean uprising through a live gestural interface. <i>Echoes of a Distance: Music, Protest and Community in Confined Times.</i> McGill Institute for the Public Life of Arts & Ideas Colloquium. Montréal, QC.
November, 2021	Presentation	Modelling of contemporary music genre rhythms with R-VAE. <i>Research workshop.</i> Department of Computing, Goldsmiths University of London, London, UK.
November, 2021	Artist talk	R-VAE: Exploration and visualization of rhythmic latent spaces. 1st Center for Sound, Technology and Culture Meeting. Goldsmiths University of London, London, UK.
October, 2021	Presentation	Clastic music: From rhythmic latent spaces to a web-based music release. <i>PG-Research meeting</i> . University of the Arts. London, UK.
July, 2021	Panel	Science and computer music: From natural algorithms to generative pieces. <i>International Computer Music Conference 2021</i> . Santiago, Chile. Online.
June, 2021	Artist talk	Música y creatividad digital. Festival de Innovación Social Capital Circular Aysén Patagonia 2021. Aysén, Chile. Online.
June, 2021	Artist talk	Lenguaje de máquinas. 50 Conversatorio Mala Memoria. Santiago, Chile. Online.
October, 2020	Artist talk	Telematic awakening: Participating in the 2019 Chilean uprising through a live gestural interface. 26th International Symposium on Electronic Art. Montréal, QC. Online.
October, 2020	Presentation	Generation and visualization of rhythmic latent spaces. 2020 Joint Conference on AI Music Creativity. Stockholm, Sweden. Online.
September, 2020	Workshop	Interactive machine learning using Wekinator. MUTEK Forum at the 21st International Festival of Digital Creativity and Electronic Music. Montréal, QC. Online.
September, 2020	Presentation	Creating latent spaces for modern music genre rhythms using minimal training data. International Conference on Computational Creativity (ICCC'20). Coimbra, Portugal. Online.
September, 2020	Presentation	Web-based dynamic visualization of rhythmic latent space. Sound, Image and Interaction Design Symposium (SIIDS2020). Madeira, Portugal. Online.
September, 2019	Presentation	Cantus Ultimus: OMR for Gothic notation and McGill nanuscripts. 1st Digital Analysis of Chant Transmission workshop. Montréal, QC.
July, 2019	Presentation	Neon.js: Neume Editor Online demo. Digital Humanities Musicology Study Group meeting. Utrecht, Netherlands.
December, 2018	Presentation	Pixel.js: a web-based application for pixel classification and correction. SIMSSA Workshop XVII. Centre for Interdisciplinary Research in Music Media and Technology. Montréal, QC.

March, 2018	Presentation	An environment for machine pedagogy: Learning how to teach computers to read music. Intelligent Music Interfaces for Listening and Creation workshop. Tokyo, Japan.
March, 2018	Workshop	$Insertions\ into\ mediatic\ circuits\ (with\ Jeronimo\ Barbosa).\ Eastern\ Bloc,\ Montr\'eal,\ QC.$
October, 2017	Presentation	Machine learning for everyone. Communications Department, Concordia University, Montréal, QC.
August, 2017	Presentation	Infrastructure for optical music recognition. SIMSSA Workshop XII. Schulich School of Music, McGill University, Montréal, QC.
May, 2017	Poster	Reconnaissance optique de la musique basée sur l'apprentissage machine à grande échelle pour des données de partitions musicales. 85e Congrès de l'Association Francophone Pour Le Savoir. Montréal, QC.
April, 2017	Presentation	Machine learning for artists. Speculative life cluster. Milieux Institute for Arts, Culture and Technology at Concordia University, Montréal, QC.
March, 2017	Presentation	Discovering music listening patterns in last.fm scrobble data. Music Information, Retrieval, Acquisition, Preservation graduate seminar. Schulich School of Music, McGill University, Montréal, QC.
October, 2016	Presentation	Automatic music recommendation systems: do demographic, profiling, and contextual features improve their performance?. User-centric Music Information Retrieval graduate seminar. School of Information Studies, McGill University, Montréal, QC.
August, 2016	Poster	Automatic music recommendation systems: do demographic, profiling, and contextual features improve their performance? 17th International Society for Music Information Retrieval Conference. New York City, NY.
February, 2016	Presentation	Automatic music recommendation systems: do demographic, profiling, and contextual features improve their performance? Doctoral colloquium. Schulich School of Music, McGill University, Montréal, QC.
October, 2015	Presentation	Discovering music listening patterns in a large dataset of music listening logs. User-centric Music Information Retrieval graduate seminar. School of Information Studies, McGill University, Montréal, QC.
May, 2015	Presentation	An automated system for performing a figured bass realization with a live performer in real time. <i>International Conference of the Historical Keyboard Society of North America</i> , Montréal, QC.
March, 2015	Presentation	Discovering music listening patterns in a large dataset of music listening logs. Music Information, Retrieval, Acquisition, Preservation graduate seminar. Department of Music Research, McGill University, Montréal, QC.
October, 2014	Presentation	Discovering music listening patterns in a large dataset of music listening logs. Seminar in Interdisciplinary Studies I. English Department, Concordia University, Montréal, QC.
October, 2014	Presentation	La música no se detiene: En la búsqueda de la innovación en la nueva economía de la música. Segundo Festival Internacional de Innovación Social. Santiago, Chile.
October, 2014	Presentation	La música no se detiene: En la búsqueda de la innovación en la nueva economía de la música. Departamento de Música y Sonología, Facultad de Artes, Universidad de Chile.
October, 2014	Poster	Time-shift normalization and listener profiling in a large dataset of music listening histories. Fourth Annual Seminar on Cognitively Based Music Informatics Research. Toronto, ON.
July, 2014	Poster	Identifying time zones in a large dataset of music listening logs. International Workshop on Social Media Retrieval and Analysis. Gold Coast, Australia.
November, 2013	Poster	Musicbrainz for the world: The Chilean experience. 14th International Society for Music Information Retrieval Conference. Curitiba, Brazil.
November, 2013	Poster	Optical measure recognition in common music notation. 14th International Society for Music Information Retrieval Conference. Curitiba, Brazil.
May, 2012	Presentation	A quantitative comparison of position trackers for the development of a touch-less musical interface. 12th International Conference on New Interfaces for Musical Expression. Ann-Arbor, MI.
October, 2011	Poster	Automatic pitch detection in printed square notation. 12th International Society for Music Information Retrieval Conference. Miami, FL.

March, 2011	Presentation	Training Gamera, CIRMMT Axis 3 Workshop on Optical Music Recognition. Center for Interdisciplinary Research in Music, Media and Technology. Montréal, QC.
October, 2010	Presentation	Using WebMiner 2.0 to improve music classification performance by combining different types of features mined from the web. CIRMMT Axis 3 Workshop on music information retrieval and cultural metadata. Center for Interdisciplinary Research in Music, Media and Technology. Montréal, QC, Canada.
August, 2010	Poster	Using jWebMiner 2.0 to improve music classification performance by combining different types of features mined from the web. 11th International Society for Music Information Retrieval Conference. Utrecht, Netherlands.
June, 2010	Presentation	Soundcatcher: Explorations in audio-looping and time-freezing using an open-air gestural controller. 2010 International Computer Music Conference. New York, NY.
June, 2010	Workshop	Music information retrieval for composition and performance. 2010 International Computer Music Conference workshop. With Ben Lacker and Rebecca Fiebrink. Harvest Works. New York, NY.
May, 2010	Poster and Concert	SoundCatcher: Explorations in audio-looping and time-freezing using an open-air gestural controller. CIRMMT Student Symposium 2010. Center for Interdisciplinary Research in Music, Media and Technology. Montréal, QC.

MUSIC

Projects

2014-PRESENT	COMPOSER & PERFORMER, VIGLIENSONI	

Composer, producer, and live performer for the solo project vigliensoni.

2001–2009 COMPOSER & PERFORMER, MISMOS

Composer, producer, and live performer for the electroacoustic band Mismos.

2003–2005 PERFORMER, ELECTRODOMÉSTICOS

Keyboard player of the band Electrodomésticos.

1991–1998, 2012–2014 COMPOSER & PERFORMER, LUCYBELL

Founding member and composer of the band Lucybell. Earned gold and double platinum albums and toured extensively in Chile, México, Perú, Argentina, Colombia, Ecuador, Canada, and United States.

Awards

2023 BEST ELECTRONIC MUSIC ARTIST. CLASTIC MUSIC by VIGLIENSONI

PREMIO PULSAR. SOCIEDAD CHILENA DEL DERECHO DE AUTOR (SCD)

1998 GOLD ALBUM, *LUCYBELL* by LUCYBELL

INTERNATIONAL FEDERATION OF THE PHONOGRAPHIC INDUSTRY (IFPI)

1997 PLATINUM ALBUM. VIAJAR by LUCYBELL

INTERNATIONAL FEDERATION OF THE PHONOGRAPHIC INDUSTRY (IFPI)

1996 PLATINUM ALBUM. PECES by LUCYBELL.

INTERNATIONAL FEDERATION OF THE PHONOGRAPHIC INDUSTRY (IFPI)

Music releases (last 10 years)

2022 VIGLIENSONI + CMD – SCINTILLATION (Dance Across Borders DAB003)

2022 VIGLIENSONI – CLASTIC MUSIC (Chez.Kito.Kat Records CKK085)

2021 TRAGATIERRA – OLA DE CALOR/TRAGATIERRA (Santiago Récords)

2018	$\textbf{VIGLIENSONI} - \text{TEMPEST} \ (\text{A Magical Substance}, \ \text{AMS007})$
2018	VIGLIENSONI - MICHAEL SAVED US ALL (No problem at apes, NOP079)
2016	VIGLIENSONI – IMÁGENES PAGANAS (A Magical Substance, AMS005)
2015	$\label{eq:VIGLIENSONI} \textbf{VIGLIENSONI} - \textbf{J} \textbf{A} \textbf{G} \textbf{U} \textbf{A} \textbf{R} \; (\textbf{Clang, clang} 029)$
2015	VIGLIENSONI – TIENE QUE PARAR AHI (A Magical Substance, AMS003)
2014	VIGLIENSONI – LE RÈGNE ANIMAL (A Magical Substance)
2013	LUCYBELL - PODEROSO (Independent, 00000000101010)

Performance (1	cet 10 years)
February, 2024	Vigliensoni. Kilele Festival. The Mist. Nairobi, Kenya.
May, 2023	Vigliensoni. Armable #1. Montréal, QC
February, 2023	Holy Waters. Transmediale 2023. Sound design for installation by Antonia Hernández. Berlin, Germany.
November, 2022	Vigliensoni b2b CMD. Montréal dances across borders Vol. 3 release. Montréal, QC.
November, 2022	Vigliensoni. EPA! #5. Santiago, Chile
October, 2022	Alejandra Pérez, Gabriel Vigliensoni, Kamila Govorcin. Stecher Sound Immersive Lab. Santiago, Chile
October, 2022	Vigliensoni + Tragatierra. Club Horizonte. Santiago, Chile
October, 2022	Vigliensoni. Madrid 1141. Santiago, Chile.
September, 2022	Vigliensoni. 18 Festival Internacional de Música y Nuevas Tecnologías Visiones Sonoras 2022. Centro Mexicano para la Música y las Artes Sonoras. Morelia, México.
September, 2022	Vigliensoni. 316Centro. Mexico City, México.
June, 2022	Vigliensoni. Analove my log. L'Aerogare. Metz, France.
June, 2022	Vigliensoni. Clastic music. Iklectik. London, UK.
April, 2022	Vigliensoni. Analove my log. La Shop. Montréal, QC.
November, 2021	Vigliensoni. Rhythmic explorations in latent spaces. Live performance at Iklectik. London, UK.
August, 2021	Vigliensoni. Clastic Music. Live performance at the 22nd International Festival of Digital Creativity and Electronic Music MUTEK 2021. Montréal, QC.
May, 2021	$\label{thm:condition} \mbox{Vigliensoni. Clastic Music. Telematic performance at $\it Campos Futuros \mid Universidad Andr\'es Bello. Santiago, Chile. Online.}$
September, 2020	Vigliensoni. Clastic Music. Live performance at the 21st International Festival of Digital Creativity and Electronic Music MUTEK 2020. Montréal, QC.
July, 2020	Vigliensoni. RELS-Rhythmic explorations in latent spaces. Telematic performance at the <i>Network Music Festival</i> . London, UK. Online.
July, 2020	Vigliensoni and Louis McCallum. LoverDre84. Telematic performance at the Network Music Festival. Online.
March, 2020	$\label{lem:control} \begin{tabular}{ll} Vigliensoni. RELS-Rhythmic explorations of latent spaces. Live performance at the Montréal Institute for Learning Algorithms (MILA). Montréal, QC. \\ \end{tabular}$
February, 2020	Vigliensoni. Tempest. Live performance at Earth Kitchen. London, UK.
January, 2020	Mismos. Live performance at Casa República. Santiago, Chile.
January, 2020	Vigliensoni. Live performance at Estudio de Campo. Santiago, Chile.
December, 2019	Vigliensoni. Live performance at Noa-Noa. Santiago, Chile.
February, 2019	Vigliensoni. Live performance at Le National. Montréal, QC.

February, 2019 Vigliensoni. Live performance at The Opera House. Toronto, ON. October, 2018 Vigliensoni. Live performance at Théâtre Fairmount. Montréal, QC. September, 2018 Vigliensoni. Live performance at Centre Canadien d'Architecture. Montréal, QC. August, 2018 Vigliensoni. Live performance at the 19th International Festival of Digital Creativity and Electronic Music | MUTEK 2018. Montréal, QC. July, 2013 July, 2013 Lucybell. Universidad Federico Santa María. Valparaíso, Chile. Lucybell. Teatro Municipal. Temuco, Chile. September, 2012 Lucybell. Cabaret du Mile End. Montréal, QC. September, 2012 Lucybell. Teatro Metropolitan. México City, México. Agosto, 2012 Lucybell. Centro María Angola. Lima, Perú. July, 2012 Lucybell. Centro de Eventos Enjoy. Los Andes. Chile. June, 2012 Lucybell. Arena Puerto Montt. Puerto Montt. Chile. June, 2012 Lucybell. Teatro Caupolicán. Santiago, Chile.

Other music credits (last 10 years) Roles: Performer | Music producer | Audio engineer

2021	MONO O ESTÉREO – IGUALES O DISTINTOS Vigliensoni Phasing Mix (Pueblo Nuevo, PN191) (M A)
2020	FRANCISCO PINTO - CRYSTAL Vigliensoni Clear Version (Pueblo Nuevo, PN158) (M A)
2019	DEDOSMUERTOS – LOBO Vowel Remix (Independent) (M A)
2017	DEDOSMUERTOS - DEDOSMUERTOS (Discos Pendiente, DPLP47) (P M)
2016	SILVIO PAREDES – POPTRONICS REMIXES (Clang) (P \mid M \mid A)
2015	$\textbf{EQUIPO} - \text{SIMULACIONES REVISITED (Clang)} \left(\begin{array}{c c} \textbf{P} & \textbf{M} & \textbf{A} \end{array} \right)$
2014	FRANCISCO GONZÁLEZ – ALMA PÚRPURA (Haiku Records) (P)

Art residencies

October, 2022 **STECHER SOUND IMMERSIVE LAB.** SANTIAGO, CHILE March, 2020 **MUTEK AI ART LAB.** MONTREAL, QC, CANADA

COMMUNITY

Conference organization, program committees, peer reviewing, and mentoring

2020-PRESENT	Program committee member, DLfM
2020	Peer reviewer, Network Music Festival
2020	$Music\ track\ co-chair,\ International\ Society\ for\ Music\ Information\ Retrieval\ (ISMIR)\ 2020\ conference$
2020	Virtual conference organization committee member, ISMIR 2020
2020	Proceedings chair, Digital Libraries for Musicology (DLfM) conference
2019-PRESENT	$Mentor, Women in \ music \ information \ retrieval \ (WiMIR) \ mentoring \ program$
2019-PRESENT	Peer reviewer, MDPI Applied Sciences journal
2019-PRESENT	Peer reviewer, Transactions of the International Society for Music Information Retrieval (TISMIR) journal

2019-PRESENT Program committee member, International Workshop on Reading Music Systems Peer reviewer, Iberian Conference on Pattern Recognition and Image Analysis 2019-PRESENT Peer reviewer, CIRMMT-OICRM-BRAMS Student Symposium 2019-PRESENT 2018-PRESENT Program committee member, meta-reviewer, ISMIR 2018-PRESENT Peer reviewer, PLOS One Open Access journal 2018-2019 Program committee member, Intelligent Music Interfaces for Listening and Creation workshop 2016-PRESENT Peer reviewer, Journal of the Association for Information Science and Technology 2015-PRESENT Peer reviewer, ISMIR 2007-2008 Peer reviewer, AcreditaUC. Comisión Nacional de Acreditación, Chile

2010-2020

2009-2011

Affiliations	
2023-PRESENT	APPLIED AI INSTITUTE. CANADA Member
2023-PRESENT	LEPARC CLUSTER. MILIEUX INSTITUTE, CANADA Member
2023-PRESENT	DIGITAL RESEARCH ALLIANCE OF CANADA. CANADA Faculty member
2021-PRESENT	CENTRE FOR INTERDISCIPLINARY RESEARCH IN MUSIC MEDIA AND TECHNOLOGY. CANADA Collaborator
2021-PRESENT	CANADA COUNCIL FOR THE ARTS. CANADA Profiles approved: Music professional, Composer or Sound creator, Musician
2020-2022	$\textbf{MIMIC PROJECT.} \ \ \text{GOLDSMITHS UNIVERSITY OF LONDON, UNIVERSITY OF THE ARTS LONDON, UK Visiting researcher}$
2020-2022	EMBODIED AUDIOVISUAL INTERACTION GROUP. GOLDSMITHS UNIVERSITY OF LONDON, UK Visiting researcher
2019-2020	DISTRIBUTED DIGITAL MUSIC ARCHIVES & LIBRARIES LAB. MCGILL UNIVERSITY, CANADA Research associate
2017-2019	SPECULATIVE LIFE CLUSTER. CONCORDIA UNIVERSITY, CANADA Student member
2013-2017	ASSOCIATION FOR COMPUTING MACHINERY (ACM) Full member
2011-2017	INTERNATIONAL COMPUTER MUSIC ASSOCIATION (ICMA) Student member
2010-PRESENT	INTERNATIONAL SOCIETY FOR MUSIC INFORMATION RETRIEVAL (ISMIR) Member

CENTRE FOR INTERDISCIPLINARY RESEARCH IN MUSIC MEDIA AND TECHNOLOGY. CANADA

INPUT DEVICES AND MUSIC INTERACTION LAB. MCGILL UNIVERSITY, CANADA

SOCIEDAD CHILENA DEL DERECHO DE AUTOR (SCD), CHILE 1996-PRESENT

Active member

Student member

Graduate student

LANGUAGE SKILLS

ENGLISH Proficient (C2)

Upper intermediate (B2) Native FRENCH

SPANISH