

# Federico Nicolás Cámara Halac

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# Professional Appointments

#### Postdoctorate

2021 Postdoctoral Scholar in Immersive Audio, The Ohio State University. Global Arts and Humanities Discovery Theme, School of Music, Advanced Computing Center for the Arts and Design. Columbus, OH (USA). 2019-2021.

### Academic

2016 Course Assistant, New York University. Faculty of Arts and Science. New York (USA).

Teaching Assistant, New York University. Faculty of Arts and Science. New York (USA). 2014-2015.

2010 **Teaching Assistant, Universidad Nacional de Córdoba.** Facultad de Artes. Córdoba (Argentina). 2007-2010.

### Education

#### PhD

Music Composition and Theory, New York University. Graduate School of Arts and Sciences. Dissertation title: "Database Music: A History, Technology, and Aesthetics of the Database in Music Composition". Advisor: Jaime Oliver La Rosa (NYU GSAS). Readers: Elizabeth Hoffman (NYU GSAS), Martin Daughtry (NYU GSAS), William Brent (American University), and Robert Rowe (NYU Steinhardt). New York, NY (USA). Sep 2013 - Jun 2019.

#### Licenciate

Music Composition, Universidad Nacional de Córdoba. Facultad de Artes. Thesis Title: "A Form of Pleasure: Music as an Experience of Pleasure". Advisor: José Halac. Readers: Eleazar Garzón, Sergio Poblete, Claudio Bazán, and Pablo de Giusto (Bachelor and Masters equivalence). Córdoba (Argentina). Mar 2006 - Jul 2012.

# Research Interests

Computer Music. Spatial Audio. Immersive Sound. Machine Learning. Digital Signal Processing. Algorithmic Composition. Computer Vision. Networked Music Performance. Sonification. Database Music

## **Publications**

# Conference Proceedings

- 2021 | Aug 'The Woods:' A Mixed Reality Two-Player Cooperative Game. SIGGRAPH. Scott Swearingen, Kyoung Swearingen, Federico Camara Halac, Sruthi Ammannagari, and Matt Hall. 09 August 2021.
- July Visual Cues as an Aid in the Auditory Stream Segregation of Music. International Conference on Music Perception and Cognition European Society for the Cognitive Sciences of Music. Samantha Burgess, Federico Camara Halac, and Daniel Shanahan. 28 July 2021.

**DreamSound: Deep Activation Layer Sonification.** International Community for Auditory Displays. Federico Camara Halac and Matias Delgadino. 25 July 2021.

- February Comparing Musical Performances of the 'Goldberg Variations' Using Supervised Machine Learning Techniques. Future Directions of Music Cognition (Accepted but not presented). Arturo Barrios, Leo A. Glowacki, Lindsay Warrenburg, and Federico Camara Halac. 12 February 2021.
- 2017 | Oct A Spectral Experience: Self Convolution and Face Tracking. International Computer Music Conference (Accepted but not presented). 11 October 2017.

#### Other Publications

2017 **'For Young Years:' A Response To Elsa Justel's Marelle.** Open Space Magazine - Issue 21 . 10 August 2017.

# Presentations

### Conference Poster

2021 **PathoSonic: Performing Sound In Virtual Reality Feature Space.** New Interfaces for Musical Expression. Birmingham (UK). 24 January 2020.

#### Conference Panel

[clone fd\_dacout]: real-time massively multichannel spatialization in Pure Data.

Jornadas de Informática y Electrónica Musical - Espacios Sonoros. Madrid (Spain). 05 March
2020.

### PhD Dissertation Defense

Database Music: A History, Technology, and Aesthetics of the Database in Music Composition. New York University. New York (USA). 06 May 2019.

#### **Invited Talks**

- 2021 | Jun Composing Database: Opening A Space For The Concept Of An Anarchic Unwork Of Art. Delian Academy for New Music. Mykonos (Greece). 11 June 2018.
  - **Inopera: A Multimedia Work for Loadbang and Pure Data.** Universidad Nacional de Córdoba. Córdoba (Argentina). 15 June 2016.
- September A History of the Database in Computer Music. Festival Atemporáneas. Buenos Aires (Argentina). 13 September 2021.

### **Awards and Honors**

# **Fellowships**

- 2018 | Sep **Dean's Dissertation.** Graduate School of Arts and Sciences (New York University). Berlin (Germany).
- January Graduate Research Initiative. Provost (New York University). Florence (Italy).
- 2017 Graduate Research Initiative. Provost (New York University). Paris (France).
- 2013 | Sep **The Henry M. MacCracken Program.** Graduate School of Arts and Sciences (New York University). New York City (USA).

#### **Prizes**

- 2015 | Jun "Ciudad Invertida" (Selected Works). Elsa Justel (Fundación Destellos). Mar del Plata (Argentina).
- 2014 "Venas" (Selected Works) . Elsa Justel (Fundación Destellos). Mar del Plata (Argentina).
- 2011 | Jul **"Lagos" (Orchestral Premiere).** Orquesta Sinfónica de la UNC Músicas en Dirigible (Universidad Nacional de Córdoba). Córdoba (Argentina).

### Conference Funds

2017 **Student Senators Council.** Graduate School of Arts and Sciences (New York University). Shanghai (China).

# **Exchange Program**

2012 **Programa Cuarto Centenario.** Prosecretaría de Relaciones Internacionales (Universidad Nacional de Córdoba and Université de Montréal). Montréal (Canada).

# Performances

#### Solo

- 2020 | Mar Concierto de arte sonoro en Espacio B. Ricardo Barney & Pedro Fraguela. Laptop. Espacio B Madrid (Spain). 04 March 2020.
- 2017 | Aug Lorenz Variations. Cube Fest at Virginia Tech Blacksburg, VA (USA). 03 August 2017.

2016 | Oct Opening Portals. Jessica Rosen. Bookentiometers. ShapeShifter Lab in Brooklyn - New York City, NY (USA). 11 October 2016.

#### The Sonic Arts Ensemble at OSU

- 2021 | Jun 8th Music and/as Process Conference: Networked Collaborative Processes 2021. Thornblower. Netty McNetface Columbus, OH (USA). 26 June 2021.
- April SEAMUS (TWELVE). Thornblower. CCRMA Stanford, CA (USA). 23 April 2021.

  Earth Day Art Model 2021. Thornblower. EDAM Festival Indianapolis, IA (USA). 22 April 2021.
  - Sonic Arts Ensemble Live-Stream Performance. Thornblower. Netty McNetface Columbus, OH (USA). 06 April 2021.
- 2020 | Oct Into The Multiverse. Thornblower. The Wexner Center for the Arts Columbus, OH (USA). 20 October 2020.
- 2019 | Sep Sonic Arts Ensemble and Atelier Avant Austria present "Virtuoso Chances".

  Andreas Weixler, Se-Lien Chuang, Marc Ainger, Ann Stimmson, and the Sonic Arts
  Ensemble. Pure Data, joyosc, and a PS4 Controller. ACCAD Motion Lab Columbus, OH (USA). 23 September 2019.

### Hijos de Distinta Madre

- 2020 | May Thanks to Federico Ragessi and Franco Pellini (Hijos de Distinta Madre), Marmotas Dreams (Berenice Llorens and Constanza Pellicci), and Jorge Castro (fisterni @ La Cúpula) for an amazing performance and night.. Pure Data, joyosc, and a PS4 Controller. La Cúpula Galería de Arte - Córdoba (Argentina). 09 May 2020.
- 2019 | Dec **HDDM** + **ffddcchh** + **Marmotas Dreams & friends.** Pure Data, joyosc, and a PS4 Controller. La Cúpula Galería de Arte Córdoba (Argentina). 21 December 2019.

**HDDM** + **ffddcchh.** Pure Data, joyosc, and a PS4 Controller. Casa Mandarina - Córdoba (Argentina). 19 December 2019.

Mermetom + Fede Camara Halac. Mermetom (Gustavo Alcaraz & Vero Guevara) and . Pure Data, joyosc, and a PS4 Controller. La Cúpula Galería de Arte - Córdoba (Argentina). 08 December 2019.

#### Live Video and Electronics

- 2017 | Jun **Electroacoustic Improvisations.** Joan Bages i Rubi, Bernardo Barros, Kyle Motl, and Joan Marti Frasquier,. Midi controller and Laptop. NYU Waverly Labs r.220 New York City, NY (USA). 19 June 2017.
- April **a.le.a.** Talea Ensemble. Midi controller and networked Laptops. The Dimenna Center for Classical Music New York City, NY (USA). 07 April 2017.
- 2016 | Nov **Ciudad Invertida.** RAGE THORMBONES. Laptop. ShapeShifter Lab New York City, NY (USA). 22 November 2016.
- September sk. TAK Ensemble. Laptop. Waverly Labs, r.220 New York City, NY (USA). 29 September 2016.

- April INOPERA. Loadbang Ensemble. Midi controller and Laptop. The Dimenna Center for Classical Music New York City, NY (USA). 20 April 2016.
- 2015 | Aug Ciudad Invertida. Rocío Elizalde y Manuel Pastrana. Laptop. Bienal 3 en Composición e Investigación Musical Córdoba (Argentina). 20 August 2015.
- February Mise-En at German House. Samuel Marques. Pure Data live processing. German Consulate New York City, NY (USA). 06 February 2015.
- 2014 | Apr Momenta Quartet Plays NYU Composers. Momenta Quartet. Laptop. NYU Silver Center r.220 New York City, NY (USA). 21 April 2014.

### LEIM Ensemble

- 2012 | Aug Ciclo Experimentalia. Piano, Analog Synthesizer. Centro Cultural España Córdoba Córdoba (Argentina). 10 August 2012.
- 2011 | Nov **Summer Concert.** Piano, Analog Synthesizer. Auditorio CePIA Córdoba (Argentina). 10 November 2011.
- October **Teatro Acústico.** Piano, Analog Synthesizer. Facultad de Artes, UNC Córdoba (Argentina). 02 October 2011.
- September Ciclo Contengo-Arte. Piano, Analog Synthesizer. Instituto Italiano de Cultura Córdoba (Argentina). 14 September 2011.

Micro-Simposio de Análisis Musical. Piano, Analog Synthesizer. Facultad de Artes, UNC - Córdoba (Argentina). 12 September 2011.

- August Winter Concert. Piano, Analog Synthesizer. Auditorio CePIA Córdoba (Argentina). 23 August 2011.
- June Ciclo Experimentalia. Piano, Analog Synthesizer. Centro Cultural España Córdoba Córdoba (Argentina). 20 June 2011.
- May **TSONAMI.** Piano, Analog Synthesizer. Centro Cultural Recoleta Buenos Aires (Argentina). 10 May 2011.
- 2010 | Dec **Nosocomio.** Piano, Analog Synthesizer. Centro Cultural España Córdoba Córdoba (Argentina). 12 December 2010.
- November Summer Concert. Piano, Analog Synthesizer. Auditorio CePIA Córdoba (Argentina). 14 November 2010.
- September 1st International Biennial of Music Composition and Education. Piano, Analog Synthesizer. Auditorio CePIA Córdoba (Argentina). 14 September 2010.
- 2009 | Jan **Performances and Workshops.** Piano, Analog Synthesizer. LEIM Facultad de Artes Córdoba (Argentina). 01 January 2009.

# Proyecto [Red] Ensemble

- 2016 | Aug Canon. Midi controller and Laptop. Centro Cultural Graciela Carena New York City, NY (USA). 06 August 2016.
- 2012 | Nov Concert. Piano. Auditorio CePIA Córdoba (Argentina). 12 November 2012.

- Aniversario de la Facultad de Artes. Piano, Trumpet, Midi Controller. Auditorio CePIA Córdoba (Argentina). 01 November 2012.
- September John Cage Festival. Piano. Auditorio CePIA Córdoba (Argentina). 05 September 2012.
- August Concert at B2CIM. Piano, Trumpet, Midi Controller. Auditorio CePIA Córdoba (Argentina). 23 August 2012.
- June Concierto de Alquimistas. Piano. Aula Magna FCEFyN Córdoba (Argentina). 29 June 2012.
  - Concierto Final de Tesis. Piano. Auditorio CePIA Córdoba (Argentina). 12 June 2012.
- 2011 | Oct Congreso de Ciencias Humana. Electric Guitar. Escuela Monserrat Córdoba (Argentina). 20 October 2011.
- September Micro-Simposio de Análisis Musical. Piano. Aula Magna de la Facultad de Artes Córdoba (Argentina). 10 September 2011.
- August Arte Forum 2: Homage to Oscar Bazán. Piano. Auditorio CePIA Córdoba (Argentina). 18 August 2011.
- July **Winter Concert.** Electric Guitar, Piano. Auditorio CePIA Córdoba (Argentina). 10 July 2011.
- 2010 | Nov Summer Concert. Conductor. Auditorio CePIA Córdoba (Argentina). 20 November 2010.
- July **Ciclo La Máquina de Tiempo.** Trumpet. Centro Cultural España Córdoba Córdoba (Argentina). 02 July 2010.

### Other Roles

- 2020 | Jan CLIMATE GATHERING. Norah Zuniga Shaw. Max/MSP and Ipad. Movement Lab at Barnard College New York City, NY (USA). 15 January 2020.
- 2012 | Mar **Guest Pianist.** LAMOI. Piano. Paseo del Buen Pastor Córdoba (Argentina). 10 March 2012.
- 2010 | Sep Inserto Beat. Luisina Couto, Pablo Behm. Guitar. Cineclub Municipal Hugo del Carril Córdoba (Argentina). 18 September 2010.
- March **Guest Pianist.** Orquesta Sinfónica de Río Ceballos. Piano. Teatro Municipal Río Ceballos, CBA (Argentina). 12 March 2010.

# Teaching

### Professor

- 2021 | Mar Computational Musicology 8824. The Ohio State University. School of Music. Columbus, OH (USA). Spring 2021.
- September Sonic Arts Ensemble. The Ohio State University. Advanced Computing Center for the Arts and Design. Columbus, OH (USA). Fall 2021.
- 2020 | Mar Sonic Arts Ensemble. The Ohio State University. Advanced Computing Center for the Arts and Design. Columbus, OH (USA). Spring 2020.

- 2019 | Sep Sonic Arts Ensemble. The Ohio State University. Advanced Computing Center for the Arts and Design. Columbus, OH (USA). Fall 2019.
- 2015 **Harmony and Counterpoint I.** New York University. Faculty of Arts and Science. New York, NY (USA). Fall 2015.

#### Course Assistant

2016 Computer Music Theory and Techniques. New York University. Faculty of Arts and Science. New York, NY (USA). Fall 2016.

### Teaching Assistant

- 2015 | Mar **Harmony and Counterpoint II.** New York University. Faculty of Arts and Science. New York, NY (USA). Spring 2015.
- 2014 | Sep **Harmony and Counterpoint I.** New York University. Faculty of Arts and Science. New York, NY (USA). Fall 2014.
- 2010 | Jan **Composición Musical I.** Universidad Nacional de Córdoba. Facultad de Artes. Córdoba, CBA (ARG).
- 2009 **Composición Musical I.** Universidad Nacional de Córdoba. Facultad de Artes. Córdoba, CBA (ARG).
- 2008 **Audioperceptiva I.** Universidad Nacional de Córdoba. Escuela de Artes FFyH. Córdoba, CBA (ARG).
- 2007 **Audioperceptiva I.** Universidad Nacional de Córdoba. Escuela de Artes FFyH. Córdoba, CBA (ARG).

# **Artistic Collaborations**

#### **Networked Music Performance**

- 2021 | Jan **1002: A Networked Music Performance with CollidePd** (ongoing). International Computer Music Conference. Federico Ragessi. Córdoba (Argentina).
- 2020 | Mar The Sonic Arts Ensemble at OSU (ongoing). Advanced Computing Center for the Arts and Design. Marc Ainger and Ann Stimson. Columbus, OH (USA).

#### Installations

- 2019 | Sep **The Woods** (ongoing). Advanced Computing Center for the Arts and Design. Kyoung Swearingen, Scott Swearingen, Marc Ainger, Sruthi Ammanngari, and Matt Hall. Columbus, OH (USA).
- 2017 | Oct Hearing the Self: A Spectral Experience. Xuhui Art Museum. Matias Delgadino and Lucia Simonelli. Shanghai (China).

#### Theatre

- 2013 | Oct **Poroto.** Pabellón Azul UNC . Celeste Lozada and Valentina Echeverría. Córdoba (Argentina).
- 2012 | Sep Itinerante: un Viaje a Través de Los Sentidos. Sindicato de Vendedores de Diarios y Revistas. Agustina Muñoz. Córdoba (Argentina).
- 2011 | May **Tesis de Licenciatura de Teatro.** Plazoleta del Fundador. Luisina Couto. Córdoba (Argentina).
- 2010 | Apr Inserto Beat. Cineclub Municipal Hugo del Carril. Luisina Couto. Córdoba (Argentina).

### Other Collaborations

- 2013 | Feb Los Chicos de Abril (Opera). Teatro Municipal de Río Cuarto. Luis Perez, Pablo Behm, and Franco Pellini. Río Cuarto, CBA (Argentina).
- 2011 | Aug Al Cielo o al Infierno (Film). Cines Gran Rex. Lauro Racosky. Córdoba (Argentina).
- 2010 | May Alicia en el País de las Maravillas (Dance). Teatro del Libertador San Martín. José Halac. Córdoba (Argentina).

### Service

# Disciplinary Service

- 2020 | Jan New Interfaces for Musical Expression (ongoing). Reviewer. Paper and Installation submissions. New York City (USA).
- Festival Atemporáneas. Reviewer. Installation, Audiovisual, and Sound Art submissions. Buenos Aires (Argentina). 2019-2020.
- New York City Electroacoustic Music Festival (ongoing). Reviewer. Music submissions. New York City (USA).
  - International Computer Music Conference (ongoing). Reviewer. Installations and Music Submissions. New York City (USA).
- 2016 PdCon16~. Organizer. Website and Conference Program. New York City (USA).
- 2010 **Bienal Composición Córdoba.** Organizer. Website and Conference Program. Córdoba (Argentina). 2010-2015.

# University Service

- 2013 | Jan **Waverly Project.** Founding Member. Website and Program. New York City (USA). 2013-2017.
- 2010 **Proyecto** [Red] Ensamble. Founding Member. Website and Program. Córdoba (Argentina). 2010-2015.

# Other Skills

Languages Spanish (Native) English (Advanced) French (Intermediate) German (Beginner, A2 Level. Currently Studying.)

Code **Pure Data** (Expert) **Python** (Advanced: Numpy, Scipy, tensorflow, librosa) **JavaScript** (Advanced: Web Audio API, Node.js) **C** (Pure Data Externals) **C++** (GEM and Max MSP Externals) **Bash** (Server-side scripting) **HTML** (Web Publishing with CSS) **Latex** (Text Publishing) **Git** (Version management, software release)

Software Max/MSP. Csound. Jacktrip. Audacity. REAPER. Ableton Live. Adobe Creative Suite.