

# Tate Carson

BM, MM, MFA, PhD

*Assistant Professor of Digital Sound Design*  
Digital Arts and Design Program  
College of Arts and Sciences  
Dakota State University  
820 N Washington Ave.  
Madison, SD 57042

EMAIL: [tatecarson@pm.me](mailto:tatecarson@pm.me)  
WEBSITE: [tatecarson.com](http://tatecarson.com)

## Areas of Interest

New Interfaces for Musical Expression • Human-Computer Interaction • Mobile Music • 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 Saraceno 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 International Computer Music Conference*. Daegu, Korea.

#### TALKS

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

#### DEMOS

- 2019 "A more perfect union: Composition with audience-controlled smartphone speaker array and evolutionary computer music," Web Audio Conference, Technical University of Berlin; Berlin, Germany. 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 Expression, 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*.

## Teaching

#### 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

- 2018–2020 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)

- 2019–2020 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.

## Service

- 2023-present Dakota State University Digital Arts and Design Internship Coordinator.

## Technical Work

### CODE

- 2020 – 2021 NexusUI: Web Audio Interfaces – developer and maintainer <https://github.com/nexus-js/ui>.  
January 2020 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*.

## 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 *Şwār m̄*, 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

### 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, Jacksonville 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, Lisser 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*, Lisser 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 *Swärm*, Littlefield Hall, Mills College, December 2, 2015.

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.