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

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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.

Publications

JOURNAL ARTICLES

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

PEER-REVIEWED CONFERENCE PAPERS

- 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.
- Marasco, A., Carson, T., Bardin, M. (2020). "Designing Collaborative and Mediated Experiences with Networked Circuit-Bent Devices." In *Preceedings 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.

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- 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.
- 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.

Other Research

POSTER PRESENTATIONS

- "Mesh Garden: A creative-based musical game for participatory musical performance," New Interfaces for Music Expression, Universidade Federal do Rio Grande do Sul; Porto Alegre, Brazil. June 5, 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 19, 2018.

TALKS

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

Demos

"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.

Awards

²⁰¹⁶ 2nd 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

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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

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 - present 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.

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Creative Work

Interactive web audio installations

- immaterial.cloud, Interactive installation with Distributed Smartphone Speaker Array.
- 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 Şwär m , 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

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.

A more perfect union, National Student Electronic Music Event, University of Virginia, February 8-9, 2019.

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

ELECTRONIC MUSIC

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.

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.

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 Şwärm, 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

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

 $_{\rm 2014}$ $\,$ 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

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.

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