

# Curriculum Vitae

Federico Nicolás Cámara Halac

June 13, 2021



# Federico Nicolás Cámara Halac

Phone + 1 (614) 440-7529  
Email [camarahalac.1@osu.edu](mailto:camarahalac.1@osu.edu)  
Website <https://fdch.github.io>  
Address 349C Sullivant Hall,  
1813 North High Street,  
Columbus, OH 43210  
Birth 8th May 1988, Córdoba, Argentina

## 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.

### Graduate

2016 **Course Assistant, New York University.** Faculty of Arts and Science. New York (USA).  
2015 **Teaching Assistant, New York University.** 2014-2015.

### Undergraduate

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

## Education

---

### PhD

2019 **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

2012 **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

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

## Conference Panel

- 2020 **[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

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

## Invited Talks

- 2018 | 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.
- 2016 **Inopera: A Multimedia Work for Loadbang and Pure Data.** Universidad Nacional de Córdoba. Córdoba (Argentina). 15 June 2016.
- 2021 | Sep **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), Paris (France). 2018, 2017.
- 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).**
- 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).

## Teaching

---

### Professor

- 2021 | Mar **Computational Musicology 8824.** The Ohio State University. School of Music. Columbus, OH (USA). Spring 2021.
- September **Sonic Arts Ensemble.** Advanced Computing Center for the Arts and Design. Fall 2021, Spring 2020, Fall 2019.
- 2015 **Harmony and Counterpoint I.** New York University. Faculty of Arts and Science. New York, NY (USA). Fall 2015, Fall 2014.

### 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.
- 2010 | Jan **Composición Musical I.** Universidad Nacional de Córdoba. Facultad de Artes. Córdoba, CBA (ARG). 2010, 2009.
- 2008 **Audioperceptiva I.** Escuela de Artes - FFyH. 2008, 2007.

# 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.
- 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.

## 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.

## Service

---

### Disciplinary Service

- 2020 | Jan **New Interfaces for Musical Expression** (ongoing). Reviewer. Paper and Installation submissions. New York City (USA).
- 2019 **Festival Atemporáneas**. Installation, Audiovisual, and Sound Art submissions. Buenos Aires (Argentina). 2019-2020.
- 2018 **New York City Electroacoustic Music Festival** (ongoing). Reviewer. Music submissions. New York City (USA).
- International Computer Music Conference** (ongoing). Installations and Music Submissions.
- 2016 **PdCon16~**. Organizer. Website and Conference Program. New York City (USA).
- 2010 **Bienal Composición Córdoba**. 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] Ensemble**. Website and Program. Córdoba (Argentina). 2010-2015.

## Performances

---

### Solo

2020 | Mar **“Untitled 2”**. “Concierto de Arte Sonoro” with Ricardo Barney and Pedro Fraguera. Laptop at Espacio B. Madrid (Spain). 04 March 2020.

2017 | Aug **“Lorenz Variations”**. Computer and speakers at Cube Fest at Virginia Tech. Blacksburg, VA (USA). 03 August 2017.

2016 | Oct **“Bookentiometers”**. “Opening Portals” with Jessica Rosen. Bookentiometers at ShapeShifter Lab in Brooklyn. New York City, NY (USA). 11 October 2016.

### The Sonic Arts Ensemble at OSU

2021 | Jun **S.A.E. Livestream**. Thornblower at 8th Music and/as Process Conference: Networked Collaborative Processes 2021. Columbus, OH (USA). 26 June 2021.

April **Seamus (Twelve)**. Thornblower at CCRMA - Jacktrip. Stanford, CA (USA). 23 April 2021.

**Earth Day Art Model 2021**. Thornblower at EDAM Festival. Indianapolis, IA (USA). 22 April 2021.

**S.A.E. Livestream**. Thornblower at Netty McNetface. Columbus, OH (USA). 06 April 2021.

2020 | Oct **“Into The Multiverse”**. Thornblower at The Wexner Center for the Arts. 20 October 2020.

2019 | Sep **“Virtuoso Chances”**. Andreas Weixler, Se-Lien Chuang, Marc Ainger, Ann Stimmson. Pure Data, joyosc, and a PS4 Controller at ACCAD Motion Lab. Columbus, OH (USA). 23 September 2019.

### Hijos de Distinta Madre

2020 | May **HDDM + fddcchh (livestream)**. Pure Data, joyosc, and a PS4 Controller at La Cúpula Galería de Arte. Córdoba (Argentina). 09 May 2020.

2019 | Dec **HDDM + fddcchh + Marmotas Dreams**. Pure Data, joyosc, and a PS4 Controller at La Cúpula Galería de Arte. 21 December 2019.

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

**Mermetom + fddcchh**. Mermetom (Gustavo Alcaraz & Vero Guevara) and . Pure Data, joyosc, and a PS4 Controller at La Cúpula Galería de Arte. 08 December 2019.

### Live Video and Electronics

2017 | Jun **“Electroacoustic Improvisations”**. Joan Bages i Rubi, Bernardo Barros, Kyle Motl, and Joan Martí Frasier. Midi controller and Laptop at NYU Waverly Labs r.220. New York City, NY (USA). 19 June 2017.

April **“a.le.a”**. Talea Ensemble. Midi controller and networked Laptops at The Dimenna Center for Classical Music. 07 April 2017.

2016 | Nov **“Ciudad Invertida”**. RAGE THORNBONES. Laptop at ShapeShifter Lab. New York City, NY (USA). 22 November 2016.

- September **“sk”**. TAK Ensemble. Laptop at Waverly Labs, r.220. 29 September 2016.
- April **“Inopera”**. Loadbang Ensemble. Midi controller and Laptop at The Dimenna Center for Classical Music. New York City, NY (USA). 20 April 2016.
- 2015 | Aug **“Ciudad Invertida”**. Rocío Elizalde y Manuel Pastrana. Laptop at Bienal 3 en Composición e Investigación Musical. Córdoba (Argentina). 20 August 2015.
- February **“Venas”**. Samuel Marques (Ensemble Mise-En). Pure Data live processing at German Consulate in New York. New York City, NY (USA). 06 February 2015.
- 2014 | Apr **Momenta Quartet Plays NYU Composers**. Momenta Quartet. Laptop at NYU Silver Center r.220. 21 April 2014.

## LEIM Ensemble

- 2012 | Aug **Ciclo Experimentalia**. Piano, Analog Synthesizer at Centro Cultural España Córdoba. Córdoba (Argentina). 10 August 2012.
- 2011 | Nov **Summer Concert**. Piano, Analog Synthesizer at Auditorio CePIA. 10 November 2011.
- October **Teatro Acústico**. Piano, Analog Synthesizer at Facultad de Artes, UNC. Córdoba (Argentina). 02 October 2011.
- September **Ciclo Contengo-Arte**. Piano, Analog Synthesizer at Instituto Italiano de Cultura. 14 September 2011.
- Micro-Simposio de Análisis Musical**. Piano, Analog Synthesizer at Facultad de Artes, UNC. Córdoba (Argentina). 12 September 2011.
- August **Winter Concert**. Piano, Analog Synthesizer at Auditorio CePIA. 23 August 2011.
- June **Ciclo Experimentalia**. Piano, Analog Synthesizer at Centro Cultural España Córdoba. Córdoba (Argentina). 20 June 2011.
- May **Tsunami**. Piano, Analog Synthesizer at Centro Cultural Recoleta. Buenos Aires (Argentina). 10 May 2011.
- 2010 | Dec **“Nosocomio”**. Piano, Analog Synthesizer at Centro Cultural España Córdoba. Córdoba (Argentina). 12 December 2010.
- November **Summer Concert**. Piano, Analog Synthesizer at Auditorio CePIA. 14 November 2010.
- September **1st International Biennial of Music Composition and Education**. Piano, Analog Synthesizer at Auditorio CePIA. Córdoba (Argentina). 14 September 2010.

## Proyecto [Red] Ensemble

- 2016 | Aug **“Canon”**. Midi controller and Laptop at Centro Cultural Graciela Carena. New York City, NY (USA). 06 August 2016.
- 2012 | Nov **Concert**. Piano at Auditorio CePIA. Córdoba (Argentina). 12 November 2012.
- Aniversario de la Facultad de Artes**. Piano, Trumpet, Midi Controller at Auditorio CePIA. 01 November 2012.
- September **John Cage Festival**. Piano at Auditorio CePIA. Córdoba (Argentina). 05 September 2012.
- August **Bienal 2 de Composición e Investigación Musical**. Piano, Trumpet, Midi Controller at Auditorio CePIA. 23 August 2012.
- June **Alquimistas**. Piano at Aula Magna FCEfyN. Córdoba (Argentina). 29 June 2012.
- Concierto Final de Tesis**. Piano at Auditorio CePIA. 12 June 2012.

2011 | Oct **Ciencias Humanas.** Electric Guitar at Escuela Monserrat. Córdoba (Argentina). 20 October 2011.

September **Micro-Simposio de Análisis Musical.** Piano at Aula Magna de la Facultad de Artes. 10 September 2011.

August **Arte Forum 2: Hommage to Oscar Bazán.** Piano at Auditorio CePIA. Córdoba (Argentina). 18 August 2011.

July **Winter Concert.** Electric Guitar, Piano at Auditorio CePIA. 10 July 2011.

2010 | Nov **Summer Concert.** Conductor at Auditorio CePIA. Córdoba (Argentina). 20 November 2010.

July **La Máquina de Tiempo.** Trumpet at Centro Cultural España Córdoba. 02 July 2010.

## Other Roles

2021 | Oct **“Untitled 2”.** Ensemble Mise-En. Fixed Media at Mise-en Festival 2021. New York (USA). 05 October 2021.

June **“The Woods”.** Kyoung and Scott Swearingen. The Woods Audio at Currents New Media Festival 2021. Santa Fe (USA). 18 June 2021.

2020 | Jan **“Climate Gathering”.** Norah Zuniga Shaw. Max/MSP and Ipad at Movement Lab at Barnard College. New York City, NY (USA). 15 January 2020.

2012 | Mar **Guest Pianist.** LAMOI. Piano at Paseo del Buen Pastor. Córdoba (Argentina). 10 March 2012.

2010 | Sep **Inserto Beat.** Luisina Couto, Pablo Behm. Guitar at Cineclub Municipal Hugo del Carril. 18 September 2010.

March **Guest Pianist.** Orquesta Sinfónica de Río Ceballos. Piano at Teatro Municipal. Río Ceballos, CBA (Argentina). 12 March 2010.

## Other Skills

### 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**

### Languages

- **Spanish** : Mother Tongue
- **English** : Advanced
- **French** : Intermediate
- **German** : Beginner, A2 Level. Currently Studying.