TOMMY MCPHEE

Composer, Researcher, and Educator 281-627-7669 tommym888@gmail.com

EDUCATION

Arizona State University (Fall 2023-Present)- Tempe, AZ **Doctor of Musical Arts in Interdisciplinary Digital Media** (expected in Spring 2026)

Graduate Certificate in Music Theory Pedagogy (Spring 2024)
Graduate Certificate in Music Entrepreneurship (Fall 2024)
Funded by teaching assistantship in music theory and aural skills

Georgia Southern University (Fall 2021-Spring 2023)- Statesboro, GA Master of Music in Music Technology

Funded by teaching and graduate assistantships in music technology

Lamar University (Fall 2017-Spring 2021)- Beaumont, TX Bachelor of Music in Music Composition

Reaud Honors College Graduate Funded by the Mirabeau Scholarship, a four-year merit-based academic

scholarship including full tuition, room/board, fees, and stipend for supplies

TEACHING EXPERIENCE

Arizona State University Tempe, AZ. August 2023 - Present Teaching Assistant

- Music Theory I (MTC 125)
- Music Theory II (MTC 221)

Responsible for instructing undergraduate aural skills classes and assisting with music theory lectures and grading. Has lectured music theory above and beyond the requirements of the position as part of the Music Theory Pedagogy graduate certificate.

Georgia Southern University Statesboro, GA. 2022-2023 AY Instructor of Record

- Digital Audio Workstations (MUSC 4534)
- Recording Studio Techniques (MUSC 4535)

Sole Instructor of Record for all upper-level undergraduate coursework in Music

Technology (MUSC 4535- Digital Audio Workstations and MUSC 4534- Recording Studio Techniques); this role included near-exclusive responsibility for curriculum design. Concurrently retained most responsibilities from previous position as a graduate assistant, including tech lab supervisory and managerial duties, library work duties, and sporadic facilities responsibilities, including the facilitation of Channel Noise concerts.

UNIVERSITY SERVICE

Arizona State University Tempe, AZ. 2024-2025 AY

Graduate Student Government Assembly Member, HIDA

Represented graduate students within the Herberger Institute of Design and the Arts. Served as Chair of the Legislative and Political Action committee.

OTHER WORK & PEDAGOGY EXPERIENCE

Tempe Public Library (City of Tempe) July 2024-Present Youth Services Support Staff

Co-facilitates Maker Lab, a STEAM program teaching teens technology skills such as creative coding and 3D printing, as well as Sunday Funday for all ages. Facilitated Code Club, a popular youth program teaching computer science to kids ages 6-12. Assists with programming and book displays for youth and teens as well as clerical duties including checkouts, returns, and library cards.

Arizona State University October 2023-Present

Music Theory Tutor September 2025-Present

Assists students with music theory individually outside of the classroom.

Information Technology Assistant October 2023-Present

Responsible for inventory and software troubleshooting/management at the Media and Immersive Experiences (MIX) center in Mesa, AZ. Works with staff, faculty, and students to solve issues and check out equipment for educational use. Helps facilitate technical needs for the MIX center at special events.

Graduate Services Assistant January-November 2024

Responsible for processing, spatializing, and integrating sound to be used within the MILES project, a virtual-reality experience designed to teach acoustics.

Georgia Southern University 2021-2022 AY

Graduate Assistant- Music Technology Facilities Manager

This role entailed the entirety of the above responsibilities undertaken as a teaching assistant with the sole exceptions of teaching and curriculum design.

Additionally, this position required serving as the department Facilities Manager responsible for maintenance and repair of music technology software and hardware, including a variety of IT and inventory tasks. This role also involved creating, managing, and enforcing studio policies and signup protocol.

Lamar University August 2018-December 2020

Cardinal Communities Remote Office Assistant August-December 2020 This role involved data entry, record keeping and performing clerical office duties. Resident Assistant August 2018-March 2020

Responsible for assisting residents at the front desk and on-call 24/7, as well as conducting supervisory nightly rounds and serving as a community leader in student housing. Assisted with clerical desk duties as well as crisis situations. Worked to engage and support a diverse and underserved population of primarily first-generation undergraduate students. Designed, planned, promoted, and executed monthly programs to engage residents and designed decorations.

Gulf Coast Aquatics Kemah, TX. May-August 2021

Poseidon Aquatic Management Consulting Houston, TX. June 2016-August 2019
Lifeguard Supervisor and Red-Cross LGI-Certified Training Instructor
Trained lifeguards and continually audited them for safety skills. Drove a
company vehicle to supervise pools and perform basic maintenance procedures
and balance water chemistry. At PAMC, was responsible for scheduling and
supervising a staff of around 20 lifeguards. Was also responsible for lifeguarding,
setting up special events, and teaching beginner-level swim lessons.

LIST OF WORKS & PERFORMANCES

2025 **Portable Audible Ecosystem,** moveable and interactive installation for BELA board for digital signal processing, XY stereo microphone and mono audio playback

April 2025- Presented for Site-Responsive Sonic Art class at ASU (Tempe, AZ)

2025 **Remote Interaction**, audiovisual interactive installation for infrared remotes

 March 2025- Showcased at MIXiversery event. ASU Media and Immersive Experiences Center (Mesa, AZ)

2024 **Study for Strings,** for any number and type of bowed string instrument. Completed for the Visiting Quartet Residency Program for feedback by the Borremeo String Quartet. 5-10'

November 2024- Visiting Quartet Residency Program Culmination Performance.
 Katzin Concert Hall (Tempe, AZ)

- 2024 **Projection Cube**, for generative stereo electronics. 3'
 - November 2024- ASU Composition Recital. Katzin Concert Hall (Tempe, AZ)
- 2024 Sub-GHz Sonification System, Max/MSP instrument for use with Flipper Zero
 - May 2024- Presented for Advanced Interactive Sound class at ASU (Tempe, AZ)
- 2024 **Scape**, for 5th order ambisonic fixed media with generative spatialization. 10'
 - April 2024- Presented for Acousmatic Composition class at ASU (Tempe, AZ)
- 2024 *Automorphism,* for soprano, flute, alto saxaphone, and video. Composed for the Fonema Consort Ensemble-in-Residence program. 5'
 - Fonema Consort Ensemble-in-Residence Concert. Organ Hall (Tempe, AZ)
- 2024 Study for Sinusoidal Spectra, for stereo fixed media. 3'
 - April 2024- Presented for Spectralism class at ASU (Tempe, AZ)
- 2024 **Zero Gravity**, for string orchestra and video. Composed for the Arizona State University Symphony Orchestra through the Composer-in-Residence program. ~11'
 - April 2024- ASUSO Concert. Organ Hall (Tempe, AZ)
- 2024 **Discretion**, for 12-channel fixed media and video. 5'
 - March 2024- SEAMUS Soundscapes of Inner Peace. New York University (New York, NY)
 - April 2024- ASU Composition Recital. Katzin Concert Hall (Tempe, AZ)
 - Condensed to quadraphonic spatialization
- 2024 *Orbital Observation,* for bass clarinet and marimba. 1.5'
 - Feburary 2024- Read by Transient Canvas in Katzin Concert Hall (Tempe, AZ)
- 2024 **Collective Perception**, for generative stero electronics and video. 3'
 - Feburary 2024- ASU Composition Recital. Katzin Concert Hall (Tempe, AZ)
- 2023 **Portal,** interactive virtual reality experience for fifth-order ambisonics. Made in collaboration with Kungin Tsai. 5'
 - December 2023- Media Arts and Sciences Showcase. Arizona State University (Tempe, AZ)
- 2023 *Freezing Tereré*, for brass quintet and audio-reactive video. 5'
 - PRISMS Contemporary Music Festival. Arizona State University (Tempe, AZ)

- 2023 *The Self-Similar Synthesizer*, oroginal software instrument and research paper
 - Defended in March 2023, in fufillment of MM at GSU (Statesboro, GA)

2023 *Counterpoint*, for generative 8-channel electronics and video. 2'

- August 2023- Vox Electronica
- November 2022- Channel Noise Concert. Carter Recital Hall (Statesboro, GA)
 - Premiere of a preliminary version without a video component

2022 Windows, for 8-channel live electronics. Flexible duration

- March 2025- MOXSONIC Missouri Experimental Sonic Arts Festival. University of Central Missouri (Warrensburg, MO)
 - Stero version with projected video component
- March 2023- TURN UP Multimedia Festival. University of Arizona (Tuscon, AZ)
 - Stereo version
- April 2022- Channel Noise Concert. Carter Recital Hall (Statesboro, GA)
 - 8-channel version

2022 Inclusive Composition Environments for Nonstandard Sound Synthesis, paper on integrating sample-level audio generation into computer music languages

- March 2024- MOXSONIC Missouri Experimental Sonic Arts Festival. University of Central Missouri (Warrensburg, MO)
- April 2023- SEAMUS (Society for Electroacoustic Music in the United States) conference. New York University (New York, NY)

2021 **Squares**, for polyphonic synthesizer with live sound processing and playback. 4'

- April 2022- Electronic Music Midwest Festival. Lewis University (Romeoville, IL)
- March 2022- TUTTI New Music Festival. Denison University (Granville, OH)

Earlier Works & Performances

2021 BM Senior Recital, Lamar University, pre-recorded in Rothwell Recital Hall

- **Space Pool**, for woodwind trio (flute and two Bb clarinets)
- Four Seasons, for grand piano and toy piano
- Fortitude, for brass trio (horn, euphonium, tuba)
- The Sweetest Poison, for solo piano
- Zaphod Beeblebrox, for low brass trio (trombone, euphonium, tuba)
- Ice Cube, for hardware electronics and live-recorded playback and processing
- The Third Eye, for alto saxophone and hardware sampler
- Lunar Truth, for generative hardware synthesizer

2019 Lamar University Department Recital, Rothwell Recital Hall

• Sipping on Tereré, for brass quintet (trumpet, horn, trombone, euphonium, tuba)

2018-9 Behind the Music Radio Broadcasts

• Interviews discussing Bach's counterpoint and expressionist orchestration

GRANTS, AWARDS, RESIDENCIES & CALLS FOR SCORES

- First-Place Winner of the Mykytyn Family Composition Prize Fall 2023
 Awarded to *Windows* including a \$1,000 prize
- **ASU Graduate Student Government Travel Grants** Spring 2024 and Spring 2025 \$950 awards to present and performat the MOXSonic Missouri Experimental Sonic Arts festivals in Warrensberg, MO

Arizona State University Composer-in-Residence Program AY 2023-2024 and Fall 2024-Present

Composed *Zero Gravity*, premiered by the ASU Symphony Orchestra in March 2024. Currently composing a work to be performed by the ASU Chamber Winds.

Visiting String Quartet Residency Program November 2024
Composed Study for Strings, read and coached by the Borremeo String Quartet

Fonema Consort Ensemble-in-Residence Program April 2024 Composed *Automorphism*, read and performed by the Fonema Consort trio

Transient Canvas Visiting Ensemble Workshop Feburary 2024

Composed *Orbital Observation*, read by the Transient Canvas ensemble

RESEARCH INTERESTS

Compositional Abstraction- aesthetics and technical approaches, including works for maximally flexible electronic playback and acoustic performance contexts; works incorporating generative and/or aleatoric elements and live improvisation

Parallelism, Feedback, and Iterated Function Systems- self-similar sound synthesis and composition, artistic applications of iterated function systems, parallel audio computing paradigms, nonlinear and antinarrative compositional forms and syntax

Audiovisual Composition- artistic approaches to integrating video and sound

synthesis, use of video as a tool to create generative works for acoustic performers

Nonstandard Sound Synthesis- creative sample-level audio generation techniques, artistic implementation and modification of digital signal processing algorithms

Free Software & Publicization of Experimental Music- accessibility and transparency of both creative and technical work to academic collaborators and the general public

SPECIALIZATIONS WITHIN GRADUATE COURSEWORK

Advanced Sound Synthesis

AME 594- Site-Responsive Sonic Art (DMA) AME 511- Advanced Interactive Sound (DMA) MUSC 7534- Interactive Media (MM) MUSC 7533- Sound Design (MM)

Audiovisual Composition

AME 532- Creating Interactive Media (DMA)

MTC 598- Topic: Sound Art and Multimedia Environments (DMA)

AME 598- Topic: Spatial Audio for XR (DMA) MUSC 7891- Audiovisual Composition (MM)

Spatial Audio

AME 598- Topic: Spatial Audio for XR (DMA)

AME 591- Acousmatic Composition (taken as MTC 790, DMA)

Music Entrepreneurship

MUP 538- The Enterprising Artist (DMA)

MUP 584- Music Entrepreneurship Internship (DMA)

Music Theory Pedagogy

MTC 525- Pedagogy of Theory (DMA)

MTC 584- Music Theory Pedagogy Internship (DMA)

Teaching Assistant- Music Theory 1 and 2 (DMA)

Digital Signal Processing and Low-Level Audio Programming in C++

MM Final Project and Paper on "The Self-Similar Synthesizer", an investigative computer program which generates auditory fractals from number sets.

Contemporary Musicology

MHL 598- Topic: Music Since 1950 (DMA)

MTC 591- Topic: Spectralism (DMA)

MTC 598- Topic: Sound Art and Multimedia Environments (DMA)

MUSC 5233G- Music in the Contemporary Period (MM)

MUSC 5630G- Music, Technology, and Contemporary Culture (MM)

Digital Audio Workstations

MUSC 7530- Digital Audio Montage (MM)

Instructor of Record- Digital Audio Workstations and Recording Studio Techniques (MM)

Frequently used DAWs and spectral analysis software for sound design on the MILES research project as a Graduate Services Assistant (DMA, see other work experience)

PROFESSIONAL SKILLS

Experience with low-level audio and graphics programming in C++ and GLSL

Score transcription & arranging for a variety of instrumentations using Finale

Experience with Digital Audio Workstations: ProTools, FL Studio, and REAPER

Extensive experience with domain-specific music programming languages: Max/MSP/Gen/Jitter, SuperCollider, Kyma, ChucK, and several other environments

Independent background in Digital Signal Processing applications for audio and video

Extensive experience with hardware sound synthesis, performance, and composition

DMA DISSERTATION (Expected Defense in Spring 2026)

Abstractions, a generative composition for *N*-speakers and microphones. This work will interact with each performance venue through input from any quantity and arrangement of microphone and camera inputs to be completed in fulfillment of DMA dissertation requirements. The written portion of this dissertation will include an analysis of this composition and other context-responsive work. Dr. Gabriel Bolaños is the chair of this project, with Dr. Todd Ingalls and Dr. Fernanda Navarro serving on the committee.