

Anthony T. Marasco, Ph.D.

Assistant Professor of Music Technology and Composition

The University of Texas Rio Grande Valley

www.atmarasco.com

EDUCATION

Ph.D. in Music: Experimental Music and Digital Media | 2020

Louisiana State University

Dissertation: "Bendit_I/O: A System for Extending Mediated and Networked Performance Techniques to Circuit-Bent Devices."

Minor in Digital Art

M.M. in Computer and Electronic Music Composition | 2010

Towson University

B.A. in Music Composition and Theory | 2008

Lebanon Valley College

TEACHING & PROGRAM DEVELOPMENT

Assistant Professor of Music Technology and Composition | 2020 - present

The University of Texas Rio Grande Valley (Brownsville and McAllen, TX)

Extern Instructor of Digital Design & Emergent Media | 2016 - present

Denham Springs STEM & Robotics Center (Denham Springs, LA) and

Lee Magnet High School (Baton Rouge, LA)

Courses taught:

- Digital Storytelling
 - Topics covered: audio recording and editing, filmmaking, interactive storytelling with JavaScript, digital media ethics
- Programming Digital Media (Dual-Enrollment course through Louisiana State University)
 - Topics covered: JavaScript for web audio and web graphics, physical computing, serial communication between hardware and the web browser, software development cycle for interactive digital media
- Introduction to Computational Thinking

Program Coordinator, Digital Design & Emergent Media STEM Pathway | 2016 - present

Louisiana State University, Baton Rouge, LA

College of Music & Dramatic Arts, Center for Computation and Technology and the
Gordan M. Cain Center

I developed curriculum and class materials for courses in the Digital Design & Emergent Media STEM Pathway. These materials include online textbooks, lesson plans, projects, study guides, and certification tests. The LSU STEM Pathways provide Louisiana public schools with college-readiness curriculum designed to teach coding, sound design, and interactive media production skills. As the Program Coordinator, I lead the training, assessment, and supervising of certified K-12 teachers throughout the state.

Notable activities:

- Authored online course textbook for Programming Digital Media course, containing interactive code examples, lesson plans, and assignment materials for sixteen chapters across three units and a reference section.
- Lead developer of Programming Digital Media course, co-developer of Digital Storytelling, Sound Design, Digital Media Capstone, and Intro to Film & TV courses.
- Recruit and train teachers for certification in the LSU STEM Pathways program, allowing them to teach DDEM pathway courses in the state of Louisiana.
- Design and teach six-week Javascript for Digital Media training course at the LSU STEM Pathways Summer Institute to certify high school teachers in the Programming Digital Media course.
- Lead monthly follow-up training sessions and conduct semesterly observations of DDEM-certified teachers during their first year of teaching.

Instructor of Music History and Digital Music | 2012 - 2016

The University of Scranton, Scranton, PA

College of Arts and Sciences - Art and Music History Department

Courses taught:

- Digital Music: Fundamentals and History (course author)
 - Topics covered: analog and digital synthesis techniques, audio recording and editing, digital signal processing, MaxMSP and Pure Data for composition and performance, MIDI controllers and sensor-based performance interfaces, electroacoustic music history
- Music in America
- Western Music History
- 20th Century Music

Instructor of Music History | 2011 - 2016

The Pennsylvania State University, Multiple Campuses (Wilkes-Barre | Hazleton | Brandywine)
College of Arts and Humanities

Courses taught:

- Film Music
- Jazz History
- History of Popular Music
- World Music

PUBLICATIONS

Dissertation

2020 Marasco, Anthony T. 2020. "Bendit_I/O: A System for Extending Mediated and Networked Performance Techniques to Circuit-Bent Devices." Ph.D. dissertation, Louisiana State University.

Conference Papers, Presentations, and Proceedings

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*, Funchal, Madeira, Portugal.

2019 Marasco, Anthony T. and Jesse Allison. 2019. "Connecting Web Audio to Cyber-Hacked Instruments in Performance." In *Proceedings of the Web Audio Conference 2019*, NTNU, Trondheim, Norway.

Marasco, Anthony T., Edgar Berdahl, and Jesse Allison. 2019. "Bendit_I/O: A System for Networked Performance of Circuit-Bent Devices." In *Proceedings of the international conference on New Interfaces for Musical Expression*, Federal University of Rio Grande do Sul, Porto Alegre, Brazil, pp. 331-334.

Berdahl, Edgar and Anthony T. Marasco. 2019. "Proposing 'Computer Bending' and 'Circuit Vacuuming' as Techniques in Experimental Music." In *Proceedings of the International Computer Music Conference*, New York University, New York City, New York, USA, vol. 2019.

2018 Marasco, Anthony T. and Jesse Allison. 2018. "SoundSling: A Framework for Using Creative Motion Data to Pan Audio Across a Mobile Device Speaker

Array." In *Proceedings of the Web Audio Conference 2018*, Technische Universität Berlin, Berlin, Germany.

Marasco, Anthony T. 2018. "Sound Opinions: Creating a Virtual Tool for Sound-Art Installations through Sentiment Analysis of Critical Reviews." In *Proceedings of the international conference on New Interfaces for Musical Expression*, Blacksburg, Virginia, USA, 2018, pp. 346 - 347.

Berdahl, Edgar, Eric Sheffield, Andrew Pfalz, and Anthony T. Marasco. 2018. "Widening the razor-thin edge of chaos into a musical highway: connecting chaotic maps to digital waveguides," in *Proceedings of the international conference on New Interfaces for Musical Expression*, Blacksburg, Virginia, USA, 2018, p. 390–393.

- 2017 Mitchusson, Chase, Anthony T. Marasco, and Jesse Allison. "Usage of Physics Engines for UI Design in NexusUI." In *Proceedings of the Web Audio Conference 2017*, Queen Mary University of London, London, England, UK.

Invited Panelist/Presentations/Workshops

- 2020 "Creating Networked Circuit-Bent NIMEs with Bendit_I/O" workshop author and co-leader with Nick Hwang and Matthew A. Bardin, presented at the international conference on New Interfaces for Musical Expression, Birmingham, England, UK (conference held virtually due to COVID-19 pandemic), July 22nd, 2020.

"Building Networked Performances Using Node.js" workshop co-author and co-leader with Eric Sheffield and Nick Hwang, presented at the MOXsonic Festival, Warrensburg, MO, March 6th, 2020.

- 2019 Lead presenter with Jesse Allison (co-presenter) on *Connecting Web Audio to Cyber-Hacked Instruments* at the EMDM Seminar, Baton Rouge, LA November 22nd, 2019.

Co-Presenter with Jesse Allison (lead presenter) of *Digital Design & Emergent Media: Programming Digital Media* at the Louisiana Science Teachers conference, Baton Rouge, LA, November 5th, 2019.

Panelist on *Cultivating Creative Thinkers* arts education panel at the 2019 Louisiana Arts Summit, Baton Rouge, July 29th, 2019.

“Designing Schematics and PCBs in EagleCAD” workshop author and leader, presented at the EMDM Seminar, Baton Rouge, LA, March 21st, 2019.

2018 Presentation on *Introducing Bendit_I/O: Networked Circuit Bending* at the EMDM Seminar, Baton Rouge, LA, December 7th, 2018.

Presentation of SoundSling framework at the Web Audio Conference 2018, Technische Universität Berlin, Berlin, Germany, September 19th-22nd, 2018.

Presentation of Sound Opinions framework at the New Interfaces for Music Expression international conference, Virginia Tech, Blacksburg, Virginia, USA, June 3rd-6th, 2018.

2017 “Creating Interactive Web Art with p5.js and tone.js” workshop author and leader, presented at the EMDM Seminar, Baton Rouge, LA, February 21st, 2017.

2015 Presentation on *Weld* and my compositional practice at the Mise-En Music Festival, New York City, NY, June 22nd, 2016.

2014 Lead presenter with Monica Pearce (co-presenter) of *Blurring the Lines Between Artist and Audience* at the Conversations on Music Lecture Series, University of Scranton, Scranton, PA, November 6th, 2014.

Presentation on my sound art to residents of the Southeast x Southeast community center as part of the Mural Arts/ACF Philadelphia music outreach program, Philadelphia, PA, September 22nd, 2014.

2013 Presentation/concert on my homemade instruments as grand-prize winner of the UnCaged Toy Piano Festival Call for Scores, Harvestworks Digital Media Arts Center, New York City, NY, December 12th, 2013.

2012 Presentation of *Architectural Music: Installation Compositions and the Changing Landscape of Musical Performance* at the PSU Hazleton Faculty Lecture Series, The Pennsylvania State University, Hazleton, PA, November 27th, 2012.

Digital Textbooks and Course Materials

2018 Author, *Programming Digital Media* online textbook and materials, LSU STEM Pathways, accessible at <https://pdm.lsupathways.org/>

Textbook Ancillary Material

2019 Ancillary material author, *Jazz: Race and Social Change (1870–2019)*, Oxford University Press.

Paper and Artwork Reviewer

2018 Reviewer, Conference Papers, Web Audio Conference 2018, TU Berlin, September 19th-22nd.

Reviewer, Installations, Web Audio Conference 2018, TU Berlin, September 19th-22nd.

2017 Reviewer, Installations, National Student Electronic Music Event, Louisiana State University, March 9th-11th.

2016 Reviewer, Compositions, Musicworks Magazine Electronic Music Composition contest, December 2016.

2015 Reviewer and Meta-Reviewer, Installations, international conference on New Interfaces for Musical Expression, Louisiana State University, May 31st-June 3rd.

GRANT WRITING

2019 Jesse Allison, Anthony T. Marasco, Austin Franklin. LSU Student Tech Fee Grant, \$6,000 awarded for Analog Synthesis Lab, October, 2019.

2017 Frank Neubrandner, Jesse Allison, Vanessa Begat, Fernando Allegre, Jewell Simon, Anthony T. Marasco. LSU STEM Certification Pathways - Math and Science Partnership Grant. \$600,000 awarded by the U.S. Department of Education for the funding of the LSU STEM Pathways Summer Training Institute for 2018 and 2019.

ADMINISTRATION & SERVICE

Conference host, Executive Director - Electric LaTeX Conference | 2017

Chair of Installation Committee - National Student Electronic Music Event | 2017

Committee Member - Scranton Mini Maker Faire | 2014

SKILLS & TECHNOLOGIES

Expert

MaxMSP, JavaScript (p5.js, Web Audio API, Node.js, WebSockets)/HTML/CSS, DAWs (Pro Tools, Logic Pro, Studio One, Audacity), MIDI systems and controllers, Arduino, Raspberry Pi, Jitter, Processing, Pure Data, OSC, music notation software, electronics design, laser cutting, sensors for multimedia interaction, motors and actuators, principals of audio engineering, live sound reinforcement, multimedia collaboration, soldering, schematic design

Experienced

Machine learning (TensorFlow/TensorFlow Lite), physical modeling synthesis, 3D printing, Adobe Creative Suite (Photoshop, InDesign, Final Cut Pro, Illustrator, Audition, Premiere), SuperCollider, Rhinoceros, Python, Ableton Live, Touch Designer, haptics design

RESIDENCIES, AWARDS, & HONORS

Signal Culture Media Lab - Artist in Residency | 2015

Montreal Contemporary Music Lab - Featured sound artist | 2015

Rhymes with Opera Chamber Music Workshop - Composer participant | 2014

soundSCAPE International Composition Festival - Composer participant and sound engineer | 2009 & 2011

American Composers Forum - Commission grant for *Southeast x Southeast* | 2014

Force Field Project Philadelphia - Commissioned artist for *Trans-Avian Sing-Along* | 2014

UnCaged Toy Piano Festival Call for Scores – Grand Prize winner | 2013

WIRED Magazine - Commissioned digital composition/Editorial for *Out of Conte#t* | 2013

I Care If You Listen magazine - Featured artist on quarterly mixtape | 2013

PROGRAMED COMPOSITIONS & INSTALLATIONS

The Sound, Image, and Interaction Design Symposium | 2020

Networked Music Festival | 2020

MOXsonic Festival - Warrensburg, MO | 2020

Web Audio Conference - Trondheim, Norway | 2019

High Voltage concert series - Baton Rouge, LA | 2019, 2018, 2017

Electroacoustic Barn Dance - Jacksonville, FL/Fredericksburg, VA | 2018, 2016

National Student Electronic Music Event - Denton, TX/Baton Rouge, LA | 2018, 2017

The Music Gallery Emergents concert series - Toronto, Canada | 2017

New Interfaces for Musical Expression (NIME) international conference - Copenhagen, Denmark/Birmingham, England | 2017, 2020

Society for Electroacoustic Music in the United States (SEAMUS) conference - St. Cloud, MN | 2017

Electric LaTeX Festival - Austin, TX | 2016

International Toy Piano Festival - Tampa, FL | 2016

Mise-En Music Festival - New York City, NY | 2016

Toronto International Electroacoustic Symposium - Toronto, Canada | 2016

Montreal Contemporary Music Lab - Montreal, Canada | 2015

New York City Electroacoustic Music Festival - New York City, NY | 2015

Rhymes with Opera Chamber Music Workshop - New York City, NY | 2014

Toy Piano Composers Ensemble concert series - Toronto, Canada | 2014

UnCaged Toy Piano Festival - New York City, NY | 2013

PROFESSIONAL ORGANIZATIONS

American Society of Composers Authors and Publishers (ASCAP)

International Computer Music Association (ICMA)

Society of Electroacoustic Music in the United States (SEAMUS)

Phi Mu Alpha Sinfonia brotherhood

COMPLETE WORKS & PROJECTS HISTORY

Camera Studies, Vol. 1 for live electronics, and networked circuit-bent camera (2020)

April 29th, 2020 premiere, Doctoral Dissertation Recital, virtual due to COVID-19 pandemic

September 4th, 2020, SIIDS 2020, virtual due to COVID-19 pandemic

gravity / density for networked circuit-bent electronics, mobile devices, and audience participation (2019)

Collaboration with Jesse Allison

December 4th, 2019 premiere, Rockheim, Trondheim, Norway

March 6th, 2020, University of Central Missouri, Warrensburg, MO

July 24th, 2020, Birmingham Conservatoire, England, UK (through online concert presentation)

The Spinning Earth Shall Spread Before You for networked circuit-bent CD players (2019)

March 8th, 2019 premiere, Louisiana State University, Baton Rouge, LA

Ghostwriter for networked laptop trio (2018)

Collaboration with Chase Mitchusson

November 5th, 2018 premiere, Louisiana State University, Baton Rouge, LA

Werewolf for soprano saxophone, tenor saxophone, computer, and reactive visuals (2017)

Commissioned by Stereoscope

May 9th, 2017 premiere, the Music Gallery, Toronto, ON

John Cage's Four4 for Robot Percussion (installation) (2017-2018)

Arrangement for solenoids, motors, and Arduino
Collaboration with Brian Elizondo, Eric Sheffield, and Landon Viator
October 28th, 2017, Electric LaTex Festival, Louisiana State University, Baton Rouge, LA
March 9-10th, 2018, NSEME, University of North Texas, Denton, TX

Travel Record (installation) (2017)

Laser-read record player, custom software, Arduino, computer, 2-channel audio
April 4th, 2017, Firehouse Gallery, Baton Rouge, LA

Listening for soprano and electric music box (Raspberry-Pi-embedded music box with live signal processing) (2015)

Commissioned by Maureen Batt
March 13th, 2016 premiere, Philadelphia, PA
May 16th, 2017, Royal Danish Academy of Music, Copenhagen, Denmark
February 10th, 2018, Electroacoustic Barn Dance, Jacksonville, FL

Weld for iPad (live granular processing), circuit-bent radios, and computer (6-channel audio playback) (revised 2015)

Commissioned by the soundSCAPE International Composition Festival
July 15th, 2011 premiere, Civico Museo Parisi-Valle, Maccagno, Italy
October 12th, 2011, PSU Hazleton Faculty Lecture Presentation, Hazleton, PA
October 4th, 2015, Electroacoustic Barn Dance, Fredericksburg, VA
November 11th, 2016, Electric LaTex Festival, Austin, TX
April 21st, 2017, SEAMUS Conference, St. Cloud, MN

For the Man Who Has Everything (installation) (2015)

Custom software, MIDI Sprout, Ableton Live, VDMX, custom sensor interfaces (tactile sensor box, conductive headband), video, computer, 4-channel audio
Created and premiered during the Montreal Contemporary Music Lab
June 19th, 2015, workshop premiere, Eastern Bloc, Montreal, QC

Sensitive Ecosystem for prepared electric guitar, clarinet, civilian percussion, cello, and computer (2-channel audio playback) (2014)

Commissioned by the American Composers Forum Philadelphia & Mural Arts Philadelphia
October 11th, 2014 premiere, Southeast x Southeast Community Center, Philadelphia, PA

Ultraviolet Cleopatra for flute, clarinet, electric violin (live signal processing), electric bass, percussion, and electronics (2-channel audio playback, 6-voice drone synthesizer, gong resonator speaker) (2014)

Commissioned by the Toy Piano Composers Ensemble

September 20th, 2014 premiere, the Music Gallery, Toronto, ON

Terre Haute, IN for soprano, mezzo-soprano, violin, percussion, and interactive electronics (custom cellphone audio controllers, synthesizer, 2-channel audio playback) (2014)

Commissioned by the Rhymes With Opera New Chamber Music Workshop

August 16th, 2014 premiere, the National Opera Center of America, New York City, NY

Troubled for prepared Pop-O-Matic Trouble board game, Makey-Makey, and computer (2-channel audio playback triggered by board game) (2013)

Commissioned by the UnCaged Toy Piano Festival 2013

December 13th, 2013 premiere, Harvestworks Center for Digital Media, New York City, NY

Out of Conte#t (Live Ensemble Version) for open, acoustic instrumentation and laptops (Soundplant software for audience generated musical performance) (2013)

Commissioned by the Color Field Ensemble

Featured event at the 2013 Color Field Festival

September 7th, 2013, Color Field Festival, Wisconsin State Capital Building, Madison, WI

October 17th, 2013, Habitat for Humanity Young Professionals Group, Urban Abbey, Omaha, NE

Mid-Century Marfa for toy piano, Aeolian harp/plastorgan hybrid, and electric fans (revised 2014)

Commissioned by Phyllis Chen

Winner of the 2013 UnCaged Toy Piano Festival Call for Scores

December 13th, 2013, Dimenna Center for Classical Music, New York City, NY

September 20th, 2014, the Music Gallery, Toronto, ON

January 10th, 2016, International Toy Piano Festival, St. Petersburg, FL

Out of Conte#t for iPad app and streaming Twitter data (digital media piece) (2013)

Commissioned by WIRED Magazine

May 14th, 2013 premiere, WIRED Magazine's The Connective issue, online publication

Communiqué for female vocal quartet (SSAA), narrator, postcards, and computer (2-channel audio playback) (2012)

Commissioned by the Quince Contemporary Vocal Ensemble
October 20th, 2012, Happy Badger Café, Bowling Green, OH
October 22nd, 2012, High Concept Labs, Chicago, IL
October 25th, 2012, Westport Coffee House, Kansas City, MO

Ages 4 and Up for two or more iPads/iPhones/iPod Touches (Thicket app) (2012)

May 9th, 2012 premiere, Games and Gamification Colloquy, Penn State, Hazleton, PA
July 19th, 2012, Learning Design Summer Colloquy, Penn State, State College, PA

Walking Distance (installation) (2012)

open, acoustic instrumentation, audience-provided electronics, instructions, marker flags, large-scale walking paths
April 4th, 2013 premiere, Academic Quad, Lebanon Valley College, Annville, PA

Laying of Hands (installation) (2012)

live video processing, computer (live audio processing), pictures, letters, portable tape recorders, iPad (Thicket app), melodica, and electric guitar
March 21st, 2013 premiere, Hope Horn Art Gallery, University of Scranton, Scranton, PA

In Country/In Motion for oboe, piano, computer (2-channel audio playback), and video (2011)

Commissioned by the soundSCAPE International Composition Festival
July 17th, 2011 premiere, soundSCAPE International Composition Festival, Maccagno, Italy

Europe During the Cold War for string quartet and computer (2-channel audio playback) (2010)

April 18th, 2010 premiere, Graduate Composition Recital, Towson University, Towson, MD

Waldorf-Astoria for electric guitar, acoustic guitar, record player, computer (2-channel audio playback), music box, ukulele, tenor voice, and keyboards (2009)

Premiere performance by Project Blue Book
April 18th, 2010 premiere, Graduate Composition Recital, Towson University, Towson, MD

Tiamat for solo baritone voice (2009)

Commissioned by the soundSCAPE International Composition Festival

Premiere performance by Aaron Engelberth

July 23rd, 2009 premiere, soundSCAPE International Composition Festival, Pavia, Italy

April 18th, 2010, Graduate Composition Recital, Towson University, Towson, MD

This Place is Forgotten for piano, violin, clarinet, classical guitar, mandolin, and computer (2-channel audio playback) (2009)

Commissioned by the soundSCAPE International Composition Festival

July 25th, 2009 premiere, soundSCAPE International Composition Festival, Pavia, Italy

April 18th, 2010, Graduate Composition Recital, Towson University, Towson, MD

Not in Kansas for keyboards, viola, prepared electric guitar, piano, Marxophone, Omnichord, and computer (2-channel audio playback) (2008)

April 12th, 2009 premiere, Student Composers Concert, Towson University, Towson, MD

April 18th, 2010, Graduate Composition Recital, Towson University, Towson, MD

On Space and Car Crashes for synthesizers, electric guitar, vibraphone, marimba, civilian percussion, and computer (2-channel audio playback) (2007)

December 7th, 2007 premiere, New Frontiers Recital, Lebanon Valley College, Annville, PA

November 12th, 2008, Student Composers Concert, Towson University, Towson, MD

REFERENCES

Jesse Allison
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