

## Jose López Santacruz

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CONTACT INFORMATION      Address: Gedempte Zuiderdiep 99A      Phone: +31 633316550  
9711 HD, Groningen, The Netherlands      E-mail: j.lopez.santacruz@umcg.nl  
Nationality: Spanish      Skype: joselops  
Date of birth: 09/11/1984

RESEARCH INTERESTS      Tinnitus, hearing aids, signal/sound processing, neuroimaging, data analysis, music.

EDUCATION      **University Medical Center Groningen**, The Netherlands

Marie Skodowska-Curie Actions fellowship PhD: *Personalized hearing aid amplification to ameliorate tinnitus*, ESIT project, Oct 2017 - present

- Topics: *Tinnitus, hearing aids schemes, EEG, contrast gain control.*
- Supervisors: Pr. Pim van Dijk and Dr. Emile de Kleine

**University of Málaga**, Spain

Post graduate research experience, Signal processing, Feb 2015 - Oct 2017.

- Topics: *Processing of the singing voice, pitch shifting, EEG/MEG analysis on music perception.*
- Supervisors: Pr. Lorenzo J. Tardón and Pr. Isabel Barbancho

B.A. + M.Sc. *cum laude* (pre-Bologna degree), Telecommunications Engineer, Apr 2014

- Topic: *Single Carrier Frequency Division Multiple Access (SC-FDMA) transmitter and receiver for LTE systems, using VHDL for FPGA implementation.*
- Supervisor: Pr. José Tomás Entrambasaguas.

**Aarhus University**, Denmark

Visitor researcher, Center For Music In The Brain, Feb-Apr 2017

- Collaboration in several projects based on EEG/MEG analysis:
  1. *Effects of a Novel Sound Processing Strategy on Music Perception and Enjoyment in Cochlear Implant Users.*
  2. *Brain Responses to Entire Pieces of Music suggest lower Prediction Error in Musically Trained versus Untrained Listeners.*
  3. *Bottom-up and top-down affective mechanisms in music and visual art.*
- Supervisor: Pr. Elvira Brattico.

RESEARCH EXPERIENCE      **Research Assistant**      Feb 2015 to Oct 2017  
Department of Communications Engineering, Signal Processing  
University of Málaga  
Supervisor: Pr. Isabel Barbancho.  
**Research Assistant**      Feb to May 2017  
Department of Clinical Medicine, Center For Music In The Brain  
Aarhus University  
Supervisor: Pr. Elvira Brattico.

REFEREED JOURNAL PUBLICATIONS	<ol style="list-style-type: none"> <li>1. Genitsaridi, E., Partyka, M., Gallus, S., Lopez-Escamez, J. A., Schecklmann, M., Mielczarek, M., <b>Jose L. Santacruz</b>... Lourenco, M. (2019) . “ Standardised profiling for tinnitus research: The European School for Interdisciplinary Tinnitus Research Screening Questionnaire (ESIT-SQ).” <i>Hearing research</i>, 2016.</li> <li>2. <b>Jose L. Santacruz</b>, Lorenzo Tardón, Isabel Barbancho, Ana M Barbancho. “Spectral Envelope Transformation in Singing Voice for Advanced Pitch Shifting.” <i>Applied Acoustics MDPI</i>, 6(11), 368, 2016.</li> <li>3. <b>Jose L. Santacruz</b>, Lorenzo Tardón, Isabel Barbancho, Ana M Barbancho. “VOICE2TUBA: transforming singing voice into a musical instrument.” <i>Multimedia Tools and Applications, Springer</i>, 76(7):9855–9875, 2017.</li> </ol>
PAPERS IN PREPARATION	<ol style="list-style-type: none"> <li>1. Haumann, N. T., Toiviainen, P., <b>Santacruz, J. L.</b>, Kliuchko, M., and Brattico, E. “Encoding of sound features during continuous listening to music changes in experts.” (submitted)</li> <li>2. <b>Santacruz, J. L.</b>, de Kleine, E., van Dijk, P.. “Minimum Masking Levels and Hearing Thresholds in Tinnitus Patients.”</li> </ol>
CONFERENCES	<ol style="list-style-type: none"> <li>1. ”Minimum masking levels and hearing thresholds in patients with tinnitus”, poster presentation. BTA 2018,</li> <li>2. ”Tinnitus pitch matching by amplitude modulated sounds”, poster presentation. TRI 2018,</li> <li>3. ”Modeling spectral changes in singing voice for pitch modification”, latebreaking demo. 17th International Society for Music Information Retrieval Conference. (<i>ISMIR2016</i>). New York City, USA, 7-11 Aug 2016. Isabel Barbancho, <b>Jose L. Santacruz</b>, Lorenzo Tardón and Ana M. Barbancho.</li> <li>4. ”Source separation by score synthesis in Spanish folk music”, oral presentation. 7th International Workshop on Folk Music Analysis (<i>FMA2017</i>). Málaga, Spain, 14-16 Jun 2017. Sergio P. Paqué, Marcelo Caetano, <b>Jose L. Santacruz</b>, Lorenzo Tardón and Isabel Barbancho.</li> </ol>
FELLOWSHIPS	<p>Research grant of the University of Málaga <span style="float: right;">Feb - Apr 2017</span> International fellowship at the <i>Center for Music in the Brain</i>, Aarhus University, Denmark.</p>
TECHNICAL SKILLS	<p>Matlab, Python, C++. Signal processing, Statistical analysis. HTML, CSS.</p>
TEACHING EXPERIENCE	<p>Instructor <span style="float: right;">June 2017</span> Session - <i>Music Acoustics: Sound Synthesis</i> Engineering Acoustics MSc with Antonio Jurado Navas Department of Communications Engineering University of Málaga</p> <p>Co-instructor <span style="float: right;">October 2015</span></p>

Workshop - *URobot: learn to program your robot*  
with Ángel Martínez Tenor  
Division of Mechatronics  
University of Málaga

Co-instructor

Summer 2015

Workshop - *FECYT Summer Science Campus 2015*  
with Ángel Martínez Tenor  
Division of Mechatronics  
University of Málaga

LANGUAGES

- Spanish - Native
- English - Full professional proficiency
- Dutch - A2/B1 level

SERVICE

- Local Committee, *FMA2017*
- Reviewer, *DAFX2017*
- Local Committee, *ISMIR2015*

Jun 2017

May 2017

Oct 2015

REFERENCES

Pim van Dijk

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Department of Otorrinolaringology  
UMCG  
Hanzeplein 1 , 9700RB Groningen  
The Netherlands

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Center for Music In the Brain  
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Aarhus University

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