

Colby N. Leider

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PERSONAL

Home Phone: (305) 247-6884
Office Phone: (305) 284-8221
Home Address: 27000 Southwest 192 Avenue
Homestead, Florida 33031 USA
Current Academic Rank: Assistant Professor of Music Engineering
Primary Department: Music Media and Industry

Frost School of Music
University of Miami
1314 Miller Drive
Coral Gables, Florida 33124 USA

Electronic Mail: cleider (at) miami (dot) edu

Citizenship: U.S.

HIGHER EDUCATION

Princeton University, Princeton, New Jersey USA

Ph.D., Music Composition, March 2007

Dissertation: *Dissonance Theory of Sound Objects*

Composition: *Tilt* for 7.1-channel tape and live electronics, commissioned by the International Computer Music Association

Advisors: Perry Cook (Department of Computer Science and Department of Music) and Paul Lansky (Department of Music)

M.F.A., Music Composition, May 2001

Westminster Choir College, Princeton, New Jersey USA

Non-degree-seeking organ student, 1998–1999 (while concurrently pursuing Ph.D. at Princeton University)

Dartmouth College, Hanover, New Hampshire USA

Master of Arts, Electro-Acoustic Music, May 1998

Advisor: Charles Dodge

Additional coursework in digital signal processing, C++, and embedded systems programming

The University of Texas, Austin, Texas USA

B.S., Electrical Engineering, May 1996

ACADEMIC
EXPERIENCE

University of Miami, Coral Gables, Florida USA

Assistant Professor of Music

Fall 2002–present

- MMI 171: Audio Design Laboratory II (undergraduate)
- MMI 172: Audio Design Laboratory III (undergraduate)
- MMI 201: Introduction to Music Engineering (undergraduate)
- MMI 401: Audio Electronics (undergraduate)
- MMI 501: Transducer Theory and Workshop (undergraduate)
- MMI 504: Audio Analysis and Synthesis (undergraduate)
- MMI 505: Musician-Machine Interfaces (undergraduate)
- MMI 505: Current Topics in Audio Signal Processing (undergraduate)
- MMI 520: Audio Technology for Musicians (graduate/undergraduate)
- MMI 593: Special Projects (undergraduate/graduate)
- MMI 601: Advanced Digital Audio (graduate, co-teacher)
- MMI 606: Current Topics in Audio Signal Processing (graduate)
- MMI 653: Transducer Theory Seminar (graduate)
- MMI 693: Special Topics: Surround Audio (graduate)

Florida International University, Miami, Florida USA

Adjunct Instructor of Music

Spring 2001–Fall 2002

- MUC 4400: Electronic Music III (undergraduate)
- MUC 6405: Electronic Music III (graduate)
- MUC 2301: Electronic Music I (undergraduate)
- MUC 6305: Electronic Music I (graduate)
- MUT 1112: Music Theory II
- MUT 1222: Sight Singing II
- MUT 1001: Fundamentals of Music
- MUC 1342: Introduction to MIDI Technology (undergraduate)
- MUS 5345: Introduction to MIDI Technology (graduate)

Princeton University, Princeton, New Jersey USA

Preceptor

Fall 1999–Spring 2001

- MUS/COS 325: Transforming Reality by Computer
Preceptor for Prof. Ken Steiglitz (Department of Computer Science) and
Prof. Paul Lansky (Department of Music)
- MUS 325: Electronic Music
Preceptor for Prof. Paul Koonce (Department of Music)

Dartmouth College, Hanover, New Hampshire USA

Teaching Assistant

Spring 1998

- CC12: Music and Computers
Teaching Assistant for Prof. Larry Polansky (Department of Music)

NON-ACADEMIC
EXPERIENCE

Personics, Boca Raton, Florida, USA

Consultant

2005–present

Terms of consulting are protected by NDA.

Colby Leider Audio Consulting, Homestead, Florida, USA

Consultant

2003–present

Assist a variety of clients, including law firms, audio companies, and private individuals with a number of audio-related projects.

everglade records, inc., Homestead, Florida, USA

President

2006–present

Solicit music recording projects for release on DVD-Video and DVD-Audio in 5.1-channel surround sound for a 501(c)(3) startup recording label venture. Assist in the design, mastering, production, replication, and distribution process.

Computer Music Journal (MIT Press), Cambridge, Massachusetts, USA

Associate Editor

July 2000–present

Solicit, edit, and prepare articles for publication. Communicate with referees regarding submitted manuscripts. Attend annual editorial board meeting to discuss future directions of the Journal.

Umixx, Princeton, New Jersey, USA

Consultant

July 2001–July 2002

Developed and implemented various digital signal-processing algorithms in MATLAB and C++ for automatically tracking the tempo of digital audio signals.

Computer Music Journal (MIT Press), Cambridge, Massachusetts, USA

Assistant Editor

February 1999–July 2000

Solicited, edited, and helped prepare articles for publication. Coordinated and handled peer-review process. Communicated with referees regarding submitted manuscripts.

AirWorks New England, White River Junction, Vermont, USA

Consultant

June 1997–July 1997

Helped write a SCSI driver for communication with the Roland VS-880 Hard Disk Recorder.

Applied Research Laboratories, The University of Texas at Austin, Austin, Texas, USA

Laboratory Research Assistant

August 1995–August 1996

Aided in the design of a networked group-wide project management, reporting and tracking system for both financial resources and personnel. Imple-

mented design as a management tool via a custom-built interface between the World Wide Web and an Oracle database backend. Demonstrated system to middle-and upper-management.

Applied Research Laboratories, The University of Texas at Austin,
Austin, Texas, USA

Laboratory Research Apprentice IV **June 1994–August 1995**

Designed, created, and implemented a custom graphical online interface to access Oracle database tables through the World Wide Web while administering a Linux system. Aided in the design and creation of a distributed configuration and project management software package. Represented company at the Fourth International Conference on the World Wide Web in Boston.

Applied Research Laboratories, The University of Texas at Austin,
Austin, Texas, USA

Laboratory Research Apprentice II **June 1993–August 1993**

Designed and implemented programs for parsing data files and automatically producing ready-to-print PostScript documents as part of a larger US Department of Defense project.

Applied Research Laboratories, The University of Texas at Austin,
Austin, Texas, USA

Laboratory Research Apprentice I **June 1992–August 1992**

Wrote data files in the Ada programming language with simulated tactical information to test a component of a large software package for the US Department of Defense.

BOOKS

Leider, C. 2004. *Digital Audio Workstation*. New York: McGraw-Hill.

Tzanetakis, G., G. Essl, and C. Leider, eds. 2004. *Proceedings of the 2004 International Computer Music Conference*. San Francisco: International Computer Music Association.

REFEREED
CONFERENCE
PROCEEDINGS

Leider, C. 2007. “Multichannel Audio in Electroacoustic Music: An Aesthetic and Technical Research Agenda.” Proceedings of the 2007 IEEE International Conference on Multimedia and Expo, Beijing, July 5.

Kirk, T., and C. Leider. 2007. “The FrankenPipe: A Novel Bagpipe Controller.” Proceedings of the 2007 Conference on New Interfaces for Musical Expression, New York, June 6–10.

Leider, C., and K. H. Burns. 2007. "The Sound Recordist as Composer: Practical and Aesthetic Concerns." Workshop on Computer Music and Technology 2007, National Chiao Tung University, Taiwan University, March 2425.

Leider, C., and K. H. Burns. 2006. "Practical and Aesthetic Considerations of Multichannel Field Recording: A Case Study." *Proceedings of the 2006 International Computer Music Conference*, New Orleans. San Francisco: International Computer Music Association.

Pohlmann, K., and C. Leider. 2003. "Music Engineering at the University of Miami." *Proceedings of the 2003 International Computer Conference*, Singapore. San Francisco: International Computer Music Association.

Cook, P. R., C. Leider, T. H. Park, and G. Tzanetakis. 2001. "Princeton Sound Kitchen Open Source Software Report." *Proceedings of the 2001 International Computer Music Conference*, Havana, Cuba. San Francisco: International Computer Music Association.

Cook, P. R., and C. Leider. 2000. "Making the Computer Sing: The squeezeVox." *Proceedings of the XIII Colloquium on Musical Informatics*. L'Aquila, Italy: Instituto Gramma.

Leider, C., and K. H. Burns. 2000. "curvePainter: A Didactic Compositional Tool." *Proceedings of the XIII Colloquium on Musical Informatics*. L'Aquila, Italy: Instituto Gramma.

Leider, C. 2000. "curvePainter: A New Compositional Tool." *Proceedings of the 2000 International Computer Music Conference*, Berlin, Germany. San Francisco: International Computer Music Association.

Cook, P.R., and C. Leider. 2000. "squeezeVox: A New Controller for Models of Vocal Synthesis." *Proceedings of the 2000 International Computer Music Conference, Berlin*, Germany. San Francisco: International Computer Music Association.

Leider, C. 1997. "A Real-Time MIDI Library for an Inexpensive Microcontroller-Based Interactive Performance System." *Proceedings of the 1997 International Computer Music Conference*, Thessaloniki, Greece. San Francisco: International Computer Music Association.

REFEREED
ARTICLES

Leider, C. 2005. "Observations Re: Jon Appleton." *Journal SEAMUS* 17(1-2).

Leider, C. 2002. "Laurie Spiegel." In K. H. Burns, ed. *Women and Music in*

America Since 1900: An Encyclopedia. Westport, Connecticut: Greenwood.

Leider, C. 2002. "Performer, Live Electronics." In K. H. Burns, ed. *Women and Music in America Since 1900: An Encyclopedia*. Westport, Connecticut: Greenwood.

Leider, C. 2002. "Ellen Fullman." In K. H. Burns, ed. *Women and Music in America Since 1900: An Encyclopedia*. Westport, Connecticut: Greenwood.

Leider, C. 2002. "Wendy Carlos." In K. H. Burns, ed. *Women and Music in America Since 1900: An Encyclopedia*. Westport, Connecticut: Greenwood.

Leider, C. 2002. "Joan LaBarbara." In K. H. Burns, ed. *Women and Music in America Since 1900: An Encyclopedia*. Westport, Connecticut: Greenwood.

Leider, C. 2002. "Clara Rockmore." In K. H. Burns, ed. *Women and Music in America Since 1900: An Encyclopedia*. Westport, Connecticut: Greenwood.

Leider, C. (a/k/a K. Courchene.) 2001. "A Conversation with Beatriz Ferreyra." *Computer Music Journal* 25(3):14–21.

Leider, C. "Jon Appleton." In S. Sadie, ed. *The New Grove Dictionary of American Music*. London: Macmillan Publishers Limited.

Leider, C. 1998. "SuperCollider: James McCartney's Real-Time Sound Synthesis Programming Language." *ICMA Array*, Spring.

REVIEWS

Leider, C., and K. H. Burns. 2003. "My Cinema for the Ear." *Computer Music Journal* 27(2).

Leider, C., 2002. Review of 2002 International Computer Music Conference. *ICMA Array*.

Leider, C. 2000. "Society for Electro-Acoustic Music in the United States National Conference 2000." *Computer Music Journal* 24(4):65–66.

Leider, C. 2000. "Erich Neuwirth: Musical Temperaments." *Computer Music Journal* 24(2):112–113.

Leider, C. 1999. "Evan Parker Electro-Acoustic Ensemble: *Drawn Inward*."

Sonic Arts Network Diffusion, September.

OTHER WORKS: Leider, C. 2006. *Dissonance Theory of Sound Objects*.
MONOGRAPHS
Leider, C. 1998. *Quotation of Early Music in Electro-Acoustic Composition*.
Leider, C. 2002-2006. *The Tuning Thesaurus*. Unpublished manuscript.

OTHER WORKS: Work for chamber ensemble (2007), commissioned by the Rhode Island Col-
COMMISSIONS lege contemporary ensemble *New York System*.

Circulo (5.1-channel tape, 2006), commissioned by the Third Practice Festi-
val of Electro-Acoustic Music at the University of Richmond.

7 (2006) for clarinet septet, commissioned by Scott Locke.

Cheraw (2005) for tape, commissioned by the State of South Carolina Artist-
in-Residence Program.

Tilt (2002) for tape and live electronics. Commissioned by the International
Computer Music Association for premiere at the 2002 International Com-
puter Music Conference in Gteborg, Sweden.

Veritas ex Machina (2001) for percussion, tape, and live electronics. Com-
missioned by Greg Beyer, percussionist.

Squaring the Circle (2001) for violin, cello, piano four hands, and percussion.
Commissioned by Lawrence Rimmel.

White Fire (1998–1999). Electronic music for dance, commissioned by chore-
ographer Carol Langstaff.

OTHER WORKS: *Taedet animam meam*. In press. Recorded on Florida Electroacoustic Music
RECORDINGS Festival Volume 3. Audio compact disc. Gainesville: University of Florida
Press.

Circulo. 2006. Recorded on *[re]: New Multichannel Computer Music from
the Third Practice Festival of Electro-Acoustic Music*. 2006. DVD-Video
and DVD-Audio two-disc set. Homestead, Florida: everglade records, Inc.

Taedet animam meam. 2001. Recorded on *Music from SEAMUS, Volume 11*. Audio compact disc. Baton Rouge, Louisiana: Society for Electro-Acoustic Music in the United States.

Veni Creator Spiritus. 1998. Recorded on *International Computer Music Conference 1998*. Audio Compact Disc. San Francisco: International Computer Music Association.

Veni Creator Spiritus. 1998, re-released 2006. Recorded on *Sonic Circuits V (Innova 114)*. Audio compact disc. Minneapolis, Minnesota: American Composers Forum.

Veni Creator Spiritus. 2000. Recorded on *Joan Lippincott and Friends: A Centennial Celebration*. Audio compact disc. Princeton, New Jersey: Princeton University PUGC 7189.

Texas Music Educators Association All-State Convention/Clinic. 1991. E. Iseler, conductor. Audio compact disc. Clarence, New York: Mark MCD-858.

-
- OTHER WORKS: *Rhombicuboctahedron* (1.1.1.1 1.1.1.1 timp perc strings, 2007), for the University of Miami Symphony Orchestra and Thom Sleeper, director
- SELECTED COMPOSITIONS
- Circulo* (5.1-channel tape, 2006), commissioned by the Third Practice Festival of Electro-Acoustic Music at the University of Richmond
- Cheraw* (5.1-channel tape, 2005–2006), commissioned by the State of South Carolina Artist-in-Residence program, collaboration with Kristine H. Burns
- Network* (7.1-channel tape and video, in progress), collaboration with Kristine H. Burns
- Suite* (accordion solo, 2003)
- Tilt* (7.1-channel tape and live electronics, 2002) commissioned by the International Computer Music Association (ICMC)
- Proverbs* (SATB soli, 2001) for Paul Hillier and the Theatre of Voices
- Veritas ex Machina* for Greg Beyer (perc, tape, and live electronics, 2001)
- Squaring the Circle* (pf 4 hands, perc, vln, vc, 2001)
- Discre(e)t(e)* (squeezeVox controller and live electronics, 2001)

Afflux/Reflux (stereo tape, 2000)

Tetrahedral Machine (2.2.2.2 4.3.3.1 timp 2 perc hp strings, 2000) for a reading by the New Jersey Symphony Orchestra

Suspension (accordion solo, 1999)

Taedet animam meam (stereo tape, 1999)

Song (two Baroque flutes, 1999) for Tom Moore and Laura Ronai

Song (arrangement for accordion solo, 1999)

White Fire (eight-channel tape, 1998-99)

Modal Mobile (contrabass solo, 1999) for Bertram Turetzky

Counting (piano solo, 1999) to Howard Skempton

Trotto (ob, cl, pf, vln, vla, vc, cb, 1999) for the Nash Ensemble of London

Eighteen (stereo tape, 1998)

Hydraulis (four-channel tape, 1998)

I-III (piano solo, 1998)

Nexus (contrabass trio, 1997, rev 1998)

Three Scenes (stereo tape, 1997)

Nutida Musik (stereo tape, 1997)

Motus Lentus (stereo tape, 1997, rev 1998)

Cauda (TTTB soli, org, vln, tape, 1997) for Paul Hillier and the Theatre of Voices

Four Tuning Studies (stereo tape, 1997)

Veni Creator Spiritus (stereo tape, 1996)

OTHER WORKS: *Daniel Koppelman: Commissions and Premières*. In preparation. Producer
ALBUM and mastering engineer. Homestead, Florida: everglade records, Inc.
CREDITS

Clarivan: New Music for Clarinet, performed by Scott Locke. In preparation. Producer and mastering engineer. Homestead, Florida: everglade records, Inc.

[re]: New Multichannel Computer Music from the Third Practice Festival of Electro-Acoustic Music. 2006. Producer and engineer. Homestead, Florida: everglade records, Inc.

ICMC 2004 Conference DVD. 2004. Producer. San Francisco: International Computer Music Association.

Computer Music Journal 2003 Sound Anthology. Curator and DVD author. Cambridge, Massachusetts: MIT Press.

OTHER WORKS: Provisional patent for a hand-held device capable of distributing, routing, and spatializing an arbitrary number of channels of digital audio into an arbitrary number of loudspeakers in a concert hall in real time.
PATENT

PAPERS IN LEIDER, C. In Preparation. "Listener Assessment of Sound Object Dissonance."
PREPARATION
LEIDER, C. In Preparation. "Automatic Tuning System Detection of Audio Signals."
LEIDER, C. In Preparation. "Sound Diffusion as Instrumental Performance: A Case Study."

SPONSORED GRAMMY FOUNDATION (\$40,000), "Acoustic Parameters of Infant-Directed (ID) Singing in Mothers with and without Depressive Symptoms," Co-PI (pending).
RESEARCH NATIONAL SCIENCE FOUNDATION NSF 07-562 (\$100,000), "Collaborative Research: Pilot: Personalized Tools to Enhance Musical Creativity," Co-PI (pending).
AND AWARDS MAX OROVITZ AWARD IN THE ARTS AND HUMANITIES (\$9,300), University of Miami (2006)
ARTIST-IN-RESIDENCE AWARD, State of South Carolina (2005)

Naumberg Fellowship (\$145,000), Princeton University (1998-2002)

Summer Fellowship (\$10,000), Princeton University (2002)

Summer Fellowship (\$10,000), Princeton University (2001)

EDITORIAL
RESPONSI-
BILITIES

Associate Editor, *Computer Music Journal*, published by the MIT Press

Editorial Board, *Journal of the Society for Electro-Acoustic Music in the United States*

PROFESSIONAL
ORGANIZATIONS

Member, International Computer Music Association

Member, Broadcast Music Incorporated

Member, Society for Electro-Acoustic Music in the United States

Member, Eta Kappa Nu Electrical Engineering Honor Society

Member, Tau Beta Pi National Engineering Honor Society

HONORS AND
AWARDS

Comission and award, International Computer Music Association, 2002

Prix Résidence. Institut International de Musique Electroacoustique Bourges, Bourges, France, 2000

Naumberg Fellowship, Princeton University (1998–2002)

George W. Perkins Prize in the Humanities, Princeton University (1998)

Engineer-in-Training (EIT) License, State of Texas Board of Professional Engineers (1996)

Full scholarship and stipend, Dartmouth College (1996–1998)

University of Texas College of Engineering Dean's List

University of Texas Career Expo 1995 Corporate Relations Officer

University of Texas Student Engineering Council Outstanding Member Award (1995)

Robert M. Leibrock Scholarship, University of Texas at Austin (1995–1996)

Eric V. Feine Scholarship, University of Texas at Austin (1994–1995)

University of Texas Engineering Scholar Award (1994)

University of Texas College of Engineering Freshmen Mentor Advisor (1993–1995)

University of Texas Austin Merit Scholarship Award (1993)

University of Texas College of Engineering Cockrell Scholarship (1992–1993, 1993–1994)

National Science Foundation Young Scholars Program, University of Texas at Austin (Summer 1991)

SELECTED
REVIEWS AND
PRESS

“Firstly, kudos to Colby Leider of the University of Miami for hosting an excellent conference.... [T]he 2004 ICMC provided an excellent panorama of computer music practices and a number of absorbing and moving listening experiences.” —Dan Hosken, review of ICMC 2004, *Computer Music Journal* 29(2)

“It is an enormous undertaking to hold an events such as the ICMC, for which organizers give of their time well above and beyond the call of duty. On behalf of all those who attended the event, I wish to thank and congratulate Conference Chair Colby Leider and the organizing committee who contributed to mounting this 30th event. Your efforts and professionalism made this a pleasure to attend.” —Ian Whalley, review of ICMC 2004, *Computer Music Journal* 29(2)

“The conference was hosted and chaired by composer Colby Leider, and overall it was quite successful, featuring interesting, eclectic music programming and high quality papers and lectures.... Colby Leider and his cohorts set the bar for which future ICMCs will reach.” —Douglas Geers, *Journal SEAMUS* 18(2), Spring 2006.

“[Colby Leider’s] *Digital Audio Workstation: Mixing, Recording, and Mastering on your Mac or PC* (2004, ISBN 0-07-142286-2) is a substantial tome, at 398 pages, containing numerous illustrations and an ‘Exercises and Classroom Discussion’ section for each of the ten chapters.” Products of Interest, *Computer Music Journal* 30(3):106–107.

“...[T]here are some lovely pieces here, like Eirik Lie’s heavy-hearted ambient work *112 Par Sko* and Colby Leider’s pulsing, Reich-ian *Veni Creator Spiritus*.” —Charlie Wilmoth, *All Music Guide*, referring to the CD release *Sonic Circuits V*

“The second half of the program began with Colby Leider’s excellent composition *Veritas ex Machina*, for percussionist plus real-time electronics, its mostly ringing-metal instruments performed ably by percussionist Matt Sexton. At one point in the piece, Mr. Sexton stomped a foot on the stage floor, at another he uttered something aloud, asserting a human frustration of some kind in this man-versus-machine piece.” —Larry Austin, on a performance of *Veritas ex Machina* at the Fourteenth Annual Florida Electroacoustic Music Festival

“...the two-channel tape created a mood that complemented all the other works.” 2003. John W. Lambert, *Classical Voice of North Carolina*, on *Taedet animam meam*.

“Finishing the program was one of this year’s ICMA commissions: *Tilt* by Colby Leider for 8-channel tape and live-controlled spatial diffusion for which the composer used the ‘elBo,’ a panning tool combining a joystick, various sliders and finger pressure sensors. The sound world of this piece is characterized by a strange dichotomy. On the one hand there is a captivating and refined control of spectral components and their evolution. Closely spaced upper partials seem to flicker out of the critical bandwidth and gracefully morph into the upper components of bell-like spectra. On the other hand most of these internally so finely diversified sounds find themselves combined in rather solid diatonic constellations, a juxtaposition which occasionally created a sense of musical incongruity. However, keeping in mind the importance of spatial diffusion in this piece, this might have been quite the intention. As Colby Leider himself writes: ‘Tilt attempt[s] to continually reorient and recontextualize space, texture, and gesture.’” —Oliver Schneller, *ICMA Array* 2002.

“Colby Leider’s *Veni Creator Spiritus* is a concise tape music composition which progressively transforms a brief sample of chant. The piece is elegantly constructed, mixing several continuous processes occurring simultaneously at differing rates. Leider separates material by rate, general timbre, and frequency area, achieving the effect of a constantly dynamic surface that slowly evolves, much like some of Steve Reich’s classic compositions from the 1970s; also like Reich, Leider retains a consistent audible pulse through the piece. He also makes good use of the timbral variances within his sample, employing t and s sounds as virtual cymbals, contrasting differing vowel colors, and placing transposed, time-stretched material in the bass register.”

OTHER
PROFESSIONAL
ACTIVITIES

Engineer-In-Training (EIT) License, State of Texas. Professional Engineer (P.E.) license pending.

Local Planning Coordinator, 2006 Congress of the International Alliance for Women in Music, Miami, Florida.

Paper Selection Committee, 2005 Society for Electroacoustic Music in the United States National Conference (SEAMUS 2005).

Chair, 2004 International Computer Music Conference (ICMC 2004), November 1–6, University of Miami.

Curator and DVD author, *Computer Music Journal 2003 Sound Anthology*. Cambridge, Massachusetts: MIT Press.

Program Committee, WASPAA 03, IEEE 2003 Workshop on Applications of Signal Processing to Audio and Acoustics. New Platz, New York. Institute of Electrical and Electronics Engineers (IEEE).

International Scientific Committee, XIV Colloquium on Musical Informatics, Firenze, Italy, May 8–10, 2003.

International Scientific Committee, XIII Colloquium on Musical Informatics, L'Aquila, Italy, September 25, 2000.

PRESENTATIONS

Leider, C. 2006. “Binaural Remixing: A Practical Approach.” Invited presentation given to the board of directors of Personics and potential venture-capital investors, August 24.

Leider, C. 2003. “Real-Time Control of Sound Diffusion Parameters.” Paper presented at the 145th Meeting of the Acoustical Society of America, Nashville, Tennessee, April.

Leider, C. 2003. “Surrounded by Sound: Multidimensional Control of Musical Space.” Paper presented at the College Music Society National Conference, Miami, October 5.

Leider, C., 2002. “The elBo Controller.” Paper presented at the Third Practice Electro-Acoustic Music Festival, Richmond, VA, November 1.

Cook, P. R., and C. Leider. 2001. "The squeezeVox." *Beyond the 88 Festival*, February 16th, Princeton University.

Cheng, C., et al. 2000. "The Aesthetic and the Exact: A Collaborative Discussion on Spatialization between Young Composers and Young Scientists in Electro-acoustic Music." Panel presentation and discussion given at the Society for Electro-Acoustic Music in the United States National Conference. Denton, Texas, March.

SELECTED PERFORMANCES *Circulo*. 2007. Music, Technology and Innovation Research Centre, De Montfort University, Leicester, England, 25 April.

Circulo. 2007. Sixteenth Annual Florida Electroacoustic Music Festival, University of Florida, Gainesville, 13 April.

Circulo. 2007. Society of Electroacoustic Music in the United States National Conference, Iowa State University, date.

Motus Lentus. 2006. "Quiet Space" radio show, Australian Broadcasting Company ABC Radio National, 21 May.

it Hydraulis. 2006. National Conference of the Society for Electro-Acoustic Music in the United States, University of Oregon, 1 April.

Hydraulis. 2006. International Computer Music Conference, New Orleans, Louisiana. Presented in the conference listening room, 6–11 November.

Cheraw. 2006. International Computer Music Conference, New Orleans, Louisiana. Presented as an audio installation loop over 32 loudspeakers, 9–11 November.

Veni Creator Spiritus. 2006. Third Practice Festival of Electroacoustic Music, Richmond, Virginia, 4 November.

Circulo. 2006. Third Practice Festival of Electroacoustic Music, Richmond, Virginia, 3 November.

Hydraulis. 2006. Fifteenth Annual Florida Electroacoustic Music Festival, University of Florida, Gainesville, 6 April.

Cheraw. 2006. International Society for Contemporary Music, Miami, Florida, April.

Hydraulis. 2006. International Computer Music Conference, New Orleans, Louisiana.

Taedet animam meam. 2005. International Computer Music Conference. Barcelona, Spain.

Veritas ex Machina. 2005. National Conference of the Society for Electro-Acoustic Music in the United States. Muncie, Indiana.

Veritas ex Machina. 2005. Fourteenth Annual Florida Electroacoustic Music Festival, University of Florida, Gainesville, 8 April.

Motus Lentus. 2004. “Quiet Space” radio show, Australian Broadcasting Company ABC Radio National, 1 November.

Veritas ex Machina. 2004. Third Practice Electro-Acoustic Music Festival. Richmond, Virginia.

Tilt. 2004. Thirteenth Annual Florida Electroacoustic Music Festival, University of Florida, Gainesville, 13 April.

Taedet animam meam. Corpi del Suono Festival, L’Aquila, Italy. Teatro dell’Accademia di Belle Arti di L’Aquila. December 12, 2003.

Tilt. October 31, 2003. Third Practice Electro-Acoustic Music Festival. Richmond, Virginia.

Afflux/Reflux; White Fire. New Bodies: Choreographic Experiments by Jill Sigman/thinkdance, choreographer. 92nd Street Y, New York City. June 8, 2003.

Taedet animam meam. 2003. Twelfth Annual Florida Electro-Acoustic Music Festival, Gainesville, Florida, 4 April.

Veritas ex Machina. Accepted for performance to the 2003 International Computer Music Conference, Singapore.

Taedet animam meam. 2003. ArtsNow concert at North Carolina State University, 4 March.

Afflux/Reflux and *White Fire.* New Bodies: Choreographic Experiments by Jill Sigman/thinkdance, choreographer. 92nd Street Y, New York City. June 8, 2003.

Taedet animam meam. Western Washington University, Bellingham, Washington, November 19, 2002.

Afflux/Reflux. Third Practice Electro-Acoustic Music Festival, University of Richmond, Richmond, Virginia. November 2, 2002.

Taedet animam meam. “Foldover” radio show. Oberlin, Ohio. October 7,

2002.

Taedet animam meam. 23rd Annual New Music and Art Festival, Bowling Green State University, Bowling Green, Ohio. October 17, 2002.

Tilt. World premiere, International Computer Music Conference 2002, Gothenberg, Sweden. September 20, 2002.

Song, Suspension. William Schimmel, accordion. The Tenri Cultural Institute, 43 W. 13th Street, New York City, August 25, 2002.

Afflux/Reflux. Society for Electro-Acoustic Music in the United States (SEAMUS) National Conference, University of Iowa, April 6, 2002.

Afflux/Reflux. University of Florida, October 26, 2001.

Hydraulis. Festival Synthse 2001, Institut International de Musique Electroacoustique Bourges, Bourges, France, June 8, 2001.

Veritas ex Machina. Greg Beyer, percussion; Colby Leider, live electronics. Taplin Hall, Princeton University, May 15, 2001.

Discre(e)t(e). Colby Leider, squeezeVox. Engine 27, New York City, February 17, 2001.

Motus Lentus. 2000. "The Virtual Concert Hall" Radio show, hosted by Paul Rudy, KAJX Radio, Aspen, 31 March.

Song, Suspension. William Schimmel, accordion. Taplin Hall, Princeton University, February 13, 2001.

Discre(e)t(e). Colby Leider, squeezeVox. Taplin Hall, Princeton University, February 13, 2001.

Taedet animam meam. Society for Electro-Acoustic Music in the United States (SEAMUS) National Conference, Louisiana State University. March 2, 2001.

Taedet animam meam. Korean Electro-Acoustic Music Festival, Seoul. 2000.

Veni Creator Spiritus. University of Massachusetts at Dartmouth Electronic Music Concert, May 11, 2000.

Afflux/Reflux. Princeton University Chapel, Princeton University, May 4, 2000.

Taedet animam meam. Subtropics Festival, Miami, FL. 2000.

Taedet animam meam. New Music Miami Festival, Miami, FL. 2000.

Motus Lentus. 2000. "The Virtual Concert Hall" Radio show, hosted by Paul Rudy, KAJX Radio, Aspen, 17 January.

Taedet animam meam. Proctor Hall, Princeton University, February 4, 2000.

Veni Creator Spiritus. Proctor Hall, Princeton University, February 4, 2000.

Taedet animam meam. Taplin Hall, Princeton University. January 18, 2000.

Song. Taplin Hall, Princeton University. December 1, 1999. Tom Moore and Laura Ronai, Baroque flutes.

Veni Creator Spritus. Western Washington University Electro-Acoustic Concert, November 11, 1999.

Modal Mobile. Bertram Turetzky, contrabass. International Society of Bassists Convention, June 4, 1999.

White Fire. Taplin Hall, Princeton University, May 19, 1999.

Modal Mobile. Bertram Turetzky, Taplin Hall, Princeton University, May 14, 1999.

Motus Lentus. Princeton Sound Kitchen Internet Radio Show, 1999.

Three Scenes. Society for Electro-Acoustic Music in the United States (SEAMUS) National Conference, San Jose State University, San Jose, California, 1999.

Hydraulis. Taplin Hall, Princeton University, 1999.

Nexus. Taplin Hall, Princeton University, 1998.

Veni Creator Spiritus. International Computer Music Conference 1998, Ann Arbor, Michigan.

Veni Creator Spiritus. Michigan State University Sonic Circuits Festival, hosted by the Alliance of MSU Composers. June 26, 1998.

Hydraulis. Festival of New Musics, Hopkins Center, Dartmouth College, 1998.

Veni Creator Spiritus. Mississippi State University, 1998.

Veni Creator Spiritus. Sonic Circuits V Festival, 1997.

Three Scenes. Hopkins Center, Dartmouth College, 1997.

Veni Creator Spiritus. Radio de la Ciudad de Buenos Aires, Fronteras del Silencio, 1997.

Nutida Musik. Hopkins Center, Dartmouth College, 1997.

Lentus Motus. Hopkins Center, Dartmouth College, 1997.

Cauda. Paul Hillier and The Theatre of Voices, with Christopher Bowers-Broadbent. Rollins Chapel, Dartmouth College, 1996.

Improvisation for live electronics, with Larry Polansky and Empi Esguerra. Festival of New Musics, Dartmouth College, 1996.

Veni Creator Spiritus. Hopkins Center, Dartmouth College, 1996.

TEACHING
SPECIALIZATION Digital audio signal processing, computer music composition, human-machine interaction, alternate controllers, spatial audio and sound diffusion, tuning systems.

Developed courses in digital audio signal processing, human-computer interaction for musicians, analog sound synthesizer modeling and construction, and a 500-level undergraduate/graduate seminar on current topics in audio signal processing.

THESIS
ADVISEES Chair, Ryan M. Twilley, M.S. Music Engineering Technology, 2007, in progress.

Chair, Adam S. Tankanow, M.S. Music Engineering Technology, 2007. *Automatic Extraction of a Measure of Complexity from an Audio Sound File*.

Chair, Christopher L. Bennett, M.S. Music Engineering Technology, 2007. *Real-Time Stimulus Shaping for In-Ear Transducers*.

Chair, V. Alluri Reddy, M.S. Music Engineering Technology, 2007. *Automatic Musicological Classification of Western Classical Music*.

Chair, Richard S. Juszkievicz, M.S. Music Engineering Technology, 2007. *An Improvement to Anthropometry-Based Head and Torso HRTF Synthesis Models for Locations Near the Frontal Median Plane*.

Member, Casey N. Maltese, M.M. French Horn, 2007.

Member, Daniel W. Harris, M.S. Music Engineering Technology, 2007. *Computationally Efficient Variable Linear-Phase Filters.*

Member, Paul M. Gunia, M.S. Music Engineering Technology, 2007. *A Hybrid Codec for Mixed Speech and Music Signals.*

Member, Lawrence W. Moore. D.M.A. Composition, In progress. *The Creation of a Compositional Environment for Minimalistic Electronic Music.*

Member, Arun Thirugnanasambandam, M.S. Music Engineering Technology, 2006. *Bandwidth-Extension Algorithms for Audio Quality Enhancement in Portable Audio Devices.*

Member, Benjamin I. Fields, M.S. Music Engineering Technology, 2006. *On the Viability of Using Mixed-Feature Extraction in Congruence with Multiple Statistical Models to Achieve Song Categorization by Genre.*

Member, Karthik Palanichamy, M.S. Music Engineering Technology, 2006. *Audio Scene Modification.*

Member, Robert M. Redman, M.S. Music Engineering Technology, 2006. *Voice Transformation of the Singing Voice using Prosodic Feature and Formant Spectra Modification.*

Member, Ryan W. Holder, D.M.A. Choral Conducting, 2006. *A Method for Using Digital Video Technology with Blackboard as a Supplemental Instructional Tool in the Undergraduate Conducting Class.*

Committee, Sam Bottoni, M.M. Electronic and Computer Music, 2005.

Chair, Kurt Jacobson, M.S. Music Engineering, 2005.

Chair, Nicolas Betancur Ospina, M.S. Music Engineering, 2005. *Synchronized Audiovisual Synopsis Using Audio Self-Similarity Analysis, Video Summarization, and Multimedia Semantic Description Tools.*

Chair, Arvind Venkatasubramaniam, M.S. Music Engineering, 2005.

Committee, Nermin Osmanovic, M.S. Music Engineering, 2005. *Classification of Musical Genres Using Audio Waveform Descriptors in MPEG-7.*

Committee, Jonathan Boley, M.S. Music Engineering, 2005. *Auditory Component Analysis Using Perceptual Pattern Recognition to Identify and Extract Independent Components from an Auditory Scene.*

Committee, Robert Burke, M.S. Music Engineering, 2004. *Reducing Perceptual Audio Quality Loss in Tandem Codecs.*

Committee, Vaibhav Chabra, M.S. Music Engineering, 2004. *Tonality Estimation Using Wavelet Packet Analysis*.

Committee, Vishweshwara M. Rao, 2004. *Audio Compression Using Repetitive Structures in Music*.

Committee, Suming Zhong, M.S. Computer Science, 2003.

Committee, Robert Hartman, M.S. Music Engineering, 2003. *Spatially Relocated Frequencies and Their Effect on the Localization of a Stereo Image*.

UNIVERSITY
COMMITTEES

University of Miami Research Council, 2006–present.

Frost School of Music Technology Committee, 2004–present.

OTHER SERVICE

Volunteer, Kingswood Montessori Academy, Homestead, Florida, 2005.

Annual advising of Music Engineering students at the University of Miami (approximately 25 out of (75 total) undergraduates and 10 graduate students)

Program selection committee (submission adjudicator), 2007 Society for Electroacoustic Music in the United States National Conference (SEAMUS 2007).

Local Planning Coordinator, 2006 Congress of the International Alliance for Women in Music, Miami, Florida.

Paper Selection Committee, 2005 Society for Electroacoustic Music in the United States National Conference (SEAMUS 2005).

Chair, 2004 International Computer Music Conference (ICMC 2004), November 1–6, University of Miami.

Program Committee, WASPAA 03, IEEE 2003 Workshop on Applications of Signal Processing to Audio and Acoustics. New Platz, New York. Institute of Electrical and Electronics Engineers (IEEE).

International Scientific Committee, XIV Colloquium on Musical Informatics, Firenze, Italy, May 8–10, 2003.

International Scientific Committee, XIII Colloquium on Musical Informatics,

L'Aquila, Italy, September 25, 2000.

Audio Design Consultant, Interactive Entertainment Complex, Homestead, Florida. 2003–2005.

Audio Engineer, First Presbyterian Church of Homestead, Florida. 2004.

Computer Music Consultant/Advisor for New World School of the Arts, Miami, Florida, January, 1999.