

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 • 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, Tate. 2020. "On Ecomposition: An Interview with Damián Keller." *Journal of Digital Media & Interaction* 3 (5): 133–42.

PEER-REVIEWED CONFERENCE PAPERS

- 2024 Carson, Tate, and Carter Gordon. 2024. "Resonant Landscapes." In *Audio Mostly 2024 - Explorations in Sonic Cultures*, 525–32. Milan Italy: ACM.
- 2021 Tate Carson. 2021. "Immaterial.Cloud: Using Peer-to-Peer Technologies for Music." In *Proceedings of the Web Audio Conference*. Barcelona, Spain.
- 2020 Marasco, Anthony T, Tate Carson, and Matthew A Bardin. 2020. "Designing Collaborative and Mediated Experiences with Networked Circuit-Bent Devices." In *Proceedings of the Sound, Image and Interaction Design Symposium*. Online.
- 2019 Carson, Tate. 2019. "Sounds Aware: A Mobile App for Raising Awareness of Environmental Sound." In *Proceedings of the Web Audio Conference*. Trondheim, Norway.
- Carson, Tate. 2019. "Mesh Garden: A Creative-Based Musical Game for Participatory Musical Performance." In *Proceedings of the International Conference on New Interfaces for Musical Expression*, 339–42. Porto Alegre, Brazil.
- Carson, Tate. 2019. "Systems Thinking and Environmental Interaction in the Work of Tomás Saraceno and David Dunn." In *Proceedings of the International Computer Music Conference*. New York.
- 2018 Carson, Tate. 2018. "A More Perfect Union: Composition with Audience-Controlled Smartphone Speaker Array and Evolutionary Computer Music." In *Proceedings of the Web Audio Conference*. Berlin, Germany.
- Carson, Tate. 2018. "Philosophical Underpinnings of Environmental Music." In *Proceedings of the 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. September 21, 2018.

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 *Şwǎr ǎ*, 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
- 2012 *Green*, Tate Carson Quintet (Jazz Quintet)
We Tend Not To Think About It Because We Tend Not To Know About It, Tate Carson Quintet (Jazz Quintet)
And Then It Hit Me, Tate Carson Quintet (Jazz Quintet)
Something Else Is Needed, Tate Carson Quintet (Jazz Quintet)
Even Dogs Get OCD, Tate Carson Quintet (Jazz Quintet)
Receptacles of Forgetting, Tate Carson Quintet (Jazz Quintet)
A Short History Interrupted, Tate Carson Quintet (Jazz Quintet)

Selected Installations and Performances

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, Lisser Hall, Mills College, April 14, 2017.
- Shifting Migration Pt 2*, Fixed Media, California Electronic Music Exchange Concert – University of California Santa Barbara, 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 *Šwärm*, Littlefield Hall, Mills College, December 2, 2015.

Service and Administrative Roles

2022–Present *Internship Coordinator, Digital Arts and Design Program*, Dakota State University.
 I serve as the Internship Coordinator, connecting students with relevant, career-focused opportunities.
 2022–Present *Faculty Advisor, DSU Live Student Club*, Dakota State University.
 I advise the student club DSU Live, manage paperwork for student compensation, and report on General Activity Fee (GAF) spending to the GAF Committee.
 2022–Present *Member, Equity, Diversity, and Inclusion (EDI) Committee*, Dakota State University.
 I work with the EDI Committee to foster a more inclusive environment within the College of Arts and Sciences.
 2021–2023 *Member, Implementation Council*, Dakota State University.
 Participated in meetings and presentations on DSU’s strategic plan, contributing to discussions and gaining insights into university governance.

Teaching Experience

DAKOTA STATE UNIVERSITY, MADISON, SD

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, BATON ROUGE, LA

- 2018-2020 CSC 2463 – Programming Digital Media, Instructor. MUS 4744 – Mobile Music, Teaching Assistant.

LIBERTY MAGNET HIGH SCHOOL (FORMERLY KNOWN AS LEE MAGNET HIGH SCHOOL), BATON ROUGE, LA.

- 2019-20 Coding for the Web.
- 2018, 2020 Introduction to Computational Thinking.
- 2018 CSC 2463 – Programming Digital Media.

OTHER

- 2020 Futures Fund, Online Content Creator, Coding for the Web, Baton Rouge, LA
- 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, Baton Rouge, LA.

Additional Performances

COMPOSITIONS PERFORMED BY MILLS COLLEGE CONTEMPORARY PERFORMANCE ENSEMBLE AND IMPROVISATION WORKSHOP, OAKLAND, CA

- 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, *Form Unfolding*
- 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

CONFERENCE REVIEWER

- 2023–24 New Interfaces for Musical Expression.
- 2019 International Computer Music Conference.

Computer Skills

PROGRAMMING LANGUAGES AND TOOLS

Max, SuperCollider, JavaScript, C# (Unity), Python, Chuck, Docker, Processing, OpenMusic, LilyPond, GUIDO music notation.

MUSIC AND AUDIO APPLICATIONS

Reaper, Ableton Live, Audiokinetic Wwise, FMOD, Logic, Pro Tools, Sound Particles, iZotope RX, Adobe Audition, Audacity, Sonic Visualizer, Praat, Wekinator.