

JACEY SCHELL

Miami, FL | 561-430-8919 | jxs7684@miami.edu | jaceyschell.com | <https://github.com/jacesch>

EDUCATION

University of Miami, Frost School of Music

Miami, FL

M.S. Music Engineering Technology — Expected May 2028

B.S. Music Engineering Technology, Minor in Computer Engineering — Expected May 2027

GPA: 3.984 / 4.0

TECHNICAL SKILLS

Programming / Software: C++, Python, MATLAB, JavaScript, JUCE, Max/MSP, Git/GitHub

Audio / DSP: Real-Time DSP, Digital Filter Design, Convolution, FFT/Frequency-Domain Analysis, Audio ML, Speech Processing, Psychoacoustics

Recording / Production: Pro Tools, Avid S6, Multitrack Recording, REAPER, Ableton Live, Logic Pro, Critical Listening

Immersive / Interactive: Spatial Audio, Ambisonics, Multichannel Audio, TouchDesigner, Unity, MIDI

Systems: Yamaha Digital Consoles, Dante Controller, Q-SYS Designer, Signal Routing, Audio-System Troubleshooting

SELECTED PROJECTS

DeEsser | C++, JUCE, Whisper.cpp, PocketSphinx

- Developed a standalone C++/JUCE application that detects and reduces vocal sibilance using local speech transcription, phoneme alignment, and a custom energy-based detection algorithm.
- Implemented editable gain automation, waveform visualization, A/B playback, undo/redo, session persistence, WAV export, and asynchronous transcription/alignment processing.

Aquatic Ensemble | Ableton Live, Max for Live, TouchDesigner, x-IMU3

- Developed a multi-user interactive audiovisual installation transforming underwater animal recordings into playable electronic instruments with synchronized visuals.
- Integrated Makey-Makey controllers and x-IMU3 motion sensors to map participant gestures to sound selection, pitch, reverb, triggering, and visual positioning.

Interactive Ear Auditory Model | JavaScript, Web Audio, DSP, Binaural Audio

- Developed an interactive computational model of outer- and middle-ear acoustics with parameterized transfer functions and 20 Hz–20 kHz frequency-response visualization.
- Implemented dynamically updated FIR/convolution filtering to provide real-time audible feedback for changes in ear parameters and source direction.

EXPERIENCE

Frost School of Music — Live Sound & Recording Engineer

Aug 2023–Present

- Engineer live sound and multitrack recordings using professional microphones, consoles, routing, monitoring, and recording systems for concerts and productions.
- Troubleshoot signal flow, routing, synchronization, recording, and playback issues during live/recorded sessions.
- Support productions for clients including Emmet Cohen, the Latin Grammy Foundation, Florida Panthers, and U.S. Marine Band.

Frost Museum of Science — Planetarium Sound Designer & Producer

Aug 2025–Jun 2026

- Produced and spatialized immersive audio for planetarium experiences using a 12.1-channel playback system.
- Developed and troubleshooted multichannel routing, decoding, and delivery workflows for large-format immersive environments.

FilmGate — Audio Lead & Sound Instructor Intern

May 2025–Aug 2025

- Led audio production for creative media projects involving recording, foley, ADR, sound design, and immersive audio.
- Supported workflows from recording through editing, post-production, and final delivery.

Aligno — Co-Founder / Audio ML Engineer

Aug 2025–Present

- Co-founded an AI-powered drum-editing startup; developed multitrack datasets and reference annotations for onset-detection models and evaluated outputs through critical listening.

LEADERSHIP & AWARDS

Audio Engineering Society: President (2026–2027), Secretary (2025–2026), Member (2023–2025)

Awards: USTAAR Venture Catalyst (2025–2026) | Frost AI Song Competition Winner (2025) | International AI Song Competition, 3rd Place (2025) | SunFest Music Scholarship (2023)