

CURRICULUM VITAE

MICHAEL DIXON GUREVICH

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University of Michigan
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ACADEMIC DEGREES

B.Mus.	2000	McGill University Honours Computer Applications in Music (High Distinction)
M.A.	2003	Stanford University Computer-Based Music Theory and Acoustics
Ph.D.	2006	Stanford University Computer-Based Music Theory and Acoustics

PROFESSIONAL RECORD

2011–Present	Assistant Professor, Department of Performing Arts Technology, School of Music, Theatre & Dance, University of Michigan
2008–2011	Lecturer, Sonic Arts Research Centre, School of Music & Sonic Arts Queen's University Belfast
2006–2008	Postdoctoral Research Scholar, CCRMA Stanford University
2005–2006	Associate Scientist, Sound and Interactivity Group Institute for Infocomm Research (I2R), Singapore

TEACHING

TEACHING QUALIFICATION

2010	Postgraduate Certificate in Higher Education Training (PGCHET) Queen's University Belfast
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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)
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 AT STANFORD UNIVERSITY, THE BANFF CENTRE & SINGAPORE POLYTECHNIC (2002-04; 2006-08; 2013-16)

Physical Interaction Design for Music

New Music Controllers

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

GRANTS

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). *Machines of Loving Grace: Computer Music in Silicon Valley*.

BOOK CHAPTERS

Verplank, B., Gurevich, M. & Mathews, M. (2016, under contract, in press). The Plank: Designing a Simple Haptic Controller. In M. Lyons & A. Refsum Jensenius, eds. *The NIME Reader*, London: Springer, 53-60.

Gurevich, M. & Verplank, B. (2016, under contract, in press). Personal Reflections on The Plank. In M. Lyons & A. Refsum Jensenius, eds. *The NIME Reader*, London: Springer, 60-61.

Gurevich, M. & Treviño, J. (2016, under contract, in press). Expression and Its Discontents: Toward an Ecology of Musical Creation. In M. Lyons & A. Refsum Jensenius, eds. *The NIME Reader*, London: Springer, 271-282.

- Gurevich, M. & Treviño, J. (2016, under contract, in press). Discontent in Retrospect. In M. Lyons & A. Refsum Jensenius, eds. *The NIME Reader*, London: Springer, 282-284.
- Gurevich, M. (2016, under contract, in press). Distinguishing the Digital. In M. Lyons & A. Refsum Jensenius, eds. *The NIME Reader*, London: Springer, 301-302.

PHD DISSERTATION

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

PUBLISHED WORKS

BOOK CHAPTER

- 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

- 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

- 2016 *Colloquium on Interdisciplinary Methodologies for Research and Creative Practice in Art, Body and New Technologies*. Universidad de Chile, Santiago Chile (upcoming, August 7-12).
 “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 * “Workshop on Physical Computing for Interactive Music.” Northwestern University Department of Electrical Engineering & Computer Science (upcoming, June 4-5).

- * "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.
- 2008 * "Designing for Style" (Workshop). Tweak Festival, University of Limerick Interaction Design Centre, Ireland.

RECENT PERFORMANCES

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 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

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

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

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

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 & 2016 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)