

Tate Carson

BM, MM, MFA, PhD

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Digital Arts and Design Program
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Areas of Interest

Locative Audio • Soundscape Ecology • Interactive Sound Art • Ecological Awareness • New Interfaces for Musical Expression • Human-Computer Interaction • Machine Learning for Sound • Distributed Sound Systems • 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 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 2nd 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 Brick House venue.
- 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.
- 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

- 2024 *Resonant Landscapes*, Web-based application that integrates ambisonics and GPS technology to overlay immersive soundscapes of South Dakota state parks onto an urban environment.
- 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

- 2024 *Veins of the Earth*, Fixed Media
- 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 *Ṣwār 𐤔*, 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

- 2024 *Resonant Landscapes*, Audio Mostly, Milan, Italy, September 18-20, 2024.
- 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

- 2024 *Veins of the Earth, Resonant Landscapes* concert, The Brick House, Madison, South Dakota, March 26, 2024.
- 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, 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

- 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 Audio Production I
- Audio Production II
- Audio Production III
- Recording Sessions
- Sound Design for Film
- Sound Design for Games
- Basic Musicianship II
- Undergraduate Research/Scholarship
- Music Appreciation
- 2023 Special Topics: History of Recorded Music
- 2022 Special Topics: Programming for Sound Design
- 2021 Special Topics: Sound Forensics

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 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*.

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

- 2023–24 New Interfaces for Musical Expression.
- 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.