

Carlos Jurado

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Brief

Acoustic Engineer, with proven success in running research projects as well as publishing scientific contributions in top-quartile Acoustics Journals. International research experience in top institutions. Proficient in signal analyses & processing, programming and design of experiments. Areas of focus: Psychological and physiological acoustics; low-frequency hearing and infrasound perception. Teaching experience in Acoustic Engineering. Music composer with intellectual property of several works.

Education

June 2011	PhD in Electrical and Electronic Engineering, Department of Electronic Systems, Aalborg University, Denmark.
June 2007	MSc. in Electronic and Electrical Engineering (Specialization in Acoustics; with distinction), Department of Electronic Systems, Aalborg University, Denmark.
Jan 2003	B.S.A in Acoustics Engineering (distinction), Facultad de Ingeniería, Universidad Austral de Chile, Chile.

Research Experience

Oct 2019-Present	Co-Director of Reseach project from Doctorand Juan Vizuete, Universidad de Málaga, Spain . Collaboration includes UCL Ear Institute, UK
April 2020-Sept 2021	Research Project Manager, <i>Neural correlates of the perception of infrasonic and low-frequency sound</i> , Universidad de Las Américas, Ecuador .
Oct 2019- Sept 2021	Research Project Manager, <i>Impact of infrasonic and low-frequency sound on high-frequency cochlear processing and hearing</i> , Universidad de Las Américas, Ecuador .
Aug 2018-Spet 2020	Research Project Manager, <i>Characterizing the human perception of amplitude fluctuating low-frequency sound</i> , Universidad de Las Américas, Ecuador .

- April 2017-Feb 2018 Research Associate, **University College London, UK.**
European-Commission funded Project *EARs II: Metrology for modern hearing assessment and protecting public health from emerging noise sources*, UK.
- Jan 2016-Dec 2017 Research Project Manager, *Characterizing the human perception of low-frequency sound*, **Universidad de Las Américas, Ecuador.**
- Mar 2015- Sept 2016 External Advisor to **NASA-funded Contractors** (Fidell Associates), Low-Frequency Detection Project. Quito, Ecuador.
- Sept 2007-June 2011 Doctoral Researcher, *Behavioral estimates of human frequency selectivity at low frequencies*, **Aalborg University, Denmark.**

Publications

- Feb 2022 The Spectral Extent of Phasic Suppression of Loudness and Distortion-Product Otoacoustic Emissions by Infrasound and Low-Frequency Tones, *Journal of the Association for Research in Otolaryngology*, Vol. 23(5), pp. 167–181.
- Jan 2022 Critical Repetition Rates for Perceptual Segregation of Time-Varying Auditory, Visual and Vibrotactile Stimulation, *Timing & Time Perception*, Vol. 10, pp. 122-141
- Jul 2021 The Lower Limit of Pitch Perception for Pure Tones and Low-Frequency Complex Sounds, *Archives of Acoustics* Vol. 46(3), pp. 459–469.
- Aug 2020 Dependency of threshold and loudness on sound duration at low and infrasonic frequencies, *Journal of the Acoustical Society of America*, Vol. 148, pp. 1030–1038.
- May 2020 Brain's Frequency Following Responses to Low-Frequency and Infrasound, *Archives of Acoustics* Vol. 45(2), pp. 313–319.
- Aug 2019 On the loudness of low-frequency sounds with fluctuating amplitudes, *The Journal of the Acoustical Society of America*, Vol. 146(2), pp. 1142-1149.
- Mar 2019 On the effectiveness of airborne infrasound in eliciting vestibular-evoked myogenic potentials, *Journal of Low Frequency Noise, Vibration and Active Control*, Vol. 39(1), pp. 3–16
- Sep 2018 Amplitude Modulation May Be Confused with Infrasound, *Acta Acustica united with Acustica*, Vol. 104, pp 825–829.
- Dec 2017 The detailed shapes of equal-loudness-level contours at low frequencies, *The Journal of the Acoustical Society of America*, Vol. 142, pp. 3821–3832
- Nov 2016 The effect of the helicotrema on low-frequency loudness perception, *The*

- Nov 2011 *Journal of the Acoustical Society of America*, Vol. 140, pp. 3799–3809.
The Effect of the Helicotrema on Low-Frequency Cochlear Mechanics and Hearing, in *What Fire is in Mine Ears: Progress in Auditory Biomechanics*, Christopher A. Shera & Elizabeth S. Olson (eds).
Published by the American Institute of Physics, Conf. Proc. Vol. 1403, pp. 495-501.
- May 2011 Psychophysical tuning curves for frequencies below 100 Hz, *Journal of the Acoustical Society of America*, Vol. 129, pp. 3166-80.
- Dec 2010 Frequency selectivity for frequencies below 100 Hz: Comparisons with mid-frequencies, *Journal of the Acoustical Society of America*, Vol. 128, pp. 3585-96.

Funding and Awards

Nov 2020	Receipt of certificate from the National Superior Conservatory of Music for outstanding participation in the International Festival of Sound Arts - Ecuador FIDAS - E20.
April 2017	European-Commission funding for participation as Research Fellow in Project <i>EARs II: Metrology for modern hearing assessment and protecting public health from emerging noise sources</i> . Host Institution: University College London, UK. Valid for 1 year full time, at Grade 7 salary.
Sept 2011	Danish Research Council Doctoral Grant for PhD studies at Aalborg University, valid for 3 years full-time as Research Fellow.
April 2010	International Commission for Acoustics (ICA) Young Scientist Grant award. For ICA conference 2010 attendance. Valued at \$500.

Teaching Experience

March 2019-present	Co-supervisor of PhD Thesis, Universidad de Málaga, Spain
April 2018-Sept 2021	Associate Professor, <i>Fundamentals of Acoustics I</i> , Universidad de Las Américas, Ecuador
April 2018- Sept 2021	Associate Professor, <i>Fundamentals of Acoustics II</i> , Universidad de Las Américas, Ecuador
Apr 2017-Feb 2018	Co-Supervisor of 4 Advanced Audiology MSc Thesis Projects, University College London, UK.
Sep 2014-Apr 2017	Associate Professor, <i>Fundamentals of Acoustics I</i> , Universidad de Las Américas, Ecuador
Sep 2014-Apr 2017	Associate Professor, <i>Fundamentals of Acoustics II</i> , Universidad de Las Américas, Ecuador
Sep 2014-Dec 2015	Associate Professor, <i>Vibration Control</i> , Universidad de Las Américas, Ecuador.
Sep 2007- Sep 2010	Supervisor of MSc. student projects in Electronic and Electrical Engineering (Specialization in Acoustics), Aalborg University, Denmark.

Conference participation (2020-present)

Feb 2022	Webinar talk. Perception of Imperceptible Sounds - Brain Awareness Week. Organization: Radio Slovenia, SiNAPSA (Slovenian Neuroscience Association.)
Sept 2021	Participation as applied researcher in Octavas Jornadas

Académicas de Ciencias de la Música. Organization: Conservatorio
Superior Nacional de Música, Ecuador

Oct 2020

Participation as expositor and composer in Festival
Internacional de Artes Sonoras Ecuador - FIDAS. E20. Organization:
Conservatorio Superior Nacional de Música, Ecuador

Personal Website: <https://juradocarlos.com/>

Musical works

All scores from the list of below can be accessed here:

https://imslp.org/wiki/Category:Jurado,_Carlos_Andr%C3%A9s

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-Concert for Piano and Orchestra

- Piano Quintet

- Brass Quintet No. 1

- Trio for Horn, Viola and Piano No.1

- Trio for Horn, Viola and Piano No.2

-Piano Sonata No.1

-Piano Sonata No.2

-Piano Sonata No.3

-Piano Sonata No.4

-Piano Sonata No.5

-Piano Sonata No.6

- 6 Estudios para Piano

- Piano Preludes

- 3 Canciones para un Dúo

- Creaciones para Piano

- Creaciones para Piano II

- 3 Creaciones

- Dos Piezas para la Noche

- Nokturnas