## MICHAEL DIXON GUREVICH

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## **EDUCATION**

Doctor of Philosophy Computer-Based Music Theory and Acoustics, Stanford University, 2006

Master of Arts Computer-Based Music Theory and Acoustics, Stanford University, 2003

Bachelor of Music Computer Applications in Music (Honours), with high distinction, McGill University, 2000

# PROFESSIONAL RECORD

# University of Michigan (Ann Arbor, MI, USA), 2011-2017

School of Music Theatre & Dance, Department of Performing Arts Technology (PAT) and Department of Chamber Music (2016-present)

Associate Professor, 2017-Present Assistant Professor, 2011-2017

# Queen's University Belfast (Northern Ireland, UK), 2008–2011

School of Music & Sonic Arts, Sonic Arts Research Centre Lecturer (equivalent in rank and responsibilities to Assistant Professor)

# Stanford University (Stanford, CA, USA), 2006–2008

Center for Computer Research in Music and Acoustics Postdoctoral Research Scholar

## Institute for Infocomm Research (Singapore), 2005–2006

Associate Scientist, Sound & Interactivity Group

## ADMINISTRATIVE EXPERIENCE

# Chair, Department of Performing Arts Technology (July 2016–June 2019)

Department facts: ~75 undergraduate majors in 3 degree programs (BFA, BS, BM); 2-3 M.A. students; 8 tenure-track faculty; 5 full- and part-time lecturers; 700+ student enrollments in PAT classes annually.

Responsibilities include: managing departmental budgets; managing faculty teaching assignments and scheduling; hiring adjunct faculty; recruitment, tours, and communication with prospective students; admissions; convening departmental meetings; coordinating with administration on departmental priorities and communications; overseeing student and faculty affairs.

Accomplishments include: successful major undergraduate curricular update in my first year as chair; drafting and gaining school-wide approval for a new Ph.D. program (presently under university-level consideration); overseeing completion and launch of new music technology facilities; securing \$220,000 of funding for new recording and production equipment; collaborative management of \$500,000 new faculty startup budget; updates to departmental web and social media infrastructure; implementation of weekly seminar series for student community-building; creation of new tenure-track faculty position with successful hire; creation of Girls in Music & Technology summer program for high-school students.

## School of Music, Theatre & Dance Executive Committee (Fall 2018–present)

Elected School-wide position. Responsibilities include review/recommendation of: tenure, promotion, and reappointment; new faculty searches and hires; sabbatical/leave requests; new programs; revisions to school-wide policies and practices.

## Project Coordinator, Faculty Leading Change (2016-ongoing)

Received a \$6000 grant to study the climate in the PAT Department as it relates to gender, and implement changes or initiatives to mitigate the gender imbalance among students in the program.

## Liaison for Inclusive Teaching (Fall 2015–Spring 2019)

Represent the School of Music, Theatre & Dance (SMTD) in meetings of delegates from all U-M schools and colleges on the subject of inclusive teaching. Work with SMTD administration on design and implementation of faculty professional development for inclusive teaching.

## OTHER SERVICE AT THE UNIVERSITY OF MICHIGAN

## Council of Departmental Representatives (member, 2012-13; chair, 2013-16)

Served on, then elected chair of the SMTD governing committee on undergraduate curricula and student affairs. Oversaw several major initiatives including revisions of our Bachelor of Musical Arts degree and joint Music Education/Music Performance degrees, and a review of our Artist & Scholars Honors Program.

## Popular Music Working Group (2015-2016)

Member of working group to develop a program in Popular Music at SMTD. Collaborated on design of a new undergraduate curriculum and individual courses approved by the SMTD governing faculty in Fall 2016.

# **Undergraduate Research Opportunity (2014-2017)**

Mentor 1st- and 2nd-year undergraduate students and provide opportunities to engage in faculty research assistance.

## **Search Committee Chair (2016-17)**

Chaired a search committee in the PAT Department for a new tenure-track position resulting in the hire of Anıl Çamcı.

#### Music Tech Suite Working Group (2014-15)

Member of working group to develop programs and designs for a new multimillion-dollar Technology Suite in the EV Moore Music Building. Worked with faculty, staff, architects, acoustical and A/V consultants to inform designs, specify equipment and programmatic needs.

#### Faculty Council on Graduate Studies (vice-chair, 2011-12)

SMTD governing committee on graduate studies responsible for approving changes to graduate curricula, overseeing graduate student affairs, and nominations for certain graduate student awards.

### **Search Committee Member (2014-15)**

Served on the search committee in the PAT Department that resulted in the hire of Professor John Granzow.

## RESEARCH INTERESTS

Aesthetic and intellectual history of computer music

Computer interactivity in music performance: The design of new performance interfaces and their musical, cultural, and aesthetic consequences

Network-based music performance

Skill in digital performance systems

#### TEACHING

## COURSES TAUGHT AT UNIVERSITY OF MICHIGAN

Interactive Media Design I (Undergraduate and Graduate)

Interactive Media Design II (Undergraduate and Graduate)

Electronic Chamber Music (Undergraduate and Graduate)

Student Partnerships in Technology & Performing Arts (Undergraduate and Graduate)

Freshman Seminar in Media Arts (Undergraduate)

Research & Scholarship (Undergraduate)

# COURSES TAUGHT AT QUEEN'S UNIVERSITY BELFAST

Interaction Design (Graduate)

Seminar in Sonic Arts (Graduate)

Interactive Sensing Systems (Undergraduate)

Computer Programming for Musical Applications II (Undergraduate)

Recording Technologies & Techniques I (Undergraduate)

Acoustics (Undergraduate)

Fundamentals of Music and Sound (Undergraduate)

# COURSES TAUGHT AT STANFORD UNIVERSITY (2006-07)

Physical Interaction Design for Music (Graduate and Undergraduate)

#### **SUMMER WORKSHOPS**

Physical Interaction Design for Music, Stanford University, 2002-03; 2006-08

Physical Interaction Design for Music, The Banff Centre (Canada) 2004

Physical Interaction Design for Music, Republic Polytechnic (Singapore) 2007

New Music Controllers, Stanford University, 2013-16

Girls in Music and Technology, University of Michigan, 2017-18

## **TEACHING QUALIFICATION**

Postgraduate Certificate in Higher Education Training (PGCHET)

Queen's University Belfast, 2010

## GRANTS

- Belle Isle and Beyond: Fostering Environmental Literacy and Stewardship Through the Arts. University of Michigan Ginsberg Center for Community Service Learning. \$10,000 Exploration Grant for partnership with Detroit Academy of Arts Sciences and Belle Isle Nature Center. Engaged a group of Detroit middle school students with urban ecology through multiple artistic media, including music technology. With Jessica Fogel (Dance), Sara Adlerstein-Gonzales and Robert Grese (School of Environment and Sustainability).
- 2018 Arts@Michigan Course Connections Grant: \$500 award to support for Stephan Moore and Peter Bussigel's installation *Chorus for Untrained Operator*.
- 2017 University of Michigan Center for Research on Teaching and Learning Faculty Communities for Inclusive Teaching. \$1,000 award to convene a faculty working group to address issues of inclusive teaching in the School of Music Theatre & Dance.
- 2016 University of Michigan Center for Research on Teaching and Learning Faculty Communities for Inclusive Teaching. \$1,000 award to host a retreat for PAT Department Faculty on Inclusive Teaching (co-recipient).
- 2016 University of Michigan ADVANCE Program Faculty Leading Change. \$6,000 award for a year-long initiative to assess and improve the climate for women in Performing Arts Technology.

- 2015 University of Michigan Transforming Learning for the Third Century: Student Partnerships in Arts and Technology. \$50,000 award to implement an experimental pilot course in 2016-17 academic year.
  - Arts @ Michigan Course Connections Grant: Electronic Chamber Music, \$500 toward production costs for a concert in Detroit
- 2014 University of Michigan Office of Research Small Projects Grant: Machines of Loving Grace, \$5525 to conduct additional research in the Bay Area for my book project.
- 2013 Arts @ Michigan Course Connections Grant: Electronic Chamber Music, \$850 to support visiting composer Heinrich Taube.
- 2012 University of Michigan Office of the Vice President for Research Small Projects Grant: Silicon Valley Breakdown, \$5128 to conduct preliminary research in the San Francisco Bay Area for my book project.

University of Michigan Center for Research on Learning and Teaching Faculty Development Fund Grant: Interactive Media Design, \$6000 award to introduce physical computing in a project-based revamp the curriculum for PAT 451 & 452.

School of Music, Theatre & Dance Block Grant: Stringtrees Instrument, \$1500 to develop a mechatronic musical instrument.

# PUBLICATIONS

#### **WORKS IN PROGRESS**

BOOK MANUSCRIPT

Gurevich, M. (In preparation). Silicon Valley Breakdown: Computer Music at Stanford.

#### **PHD DISSERTATION**

Gurevich, M. (2006). *Computational Acoustic Modeling of Cetacean Vocalizations*. Stanford University.

#### **PUBLISHED WORKS**

#### **BOOK SECTIONS**

- Verplank, B., Gurevich, M. & Mathews, M. (2017). The Plank: Designing a Simple Haptic Controller. In M. Lyons & A. Refsum Jensenius, eds. *A NIME Reader*, London: Springer, 59-66.
- Gurevich, M. & Verplank, B. (2017). Personal Reflections on The Plank. In M. Lyons & A. Refsum Jensenius, eds. *A NIME Reader*, London: Springer, 66-67.
- Gurevich, M. & Treviño, J. (2017). Expression and Its Discontents: Toward an Ecology of Musical Creation. In M. Lyons & A. Refsum Jensenius, eds. *A NIME Reader*, London: Springer, 299-310.
- Gurevich, M. & Treviño, J. (2017). Discontent in Retrospect. In M. Lyons & A. Refsum Jensenius, eds. *A NIME Reader*, London: Springer, 310-312.
- Gurevich, M. (2017). Distinguishing the Digital. In M. Lyons & A. Refsum Jensenius, eds. *A NIME Reader*, London: Springer, 331-332.
- Gurevich, M. (2014). Skill in Interactive Digital Music Systems. In *The Oxford Handbook of Interactive Audio*. Karen Collins, Bill Kapralos, and Holly Tessler, eds. New York: Oxford University Press.

# **JOURNAL ARTICLES**

Gurevich, M. (2016). Diversity in NIME Research Practices. *Leonardo* 49(1), 80-81.

- Gurevich, M. (2015). Interacting with Cage: Realising classic electronic works with contemporary technologies. *Organised Sound* 20(3), 290-299.
- Gurevich, M., Marquez-Borbon, A., & Stapleton, P. (2012). Playing with constraints: Stylistic variation with a simple electronic instrument. *Computer Music Journal* 36(1), 23-41.
- Gurevich, M., & Fyans, A.C. (2011). Digital musical interactions: Performer-system relationships and their perception by spectators. *Organised Sound* 16(2), 166-175.
- Chafe, C., Caceres, J. P., & Gurevich, M. (2010). Effect of temporal separation on synchronization in rhythmic performance. *Perception* 39(7), 982-992.
- Gurevich, M. (2010). Guest editor's note. Computer Music Journal 34(4),4-5.

#### PEER-REVIEWED CONFERENCE PAPERS

- Tahiroglu, K., Gurevich, M., and Knapp, B. (2018). Contextualising Idiomatic Gestures in Musical Interactions with NIMEs. In *Proceedings of the International Conference on New Interfaces for Musical Expression*, Blacksburg, Virginia, pp. 126-131.
- Gurevich, M. (2017). Discovering Instruments in Scores: A Repertoire-Driven Approach to Designing New Interfaces for Musical Expression. In *Proceedings of the International Conference on New Interfaces for Musical Expression*, Copenhagen, Denmark, pp. 163-168.
- Holland, S., Gurevich, M., et al. (2016). Music and HCI Workshop. In *CHI Extended Abstracts*, International Conference on Human Factors in Computing Systems, ACM Press, San Jose, California.
- Sheffield, E. & Gurevich, M. (2015). Distributed Mechanical Actuation of Percussion Instruments. In *Proceedings of the International Conference on New Interfaces for Musical Expression*, Louisiana State University.
- Alexander-Adams, S. & Gurevich, M. (2015). A Flexible Platform for Tangible Graphic Scores. In *Proceedings of the International Conference on New Interfaces for Musical Expression*, Louisiana State University.
- Gurevich, M. (2014). Methodology Soup: Diversity in NIME Research Practices. Workshop on Practice-Based Research. In *Proceedings of the International Conference on New Interfaces for Musical Expression*.
- Gurevich, M. (2014). Distributed Control in a Mechatronic Musical Instrument. In *Proceedings* of the International Conference on New Interfaces for Musical Expression.
- Gurevich, M. (2012). Spectators of Mobile Musical Interactions: Opportunities and Challenges. Workshop on Designing Musical Interactions for Mobile Systems. In *Proc. 9th ACM conference on Designing Interactive Systems*.
- Fyans, A.C., Marquez-Borbon, A., Stapleton, P., & Gurevich, M. (2012). Ecological considerations for participatory design of DMIs. In *Proceedings of the Conference on New Interfaces for Musical Expression*.
- Booth, G., & Gurevich, M. (2012). Collaborative Composition and Socially Constructed Instruments: Ensemble Laptop Performance Through the Lens of Ethnography. In *Proceedings of the Conference on New Interfaces for Musical Expression*.
- Booth, G., & Gurevich, M. (2012). Proceeding from Performance: An Ethnography of the Birmingham Laptop Ensemble. In *Proceedings of the International Computer Music Conference*.
- Gurevich, M., Donohoe, D., & Bertet, S. (2011). Ambisonic Spatialization for Networked Music Performance. In *Proceedings of the 17th International Conference on Auditory Display (ICAD-2011)*.
- Marquez-Borbon, A., Gurevich, M., Fyans, A.C., & Stapleton, P. (2011). Designing Digital Musical Interactions in Experimental Contexts. In *Proceedings of the Conference on New Interfaces for Musical Expression* (pp. 373-376).
- Fyans, A.C., & Gurevich, M. (2011). Perceptions of Skill in Performances with Acoustic and

- Electronic Instruments. In *Proceedings of the Conference on New Interfaces for Musical Expression* (pp. 495-498).
- Gurevich, M., Stapleton, P., & Marquez-Borbon, A. (2010). Style and constraint in electronic musical instruments. In *Proceedings of the Conference on New Interfaces for Musical Expression* (pp. 106–111).
- Fyans, A.C., Gurevich, M., & Stapleton, P. (2010). Examining the spectator experience. In *Proceedings of the Conference on New Interfaces for Musical Expression* (pp. 451–454).
- Gurevich, M., Stapleton, P., & Bennett, P. (2009). Designing for style in new musical interactions. In *Proceedings of the Conference on New Interfaces for Musical Expression* (pp. 213–217).
- Fyans, A. C., Gurevich, M., & Stapleton, P. (2009). Where did it all go wrong? A model of error from the spectator's perspective. In *Proceedings of the Conference on New Interfaces for Musical Expression* (pp. 171–172).
- Fyans, A. C., Gurevich, M., & Stapleton, P. (2009). Spectator understanding of error in performance. In *Proceedings of the Conference on Human Factors in Computing Systems Extended Abstracts* (pp. 3955–3960).
- Gurevich, M., & Treviño, J. (2007). Expression and its discontent: Toward an ecology of musical creation. In *Proceedings of the Conference on New Interfaces for Musical Expression* (pp. 106–111).
- Pendharkar, C., Gurevich, M., & Wyse, L. (2006). Parameterized morphing as a mapping technique for sound synthesis. In *Proceedings of the International Conference on Digital Audio Effects* (pp. 45–48).
- Gurevich, M. (2006). JamSpace: Designing a collaborative networked music space for novices. In *Proceedings of the Conference on New Interfaces for Musical Expression* (pp. 118–123).
- Gurevich, M. (2006). JamSpace: A networked real-time collaborative music environment. In *Proceedings of the Conference on Human Factors in Computing Systems Extended Abstracts* (pp. 821–826).
- Chafe, C., & Gurevich, M. (2004). Network time delay and ensemble accuracy: Effects of latency, asymmetry. In *Proceedings of the 117th Audio Engineering Society Convention*.
- Chafe, C., & Gurevich, M. (2004). Effects of latency on networked musical performance. In *Proceedings of the 2004 OpenSound Control Conference*, UC Berkeley, USA.
- Gurevich, M., Chafe, C., Leslie, G., & Tyan, S. (2004). Simulation of networked ensemble performance with varying time delays: characterization of ensemble accuracy. In *Proceedings of the 2004 International Computer Music Conference*.
- Chafe, C., Gurevich, M., Leslie, G., & Tyan, S. (2004). Effect of time delay on ensemble accuracy. In *Proceedings of the International Symposium on Musical Acoustics*.
- Wilson, S., Gurevich, M., Verplank, B., & Stang, P. (2003). Microcontrollers in music HCI instruction: Reflections on our switch to the Atmel AVR platform. In *Proceedings of the Conference on New Interfaces for Musical Expression* (pp. 24–29).
- Gurevich, M., Verplank, B., & Wilson, S. (2003). Physical interaction design for music. In *Proceedings of the 2003 International Computer Music Conference*.
- Verplank, B., Gurevich, M., & Mathews, M. (2002). The PLANK: designing a simple haptic controller. In *Proceedings of the Conference on New Interfaces for Musical Expression* (pp. 1–4).
- Gurevich, M., & von Muehlen, S. (2001). The Accordiatron: A gestural interface for interactive music. In *Proceedings of the 2001 International Computer Music Conference*.
- Gurevich, M., & von Muehlen, S. (2001). The Accordiatron: A MIDI controller for interactive music. In *Proceedings of the Conference New Interfaces for Musical Expression* (pp. 1–3).

#### **INVITED PRESENTATIONS**

## TALKS AND LECTURES

- 2018 "The Social Construction of New Digital Musical Instruments: Developing a NIME Repertoire"
  - Michigan Interactive and Social Computing, University of Michigan School of Information.
  - Northwestern University Department of Computer Science.
- 2017 "The Social Construction of New Digital Musical Instruments: Developing a NIME Repertoire."
  - University of California Santa Barbara Media Arts and Technology Seminar.
  - Rochester Institute of Technology School of Interactive Games and Media Seminar.
- 2016 Colloquium on Interdisciplinary Methodologies for Research and Creative Practice in Art, Body and New Technologies. Universidad de Chile, Santiago Chile.
  - "Music Technology Research: Multidisciplinary or Interdisciplinary?" *Undergraduate Research Opportunity Seminar*, University of Michigan.
- 2015 "Interdisciplinary Research in the Humanities." *Undergraduate Research Opportunity Seminar*, University of Michigan.
- 2014 "Electronic Music: How Technology Changed the Way We Hear Music and the World." Osher Lifelong Learning Institute. Ann Arbor, MI.
  - "Gems From the Archives." *TripleCCRMALite Symposium,* Center for Computer Research in Music and Acoustics, Stanford University.
  - "Technologically Mediated Music Performance." Twenty-two Ways to Think about New Media, University of Michigan.
- 2013 "In Two Places." *Net-Music 2013: The Internet as Creative Resource in Music.* Center for Computer Research in Music and Acoustics, Stanford University.
  - "Designing Musical Interactions: Skill, Style, and Spectatorship." *Design Science Seminar Series*, University of Michigan.
- 2012 Keynote Address: "New Interfaces for Musical Expression." *Diseño+ Tecnología International Conference* (2012), Universidad ICESI, Cali, Colombia.
- 2010 MIT Press Journals Podcast. Human-Computer Interaction in Music. http://www.mitpressjournals.org/page/podcast\_episode7\_CMJ
  - "Spectatorship, Skill and Style in Electronic Music Performance." National University of Singapore, Center for New Media.
  - "Style and Constraint in Electronic Musical Instruments." Universitat Pompeu Fabra, Barcelona, Spain, Music Technology Group.
- 2009 "Spectator Understanding of Error in Performance With New Technologies." National University of Singapore, Center for New Media.
- 2007 "Physical Interaction Design for Music." Workshop on Computer Music and Audio Technology (WOCMAT-07), National Chao Tung University, Taiwan.
- PANELS AND PROFESSIONAL WORKSHOPS (\* INDICATES WORKSHOP ORGANIZER)
  - 2016-18 \* "Workshop on Physical Computing for Interactive Music." Northwestern University Department of Electrical Engineering & Computer Science.

- 2017 \* "Workshop on NIME Pedagogy", with Sasha Leitman. Full-day workshop at the International Conference on New Interfaces for Musical Expression at Aalborg University Copenhagen, Denmark.
- 2016 \* "Workshop on Music and HCI." ACM International Conference on Human Factors in Computing Systems, San Jose, California. (Co-organizer).
- 2012 "John Cage Centennial Birthday Celebration." University of Michigan School of Music, Theatre & Dance.
  - "Panel on sampling in music." University of Michigan, Hatcher Graduate Library, F.O.K.U.S. (Fighting Obstacles Knowing Ultimate Success) Student Group.
- 2010 \* "Workshop on NIME Education." International Conference on New Interfaces for Musical Expression, University of Technology Sydney, Australia.
- 2009 "Workshop on Collaboration in the Arts." Ulster University School of Art and Design, Belfast, UK.
- \* "Designing for Style" (Workshop). Tweak Festival, University of Limerick Interaction Design Centre, Ireland.

#### RECENT PERFORMANCES

#### 2019

*Belle Isle and Beyond*. Belle Isle Nature Center, Detroit, MI. Music for collaborative site-specific dance performance, with Jessica Fogel and Erika Stowall.

*Einstein's Dreams: Electronic Chamber Music.* Chip Davis Technology Studio. Directed a concert of student-devised multimedia works that respond to Alan Lightman's novel.

#### 2018

*Plausible Fictions: Electronic Chamber Music.* University of Michigan Museum of Art. Directed a concert of responses to the exhibition *Proof: The Ryoichi Excavations,* photography by Patrick Nagatani.

*Electronic Chamber Music.* Chip Davis Technology Studio. Directed a concert of student-devised multimedia works.

#### 2017

The River in Our City, The River in Our Veins, Electronic Chamber Music with processional puppetry, collaboration with Christianne Myers, Associate Professor of Theatre (Costume Design). Directed a performance at three outdoor sites at U-M.

University of Michigan Bicentennial Celebration. *The River in Our City, The River in Our Veins,* Electronic Chamber Music with processional puppetry, collaboration with Christianne Myers.

#### 2016

*Techno in Space: Electronic Chamber Music.* Performance of multichannel music inspired by Detroit Techno in the Davis Technology Studio, University of Michigan.

#### 2015

Performance of *Aural Cavity*, co-composed with U-M PhD student Sang Won Lee. *International Computer Music Conference*, University of North Texas.

*Calculated Operations: The Techno Performance Paradox*. Electronic Chamber Music performance of original music inspired by Detroit Techno. The Jam Handy, Detroit, MI.

#### 2014

New realization of John Cage's *Rozart Mix*, for electronically controlled cassette players, radios, and FM transmitters. *International Conference on New Musical Interfaces for Music Expression*.

*Gradual Processes*: Minimalist Electronic Chamber Music. New arrangements of music by Glass, Young, Reich, Gurevich, and student works. Cady Room at U-M Ann Arbor.

#### 2013

Percussive Arts Society International Convention. Director and performer with University of Michigan Telematic Players in a networked performance of Scott Deal's *Goldstream Variations*.

*Radiophonics*: Electronic Chamber Music for radio transmitters and receivers. 5 new student compositions and 1 classic work by Cage. Cady Room at U-M Ann Arbor.

Performance and new electronic realization of Berio's *Altra Voce* for voice, horn and electronics. With Jennifer Goltz-Taylor and Adam Unsworth at UMMA in Ann Arbor.

*In Two Places*. Networked performance at CCRMA, Stanford University, with Stephen Rush and members of DME via Internet2.

#### 2012

*Music* + *Mushrooms II: An Autumn Foray* in Honor of John Cage. Cage-inspired happening with students in the PAT department, and the Mycotics. Bird Hills Park, Ann Arbor.

New realization of John Cage's *Rozart Mix*, for electronically controlled cassette players, as a part of the Videosonica Festival, Cali, Colombia.

Multi-site, networked improvisation in Cali, Colombia, as a part of the *Latin American Music and Musical Interfaces Festival*, with collaborators at Stanford and U-M.

New realization of George Brecht's *Motor Vehicle Sundown* for 11 automobiles in downtown Ann Arbor. Opening concert of NIME 2012.

On Cage On Cage. New realizations of 5 electronic works by Cage, with U-M Electronic Chamber Music Ensemble. U-M Dance Studio A.

*Music* + *Mushrooms*: A Cagean Walk in the Woods. Cage-inspired happening performed members of Electronic Chamber Music Ensemble and The Mycotics while foraging for edible mushrooms. Bird Hills Park, Ann Arbor.

New realization of John Cage's *Rozart Mix* at University of Michigan Museum of Art (UMMA).

The Fluxus String and Water Compendium at UMMA. Performances of my compositions Cow Pong and September 8, 1964. New realization of Yoko Ono's Wall Piece for Orchestra.

## DEVICES, INTERACTIVE EXHIBITS & INSTALLATIONS

#### The Counted (2017)

Generative sound installation at Gallery One, Washtenaw Community College, April 13 – June 1. Commissioned multichannel sound installation using the sound of the Lurie Carillon to sonify the names of the 1092 people killed by law enforcement in the United States in 2016.

## *Tridents* (2015-ongoing)

Light-based synthesizer instruments for electronic dance music performance

## *Giants' Causeway* (2015-ongoing)

Light-based effects controller for electronic dance music

# Aural Cavity, with Sang Won Lee (2014-5)

Electroacoustic feedback instrument, semifinalist at the 2015 Guthman Musical Instrument Competition at Georgia Tech

#### *Stringtrees* (2010-15)

Mechatronic interactive plucked string instrument

# Whispering Places (2010)

Multi-site networked ambisonic installation, premiered between SARC, CCRMA (Stanford) and IRCAM (Paris), September 2010

Homemade sensors for interactive audio (2007)

Demo at Maker Faire, San Mateo, CA

Augmented Reality DJ (2006)

Interactive exhibit with gesture tracking, head-mounted display, sound

*JamSpace* (2006)

Jamming application for novices in isolated locations on a local network

Stop the War Machine | Start the Peace Machine (2004)

Motorized microphone pendulums, multichannel interactive sound

Glass of Water (2003)

Location-based installation. Robotic television, stickers, glasses of water *The Plank* (2002)

Haptic interface for musical interaction, with Bill Verplank

Contraption (2001)

Interactive sound sculpture; wood, glass, aluminum, custom electronics

Accordiatron (2001)

MIDI music controller for interactive performance with computer

# COMPOSITIONS & ARRANGEMENTS

Belle Isle Reverie (2019), electroacoustic music based on field recordings at Belle Isle, Detroit

P-A-T 3-1-3 (2015), electronic chamber music for techno ensemble

Arrangement of *Radio Music*, by John Cage (2013), for 5 or more performers

*Music* + *Mushrooms II*: *An Autumn Foray* (2012), happening for 10 or more performers

Music + Mushrooms: A Cagean Walk in the Woods (2012), happening for 10 or more performers

Arrangement of Rozart Mix, by John Cage (2012), for cassette tapes and 4-12 performers

Arrangement of Imaginary Landscape No. 5, by John Cage (2012), for 8 turntablists

War! (2010), for 12 musicians and 2 card players

Mixtape Music (2010), for 10 portable cassette players

On Not Knowing (2009), for 10 voices and radios

Cow Pong (2008), a competition for 10 or more percussionists

Alpheus (2006), for Accordiatron and computer

n Questions (2003), for 8 or more voices

one thousand seven hundred and fourteen questions (2002), for 8-channel tape

Cartography (2001), for Accordiatron and computer

25 Away (2001), for Accordiatron and computer

Androgyn (2000), for soprano & baritone saxophones, computer and tape

We are the First (1999), for stereo tape

Soft White (1998), for alto saxophone, computer and tape

# THESIS SUPERVISION

## PhD in Music and Sonic Art, Queen's University Belfast, Co-Supervisor

Adnan Marquez-Borbon (2013). Working Through: Characterising and Evaluating Skill with Digital Musical Interactions.

Cavan Fyans (2015). Spectator Understanding of Performative Interaction.

## MA in Media Arts, University of Michigan, Thesis Committee Primary Advisor

Matias Vilaplana (2017-19). Synthetic Bodies.

Matias researched compositional practices for movement-controlled interactive dance and music performance with infrared marker-based motion capture. Culminated in a multimovement dance performance. <a href="https://matiasvilaplana.com/interactive-media/">https://matiasvilaplana.com/interactive-media/</a>

Kirandeep Bhumber (2016-18). Phulkari.

Multimovement multimedia performance work with dance, acoustic & electronic music, motion capture, real-time generative video based on patterns and cultural histories of traditional Punjabi textiles. http://www.kiranbhumber.com/phulkari-1

Kevin Allswede (2016-17). From Design to Development: Long-term Coevolution of Digital Musical Instrument Designs and Performance Practices.

Thesis investigated how we can design live performance systems or digital musical instruments that facilitate sustained skill development.

Simon Alexander-Adams (2014-15). A Flexible Platform for Tangible Graphic Scores.

Simon's thesis merged his interests in graphic scores, real-time visualization, tangible interaction, and performance. He created a multi-touch display with interchangeable digitally-fabricated plates that functioned as tangible graphic scores for real-time audiovisual performance: http://www.simonaa.media/content/tangible-graphic-scores

Eric Sheffield (2014-15). Distributed Mechanical Actuation of Percussion.

Eric's thesis was inspired by my interest in distributed mechatronic systems and his own experience as a percussionist. He developed mechatronic percussion instruments that were performed and co-developed with high-level percussion performance students. See: <a href="https://youtu.be/6OGQ5yoa\_Z4">https://youtu.be/6OGQ5yoa\_Z4</a> and <a href="https://youtu.be/exPR5bmsfc8">https://youtu.be/exPR5bmsfc8</a>

Conor Barry (2013-14). Send a Message.

Conor's thesis centered around a multi-site, networked, telematic public sound-art installation using modified telephones that was simultaneously installed in Ann Arbor, Berlin, Boston, Portland, Belfast, London, Athens, and Frederikstad, Norway. <a href="http://conorbarry.me/SendAMessage">http://conorbarry.me/SendAMessage</a>

## PAT Undergraduate Senior Thesis, University of Michigan Advisor

Ayal Subar (2018). *The Scientific Knowledge of Unknown Passing*. Live electronic music performance with projection mapped visuals. <a href="https://youtu.be/aGTTGik5UQs">https://youtu.be/aGTTGik5UQs</a>

Everett Reid (2018). *Nova Portals*. New digital instrument for live electronic music performance.

Johanna Baumann (2018). Interactive sound installation.

Jaime Cheung (2018). EP of original music with videos. https://youtu.be/zugy\_PC5E6Q

Peter Littlejohn (2017). Interactive sound installation.

Sam Schaefer (2017). Interactive sound installation.

Kevin Allswede (2016). *String Accordion* 2.0. Digital musical instrument: <a href="http://kevinallswede.com/string-accordion-v2/">http://kevinallswede.com/string-accordion-v2/</a>

Isaac Levine (2016). *Speech Devices*. Robotic slide whistles to create an experimental, artistic approximation of sine-wave speech: <a href="https://vimeo.com/164335922">https://vimeo.com/164335922</a>

Takumi Ogata (2016). *Rib Cage*. Interactive mechatronic musical instrument: <a href="https://vimeo.com/164644619">https://vimeo.com/164644619</a>. Second place at the 2017 Guthman Musical Instrument Competition: <a href="http://guthman.gatech.edu/2017-winners">http://guthman.gatech.edu/2017-winners</a>

Ian Petrarca (2016). *Syncaudio*. Interactive music player for Soundcloud DJ mixes: <a href="http://syncaud.io/">http://syncaud.io/</a>

Michael McCrindle (2013). *Shine*. Independent EP composed, arranged, recorded, and produced as "Anagram Norton": <a href="http://anagramnorton.com/album/shine">http://anagramnorton.com/album/shine</a>.

#### **Doctoral Dissertation Committees**

Corey Dundee (2019), DMA in Composition, University of Michigan. Preliminary exam committee member.

Merryl Monard (2017–18), DMA in Flute Performance, University of Michigan. Preliminary exam committee member.

Linda Walsh (2017), PhD in Engineering and Information Technology, University of Technology Sydney. External examiner.

#### **MA Thesis Committees**

Myron Bishop (2011-12), MA in Media Arts, University of Michigan.

Kyle Kramer (2011-12), MA in Media Arts, University of Michigan.

Michael Musick (2011-12), MA in Media Arts, University of Michigan.

Graham Booth (2010), MA in Music, University of Huddersfield. External examiner.

### PROFESSIONAL SERVICE

#### **GUEST EDITOR**

Computer Music Journal 34:4 (Winter, 2010). Special Issue on HCI in Computer Music.

#### **PROFESSIONAL SOCIETIES**

Vice President of Membership (2014-present) of the International Computer Music Association Member of the American Musicological Society

Member of the ACM Special Interest Group on Human Factors in Computing Systems

#### **SESSION CHAIR**

2018 Conference on New Interfaces for Musical Expression, session "Theory & Critique"

2017 Conference on New Interfaces for Musical Expression, session "Machines/Humans"

2015 International Computer Music Conference, session "Virtual Reality"

2015 Conference on New Interfaces for Musical Expression, session "Human-Computer Interaction with Feedback"

## **PROGRAM COMMITTEES**

2012 Conference on New Interfaces for Musical Expression (NIME) – Music Chair and Conference Co-organizer

2010 Conference on Digital Resources in the Humanities and Arts

2007 Conference on New Interfaces for Musical Expression (NIME)

# **METAREVIEW**

2015-19 Conference on New Interfaces for Musical Expression (NIME)

#### PEER REVIEW

Ongoing peer review for numerous conferences, journals, and publishers including: Oxford University Press, Bloomsbury, Computer Music Journal, Academy of Finland, International Computer Music Conference (ICMC), Conference on New Interfaces for Musical Expression (NIME), Conference on Tangible, Embedded and Embodied Computing (TEI), ACM Conference on Computer-Supported Collaborative Work (CSCW), ACM Conference on Human Factors in Computing Systems (CHI), ACM Multimedia, International Symposium on Music Information Retrieval (ISMIR), International Conference on Design and Semantics of Form and Movement (DeSForM), Society for Electroacoustic Music in the United States (SEAMUS), Sound and Music Computing (SMC)