

# Tate Carson

BM, MM, MFA, PhD

*Assistant Professor of Digital Sound Design*  
Digital Arts and Design Program  
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## Areas of Interest

Locative Audio and Interactive Soundscapes • Soundscape Ecology • Interactive Sound Art • Ecological Awareness • New Interfaces for Musical Expression • Human-Computer Interaction • Machine Learning for Sound • Distributed Sound Systems • Ubiquitous Listening and Soundwalks • Web Audio

## Education

- 2021 PhD, Experimental Music and Digital Media, Louisiana State University.  
Teaching Assistant, Digital Design and Emergent Media.  
Dissertation: *Using Distributed Technology to Make Music in the Time of the Attention Economy*.
- 2017 MFA in Electronic Music and Recording Media, Mills College.  
Technical Assistant, Center for Contemporary Music.
- 2011 MM in Jazz Studies, University of New Orleans.
- 2009 BM in Music Industry Studies/Jazz Bass Concentration, Loyola University New Orleans.

## Research

### JOURNAL ARTICLES

- 2020 Carson, T. (2020). "On Ecocomposition." *Journal of Digital Media & Interaction* 3, no. 5. pp. 133-142.

### PEER-REVIEWED CONFERENCE PAPERS

- 2024 Carson, Tate, and Carter Gordon. "Resonant Landscapes." In *Audio Mostly 2024 - Explorations in Sonic Cultures*, 525–32. Milan Italy: ACM, 2024. <https://doi.org/10.1145/3678299.3678354>.
- 2021 Carson, T. (2021). "immaterial.cloud: Using peer-to-peer technologies for music." In *Proceedings of the Web Audio Conference*. Barcelona, Spain.
- 2020 Marasco, A., Carson, T., Bardin, M. (2020). "Designing Collaborative and Mediated Experiences with Networked Circuit-Bent Devices." In *Proceedings of the Sound, Image and Interaction Design Symposium*. Online.
- 2019 Carson, T. (2019). "Sounds Aware: A Mobile App for Raising Awareness of Environmental Sound." In *Proceedings of the Web Audio Conference*. Trondheim, Norway.

- Carson, T. (2019). "Mesh Garden: A Creative-Based Musical Game for Participatory Musical Performance." In *Proceedings of New Interfaces for Musical Expression*. Porto Alegre, Brazil.
- Carson, T. (2019). "Systems Thinking and Environmental Interaction in the Work of Tomás Sara-ceno and David Dunn." In *Proceedings of International Computer Music Conference*. New York, New York.
- 2018 Carson, T. (2018). "A More Perfect Union: Composition with Audience-Controlled Smartphone Speaker Array and Evolutionary Computer Music." *Web Audio Conference*. Berlin, Germany.
- Carson, T. (2018). "Philosophical Underpinnings of Environmental Music." In *Proceedings of Inter-national Computer Music Conference*. Daegu, Korea.

#### TALKS

- 2023 "Teaching Video Game Sound: Balancing Technical Know-How with Sonic Creativity." Talk pre-sented at the 2023 ATMI/CMS National Conference, Miami, Florida.

#### DEMOS

- 2019 "A more perfect union: Composition with audience-controlled smartphone speaker array and evo-lutionary computer music," Web Audio Conference, Technical University of Berlin; Berlin, Ger-many. December 4-6, 2019.

#### WORKSHOPS

- 2018 "Utilizing NexusHUB and Docker for Distributed Performance," Web Audio Conference, Technical University of Berlin; Berlin, Germany, September 21, 2018.
- "NexusHUB Distributed Performance Workshop." Co-presenter, New Interfaces for Musical Expres-sion, Virginia Tech, June 3-6, 2018.

## Grants and Awards

- 2023-24 Faculty Research Initiative Grant Award, Dakota State University. Project: *Resonant Landscapes*
- 2016 2<sup>nd</sup> Place in Musicworks' 2016 Electronic Music Composition Contest for *Before, I wandered as a diversion*.

## Media and Press Coverage

- 2024 **"DSU Faculty, Students Turn the Sounds of SD State Parks into Music"**  
*Madison Daily Leader*, March 27, 2024  
 By Zac Zwaschka  
[Link to article](#)  
 Coverage of the public presentation of *Resonant Landscapes* at the Madison Area Arts Council's BrickHouse venue. The event featured collaborative performances incorporating soundscapes from South Dakota's state parks.
- 2024 **"Research Symposium Showcases Innovation, Creativity at DSU"**  
*Madison Daily Leader*, March 23, 2024  
 By Zac Zwaschka  
[Link to article](#)  
 Highlights from the DSU Research Symposium, where *Resonant Landscapes* was showcased as an interactive art installation, demonstrating its capability to immerse users in natural soundscapes through GPS and ambisonic recordings.
- 2023

## “Resonant Landscapes: DSU Researchers Make Music with Nature”

Dakota State University News, December 13, 2023

Written by Mary Askren

[Link to article](#)

Overview of *Resonant Landscapes*, highlighting the project’s experimental approach to field recording and its goal of engaging audiences with the natural soundscapes of South Dakota.

## Creative Work

### INTERACTIVE WEB AUDIO INSTALLATIONS

- 2020 *immaterial.cloud*, Interactive installation with Distributed Smartphone Speaker Array.
- 2019 *Sounds Aware*, Smartphone app that creates music from sensing the environment.
- 2018 *Mesh Garden*, Creative-based musical game with Distributed Smartphone Speaker Array.
- 2017 *A More Perfect Union*, Distributed Smartphone Speaker Array.

### COMPOSITIONS

- 2017 *I only went out for a walk*, Violin and Electronics
- And the waters returned*, Eight Players and Electronics
- And the water receded*, Cello, Violin, Bass Clarinet, Electronics
- 2016 *Twin highways flung across the evening*, Live Electronics and 8 Channel Spatialization
- Shifting Migration Pt 2*, Fixed Media
- Before, I wandered as a diversion*, Clarinet and Live Electronics
- Entangled Spaces*, Networked Laptop Duo
- Four Petals*, Chamber Ensemble and Live Electronics
- Lamella*, Live Electronics and Music Box
- The Laptop as Dwelling*, Live Electronics and Computer Sounds
- Simplexity*, Live Electronics
- A Quiet Desert Future*, Fixed Media
- Shifting Migration*, Fixed Media
- 2015 *ᠰᠡᠭᠡᠷ ᠨᠠ*, Live Electronics and Pipa
- Recursion*, Graphic Score for Improvising Ensemble
- Microstasis*, Fixed Media
- Diminishing Pt 2*, Chamber Ensemble
- Synechdoche*, Fixed Media
- Score for *Si*, a short film by Sam Smith
- Score for Milliman corporate video, School of Thought advertising agency, San Francisco, CA

## Selected Performances and Installations

### INSTALLATIONS

- 2020 *immaterial.cloud*, New Interfaces for Musical Expression, online at <https://nime2020.bcu.ac.uk/>, July 21-25, 2020.
- immaterial.cloud*, Network Music Festival, online at <https://networkmusicfestival.org/>, July 15-18, 2020.
- 2019 *A more perfect union*, National Student Electronic Music Event, University of Virginia, February 8-9, 2019.

- 2018 *A more perfect union*, Web Audio Conference, Technical University of Berlin; Berlin, Germany, September 20, 2018.

#### ELECTRONIC MUSIC

- 2019 *And the water receded*, International Computer Music Conference and New York Electroacoustic Music Festival; Hebrew Union College; New York, New York, June 16-23, 2019.
- 2018 *And the water receded*, New Music on the Bayou, Ruston Artisans; Ruston, Louisiana; May 31, 2018.  
*Twin highways flung across the evening*, National Student Electronic Music Event, MEIT, University of North Texas, March 10, 2018.  
*A More Perfect Union*, LSU Museum of Art, March 4, 2018.  
*Twin highways flung across the evening*, Electro Acoustic Barn Dance, Terry Concert Hall, Jacksonsville University, February 10, 2018.  
*A More Perfect Union*, Surreal Salon Soiree, Baton Rouge Gallery, January 27, 2018.
- 2017 *A More Perfect Union*, Louisiana State University School of Music Recital Hall, November 27, 2017.  
*A More Perfect Union*, Louisiana State University School of Music Recital Hall, November 6, 2017.  
*Shifting Migration Pt 2*, Fixed Media, Electric LaTex, Digital Media Center Theatre, Louisiana State University, October 2017.  
*Pseudo Pseudo*, music for dance, choreography by Stephanie Hewett, Lissner Hall, Mills College, April 14, 2017.  
*Shifting Migration Pt 2*, Fixed Media, California Electronic Music Exchange Concert – UCSB, April 5, 2017.  
*And the Water Receded*, Cello, Violin, Bass Clarinet Electronics, Signal Flow, Littlefield Concert Hall, Mills College, March 12, 2017.
- 2016 *I only went out for a walk*, Violin and Electronics, Center for New Music, San Francisco, Dec 7, 2016.  
*And the waters returned*, Littlefield Concert Hall, Mills College November 3, 2016.  
*Twin highways flung across the evening*, Lissner Hall, Mills College, October 28, 2016.  
*Entangled Spaces*, Littlefield Hall, Mills College, May 4, 2016.  
*Laptop As Dwelling*, California Electronic Music Exchange Concert – UCSD, April 22, 2016.  
*Lamellae*, Center for New Music, San Francisco, April 14, 2016.  
*Laptop As Dwelling*, California Electronic Music Exchange Concert – CalArts, April 5, 2016.
- 2015 *Şwärm*, Littlefield Hall, Mills College, December 2, 2015.

## Service and Administrative Roles

#### 2024 **Program Visibility and Recruitment**

Collaborated with DSU's marketing department to update the Sound Design webpage and participated in campus visits for prospective students, promoting recruitment for the Digital Arts and Design program.

#### 2024 **Collaboration with Lake County Museum**

Developed a Digital Sound Design internship with the Lake County Museum, focusing on creating a podcast based on museum exhibitions and collections.

#### 2023–24 **Reviewer, NIME Conference**

Served as a reviewer for the New Interfaces for Musical Expression (NIME) conference, contributing to the peer review process for professional conferences in the field of digital sound design.

#### 2022–Present **Internship Coordinator, Digital Arts and Design Program**

Served as the Internship Coordinator, connecting students with relevant, career-focused opportunities.

#### 2022–Present **Faculty Advisor, DSU Live Student Club**

Advised the student club DSU Live, managed paperwork for student compensation, and reported

- on General Activity Fee (GAF) spending to the GAF Committee.
- 2022–Present **Member, Equity, Diversity, and Inclusion (EDI) Committee**  
Worked with the EDI Committee to foster a more inclusive environment within the College of Arts and Sciences.
- 2021–2023 **Member, Implementation Council**  
Participated in meetings and presentations on DSU’s strategic plan, contributing to discussions and gaining insights into university governance.

## Teaching Experience

### DAKOTA STATE UNIVERSITY

- 2021–present Basic Musicianship II  
Audio Production I  
Audio Production II  
Audio Production III  
Recording Sessions  
Sound Design for Film  
Sound Design for Games  
Special Topics: History of Recorded Music  
Special Topics: Programming for Sound Design  
Special Topics: Sound Forensics  
Undergraduate Research/Scholarship  
Music Appreciation

### LOUISIANA STATE UNIVERSITY

- 2018–20 CSC 2463 – Programming Digital Media, Instructor, Louisiana State University, Baton Rouge, LA.  
2020 MUS 4744 – Mobile Music, Teaching Assistant, Louisiana State University, Baton Rouge, LA.

### LIBERTY MAGNET HIGH SCHOOL (FORMERLY KNOWN AS LEE MAGNET HIGH SCHOOL)

- 2019–20 Coding for the Web, Liberty Magnet High School, Baton Rouge, LA.  
2018, 2020 Introduction to Computational Thinking, Liberty Magnet High School, Baton Rouge, LA.  
2018 CSC 2463 – Programming Digital Media, Liberty Magnet High School, Baton Rouge, LA.

### OTHER

- 2020 Futures Fund, Online Content Creator, Coding for the Web.  
2019–2020 Futures Fund, Instructor, Coding for the Web, Baton Rouge, LA.  
2015 Contemporary Arts Center, Teaching Artist, Summer Arts Camp, New Orleans, LA.  
2012 Instructor, Private Bass Lessons, New Orleans, LA.  
2011 Instructor, Jazz Combo, University of New Orleans.

## Technical Work

### CODE

- 2020–21

January 2020 NexusUI: Web Audio Interfaces – developer and maintainer <https://github.com/nexus-js/ui>.  
Chris Janney, Exploring the Hidden Music: LASM, Max Patch, Louisiana Art and Science Museum.

#### TECHNOLOGY DEVELOPED FOR PERSONAL WORKS

**Distributed Smartphone Speaker Array:** A system of networked smartphones that allows users to create a distributed speaker system for a collective musical composition.

**Used in:** *immaterial.cloud*, *Mesh Garden*, *A More Perfect Union*, and *And the water receded*.

## Additional Performances

#### COMPOSITIONS PERFORMED BY MILLS COLLEGE CONTEMPORARY PERFORMANCE ENSEMBLE AND IMPROVISATION WORKSHOP

- 2016 *Four Petals*, Littlefield Hall, Mills College, April 27, 2016
- 2015 *Recursion*, Littlefield Hall, Mills College, November 20, 2015
- Diminishing Pt 2*, Littlefield Hall, Mills College, November 18, 2015

#### SELECT PERFORMANCES OF CREATIVE IMPROVISATION COMPOSITIONS (NEW ORLEANS, LA)

- 2015 Solo Bass and Electronics, Blue Nile, Open Ears Music Series, April 21, 2015
- Ablebody, Union Station, April 15, 2015
- 2014 Ablebody, Blue Nile, July 15, 2014
- Ablebody, Gasa Gasa, June 4, 2014
- Ablebody, Hi Ho Lounge, January 25, 2014
- 2013 Ablebody, Blue Nile, Open Ears Music Series, December 10, 2013
- Ablebody, Gasa Gasa, October 30, 2013
- Numbers Stations, Blue Nile, Open Ears Music Series, March 28, 2013
- Tate Carson Quintet, Maison, January 9, 2013
- Tate Carson Quintet, Zeitgeist Multi-Disciplinary Arts Center, January 1, 2013
- 2012 Tate Carson Quintet, Café Istanbul, December 18, 2012
- Tate Carson Quintet, Blue Nile, Open Ears Music Series, July 17, 2012
- Carbon Trio, Allways Lounge, July 6, 2012
- Tate Carson Quintet, Zeitgeist Multi-Disciplinary Arts Center, April 4, 2012
- Tate Carson Quintet, Allways Lounge, March 14, 2012

#### JAZZ ENSEMBLES

- 2009-2015 Moonshine and Caroline
- 2012-2014 The Messy Cookers Jazz Band
- 2012-2014 Tate Carson Quintet
- 2013 Carbon Trio

#### ORCHESTRAL ENSEMBLES

2013-2015

New Orleans Volunteer Orchestra  
2010 New Orleans Civic Symphony

## Discography

2015 Ablebody, I  
2013 The Messy Cookers Jazz Band, *Swing That Music*  
2012 Tate Carson Quintet, *Walking Like I Was Already Asleep*

## Broadcasts

2014 WWL TV, live performance with The Messy Cookers Jazz Band  
2014 WGNO TV, “News with a Twist,” live performance with The Messy Cookers Jazz Band  
2013 WWOZ Radio, Pledge Drive, live performance with Tate Carson Quintet

## Professional Activities

### PROFESSIONAL ORGANIZATION MEMBER

*International Computer Music Association (ICMA)*  
*Society for Electro-Acoustic Music in the United States (SEAMUS)*  
*Audio Engineering Society (AES)*  
*Motion Picture Sound Editors (MPSE), Affiliate Member*

### CONFERENCE REVIEWER

2019 International Computer Music Conference and New York Electroacoustic Music Festival; New York University; New York, New York.

## Skills

### COMPUTER SKILLS

Programming: JavaScript, Max, SuperCollider, Processing, Python, LilyPond, GUIDO music notation, OpenMusic.  
Music and audio apps: Ableton Live, Logic, Pro Tools, Reaper, Audiokinetic Wwise, Wekinator.