#### **Curriculum Vitae**

#### Personal details

Full name (Given Names and Surnames):	Juan Ignacio Mendoza Garay
Sex:	male
Date and Place of Birth:	1 <sup>st.</sup> January, 1978 in Santiago de Chile
Citizenship:	chilean
Residence:	Finland
Website:	https://juigmend.github.io/
Software:	https://github.com/juigmend?tab=repositories
ORCID:	0000-0003-3996-7537
Date of the CV:	11 July, 2024

### **Degrees**

Doctor of Philosophy:	2023 - University of Jyväskylä - Musicology	
	https://www.jyu.fi/en/study-with-us/doctoral-programme-of-the-department-of-music-art-	
	and-culture-studies-spring-2024	
Master of Arts:	2014 - University of Jyväskylä - Music, Mind and Technology	
	https://www.jyu.fi/hytk/fi/laitokset/mutku/en/studies/mmt/Courses/mmt	
Professional Certificate:	2005 - Instituto Profesional Escuela Moderna - Composición y Arreglos de Música Popular	
	(Composition and Arrangements of Popular Music)	
	https://emoderna.cl/carreras/composicion/	

#### Other education and skills

Computer programming experience:

- Python, Matlab, and Octave: Linear algebra, statistics, machine learning, music Information retrieval, motion analysis, signal processing, data scraping, data visualisation.
- Pure Data and Max: Prototyping, user interfaces, video tracking, motion capture, machine learning; audio synthesis, recording, processing and playback; networking (e.g., UDP, OSC).
- HTML (with CSS and Javascript). Flask: Website development.
- SQL: Relational databases.

Software end-user experience:

- Protools, Digital Performer, Cubase, Audacity and other software for recording and processing digital audio.
- Music notation software Sibelius and Finale.
- MS Office, Libre Office, LaTeX and other word processing, typesetting, spreadsheet, and related software.

## Other technical skills:

- Motion Capture: Accelerometry, video tracking, infrared marker-based optical motion capture (e.g., Qualisys).
- Sound recording in studio and field.
- Musical instruments: Computer, electric bass, functional guitar and keyboards, and elementary percussion.

Practical Defensive Fighting System (civilian self-defence) and Escrima (traditional martial art from Philippines). Instructor Kai Koskinen, Aikiken dojo (Finland), <a href="https://www.aikiken.fi">www.aikiken.fi</a>. September 2016 to date.

Machine Learning, 10 weeks course by prof. Andrew Ng (Stanford University), Coursera, online learning. October 2013 to January, 2014.

Composition workshops "Copiu" and "Yareta" by composer Luca Belcastro (Italy), Universidad de Chile, Universidad Arcis, Instituto Profesional Escuela Moderna de Música, Instituto Projazz, Instituto Arcos (universities and other music schools in Santiago, Chile). August 17 to 27, 2010.

Ai-Maako festival 2009 in Valdivia, Chile: - Lectures by composers Elsa Justel (Argentina) and Annette Vande Gorne (Belgium); Multichannel Sound Systems - Carlos Irarrázabal (Chile); Introduction to Software Programming for Live Electronics Music - Dr. Miller Puckette (USA), Dr. Cort Lippe (USA), Dr. Zack Settel (Canada). October, 2009.

Composition and Mastering for Electroacoustic Music - Dr. Federico Schumacher. Santiago, Chile. July - August, 2008. Ai-Maako festival 2007 in Santiago, Chile, academic activities at universities in Santiago de Chile: Speed Composition - Ake Parmerud (Sweden) – LATEM/PUC; Composers Desktop Project - Trevor Wishart (United Kingdom) – LAIM/ARCIS; Composition - Lecture - Joâo Pedro Oliveira (Portugal) – ALMA/UDP. October, 2007.

IRCAM software tools by Eric Daubresse (IRCAM/France). Pontificia Universidad Católica de Chile (university in Santiago, Chile). July, 2006.

"Introducción a SuperCollider 3" (Introduction to Supercollider 3 - workshop) by Félix Lazo – Laboratorio Arcis de Informática Musical (university computing facility), Santiago de Chile. May, 2006

Third Eye Orchestra workshop. Laptops ensemble - workshop by Hans Tannen (Germany); Circuit Bending - workshop by Joker Nies (Germany). Both within the "Transitio" festival of arts and new technologies in Ciudad de México, México. December, 2005

Short grant for studies in Mexico with Dr. Rodrigo Sigal. "Herramientas y Estrategias para la Composición en Música Electroacústica" (Tools and Strategies for Composition in Electroacoustic Music). Private lessons in Morelia and Ciudad de México, México. September 2005 to February 2006.

"Seminario de composición de música acusmática" (Acousmatic Music Composition - seminar) by Federico Shumacher - CMT Escuela de Música SCD (music school in Santiago de Chile). May, 2005.

Electroacoustic Music - Dr. Rodrigo Sigal (Mexico). Santiago de Chile. Years 2004 to 2005.

"Taller de relato" (Storytelling - workshop) by Prof. Carlos Flores - Escuela de Cine de Chile (Film Arts School in Santiago de Chile). Year 2004.

"Música para cine y TV" (Music for Film and TV) by composer Osvaldo Montes (Uruguay) - Andrea Films/ Escuela Moderna (music school in Santiago de Chile). Year 2004.

"Seminario de música electroacústica" (Electroacoustic Music - seminar) by Dr. Rodrigo Sigal (Mexico) - CMT Escuela de Música SCD (music school in Santiago de Chile). Year 2004.

"Taller de espacialización de música electroacústica" (Electroacoustic Music Spatialisation - workshop) by Prof. Federico Shumacher - Festival Internacional de Música Electroacústica de Santiago "Ai-Maako" (international electroacoustic music festival in Santiago de Chile). Year 2004.

Workshop of recorder contemporary techniques "In-ventando" by Carmen Troncoso - Escuela Moderna/Pontificia Universidad Católica de Chile (university in Santiago de Chile). Years 2003 and 2004.

Licenciatura en Artes con Mención en Sonido (BA in Audio Technology). 4 years programme. Universidad de Chile (university in Santiago de Chile). Years 1996 to 1999. Incomplete.

### Languages

Spanish (Native), English (C2), French (A2), Finnish (A2)

### Previous work experience

Development of software for machine learning of human motion – Tabula Rasa project (<u>www.parasense.fi</u>) Part-time. February to May of 2024.

Doctoral researcher – University of Jyväskylä, employment relationship: January to June of 2023, December of 2020, January of 2018 to July of 2019, January to December of 2017.

Teacher of Music Technology – University of Jyväskylä. Part-time. January to June of 2022, October to December of 2021, January to May of 2021.

"Investigación en Cognición Musical" (Research in Music Cognition). Funded by Fondo de la Música del Consejo Nacional para la Cultura y las Artes (Chilean government culture ministry). Part-time. 2014. CLP\$1.600.000 (€1700)

Fund-raiser and Manager for project "Educación de la Voz y Dirección Coral In Situ para Directores de Coros" (Vocal Training and Choral Conducting In Situ for Choral Conductors). Funded by Fondo de la Música del Consejo Nacional para la Cultura y las Artes (Chilean government culture ministry) and administered by Agrupación Coral de Los Rios. (Association of choirs of the Los Rios region in Chile). Part-time. Years 2013 and 2014. CLP\$14.994.829 (€15800)

Research assistant for investigation "The tactical resources of musical styles, instruments and Musicans" conducted by

Marko Aho. Computer assisted music analysis. Funded by Emil Aaltonen Foundation, at the Music Department, University of Jyväskylä. October to November, 2013.

Fund-raiser and manager for project "Formación en Competencias Para la Actividad Coral" (Formation in Skills for Choral Activity). Funded by Fondo de la Música del Consejo Nacional para la Cultura y las Artes (Chilean government culture ministry).- Agrupación Coral de Los Rios. (Association of choirs in Chile). October, 2012 to December, 2013.

Research assistant for music psychology investigation conducted by Suvi Saarikallio. Operator of motion capture, video

Research assistant for music psychology investigation conducted by Suvi Saarikallio. Operator of motion capture, video and audio recording equipment. - Music Department, University of Jyväskylä. April to June, 2013.

Lecturer. Short course "Taller Música para Medios Audiovisuales" (Workshop Music for Audiovisual Media) - Universidad Austral de Chile UACH (university in Valdivia, Chile). January 9 to 13, 2012

Lecturer of Counterpoint, Harmony and Composition for "Pedagogía en Artes, Mención Música" (pedagogy in arts, specialisation in music education) - Universidad de Los Lagos (university in Puerto Montt, Chile). Year 2011.

Project manager and teacher of Music Technology and Arrangements and Harmony for the course "Capacitación en

Artes Musicales para Profesionales de la Educación de la Región de Los Rios" (musical arts course aimed to teachers), - UACH (university in Valdivia, Chile). October 18, 2010 to June 15, 2011.

Guest at "Bienal Patagónica de Arte Sonoro 2010" (Patagonia Biennial of Sonic Arts). Guest speaker at conference "Composición Colectiva" ("Collective Music Composition"). San Martín de Los Andes, Argentina. March 24 to 26, 2010. School teacher (elementary and secondary), including instrumental practice and choir. 2009 to 2012.

Project manager and administrator of "The Composer Collective" (film scoring enterprise). 2008 to 2012.

Short Grant. Research on musical form. Composition of piece for guitar and tape. Funded by Fondo de la Música del Consejo Nacional para la Cultura y las Artes (Chilean government culture ministry). Morelia and Ciudad de México, México. September 2005 to February 2006.

Freelance teacher. Composition, audio technology, harmony, music theory and practice. Part-time. 2003 to 2012. Freelance composer. Produced music for film (<a href="https://www.imdb.com/name/nm3255768/">https://www.imdb.com/name/nm3255768/</a>), TV, theatre, art music and others, in different styles and for different ensambles such as orchestral, chamber, electroacoustic (acousmatic, live and mixed), popular, big-band, folk, electronica and others. Full-time and part-time. 2003 to 2014.

## Peer-reviewed publications

- Mendoza, J.I. (2023). *Mimetic relationships between bodily movement and musical structure: theory, measurement, and application.* JYU Dissertations, University of Jyväskylä, Finland. http://urn.fi/URN:ISBN:978-951-39-9799-1
- Mendoza, J.I. (2023). The Rearranger Ball: Delayed Gestural Control of Musical Sound using Online Unsupervised Temporal Segmentation. In *Proceedings of the International Conference on New Interfaces for Musical Expression*. https://nime.org/proc/nime2023\_19/index.html
- Thompson, M.R., Mendoza, J.I., Luck, G., & Vuoskoski, J.K. (2023). Relationships between Audio and Movement Features, and Perceived Emotions in Musical Performance. *Music and Science, 6*. <a href="https://doi.org/10.1177/20592043231177871">https://doi.org/10.1177/20592043231177871</a>
- Mendoza, J.I. (2022). Segmentation Boundaries in Accelerometer Data of Arm Motion Induced by Music: Online Computation and Perceptual Assessment. *Human Technology*, 18(3), 250–266. https://doi.org/10.14254/1795-6889.2022.18-3.4
- Mendoza, J.I., Burger, B., & Luck, G. (2022). Exploring Relations Between Big Five Personality Traits and Musical Emotions Embodied in Spontaneous Dance. *Psychology of Music*, *51*(4). https://doi.org/10.1177/03057356221135355
- Mendoza, J.I., Danso, A., Luck, G., Rantalainen, T., Palmberg., L, & Chastin, S. (2022). Musification of Accelerometry Data Towards Raising Awareness of Physical Activity. In *Proceedings of the Conference on Sonification of Health and Environmental Data*. <a href="https://doi.org/10.5281/zenodo.7243875">https://doi.org/10.5281/zenodo.7243875</a>
- Touizrar, M., Mendoza, J. I., & Thompson, M. R. (2022). Links between Embodiment and Perceived Brightness in Orchestral Music. In *Psychology and Music–Interdisciplinary Encounters, Conference Proceedings*, 17. https://www.fmu.bg.ac.rs/wp-content/uploads/2023/07/01-touizrar-et-al..pdf
- Mendoza, J.I. & Thompson, M.R. (2017). Modelling Perceived Segmentation of Bodily Gestures Induced by Music. In *Proceedings of the 25th Anniversary Conference of the European Society for the Cognitive Sciences of Music*. http://urn.fi/URN:NBN:fi:jyu-201711024121
- Mendoza, J.I., & Thompson, M.R. (2017). Gestural Agency in Human-Machine Musical Interaction. In *The Routledge companion to embodied music interaction* (pp. 412-419). New York, NY: Routledge. <a href="http://urn.fi/URN:NBN:fi:jyu-201801081081">http://urn.fi/URN:NBN:fi:jyu-201801081081</a>
- Thompson, M. R., & Mendoza, J. I. (2014). Review of New Perspectives in Music and Gesture. *Psychomusicology: Music, Mind and Brain,* 24 (4). p. 344-350. <a href="http://dx.doi.org/10.1037/pmu0000084">http://dx.doi.org/10.1037/pmu0000084</a>
- Mendoza, J. I. (2014). Self-report measurement of segmentation, mimesis and perceived emotions in acousmatic electroacoustic music. Master's thesis, University of Jyväskylä, Finland. http://urn.fi/URN:NBN:fi:jyu-201406192112

# Research funding and grants\*\*

Six-months grant for doctoral dissertation (13000 euro), Suomen Kulttuurirahasto. January, 2022.

One-year grant for doctoral dissertation (22000 euro), Tekniikan Edistämissäätiö. September, 2019.

One-year doctoral studies scholarship (19200 euro), University of Jyväskylä. January, 2016.

Three-months doctoral studies scholarship (4800 euro), University of Jyväskylä. January, 2015.

Three-months doctoral studies scholarship (3200 euro), University of Jyväskylä. November, 2014.

Scholarship for international degree students (1500 euro), University of Jyväskylä. December, 2013.

<sup>\*\*</sup> Only those awarded in Finland. Other funding under "Previous work experience".

# Teaching\*\*\*

Guest lectures, workshops, teaching assistance, and mentoring of master's degree students at the Department of Music, Art, and Culture Studies, University of Jyväskylä. 2015 to 2023

Semester-long course "Introduction to Music Technology". Teaching and development of content and material. University of Jyväskylä. Academic years 2021 and 2022. Co-taught 1 time online, taught alone 2 times hybrid.

# Other

2016-2020,2023: Organisation of outreach event "European Researcher's Night" at the Department of Music, Art, and Culture Studies, University of Jyväskylä.

<sup>\*\*\*</sup> Only activities in Finland. Other teaching under "Previous work experience".