## MARY HOPE SIMONI

#### **Business:**

School of Humanities, Arts & Social Sciences Rensselaer Polytechnic Institute 110 8<sup>th</sup> Street Troy, NY 12180

#### **Education:**

MICHIGAN STATE UNIVERSITY, East Lansing, MI

Ph.D. Music Theory. 1983

Dissertation: THE COMPUTER ANALYSIS OF ATONAL MUSIC: AN APPLICATION PROGRAM USING

e-mail: maryhopesimoni@gmail.com

**SET THEORY** 

M.Mus. Music Composition. 1981

Thesis: IN MEMORY OF T.S. DOWD (orchestra)

Principal teacher: David Liptak B.Mus. Music Education. 1977

B.Mus. Music Theory and Composition. 1977

Piano Principal: Ralph Votapek

#### **Post Doctoral Studies:**

STANFORD UNIVERSITY, Center for Computer Research in Music and Acoustics (CCRMA), Stanford, CA. 1992-1993.

Postdoctoral scholarship student of computer-assisted compositional techniques, psychoacoustics, and synthesis.

Principal teachers: John Chowning, Perry Cook, and Heinrich Taube.

CITY UNIVERSITY OF NEW YORK, Center for Computer Music at the Conservatory of Music, Brooklyn College, NY. 1985. Postdoctoral scholarship in computer music composition. Principal teacher: Charles Dodge.

#### **Higher Education Administration:**

RENSSELAER POLYTECHNIC INSTITUTE, Troy, NY

Dean, School of Humanities, Arts & Social Sciences, October 2011 to present

Dean of a School that comprises programs in the Arts; Cognitive Science; Communication & Media; Economics; Games and Simulation Arts & Sciences; and Science & Technology Studies. Developed new approaches to Institute core curricular requirements through interdisciplinary inquiry-based learning, stabilized the resource base of School, created new faculty positions to strengthen existing curricula and appropriately resourced existing programs, created interdisciplinary research programs, and participated in Middle State Commission on Higher Education accreditation and New York State Education Department. Collaborated with Institute leadership and faculty on strategic planning process. Oversaw Administrative Services and Operations, Business Office, Information Technology, Program Development, and Student Services. Extensive fundraising through alumni events and donor cultivation in partnership with Institute Advancement. Led the School to become recognized as an *All Steinway School*.

UNIVERSITY OF MICHIGAN, Ann Arbor, MI

Associate Dean, School of Music, Theatre & Dance, July 2004 to 2011

Developed research opportunities and strategic planning processes for the School of Music, Theatre & Dance. Developed and implemented recording and production grants and programs. Launched a University of Michigan record label *Block M Records* and provided direction for branding and marketing, intellectual property rights management, metadata and media encoding processes, workflow management, and production and post-production standards. Responsible for community engagement and educational outreach programs through Michigan in partnership with Michigan State University, Wayne State University, and the Detroit Public Schools. Oversaw Michigan Youth Ensembles and the Summer Institutes of MPulse. Supervision of information technology including the redesign and launch of the school website, the design, development, and deployment of a comprehensive performing arts scheduling system, and groupware devoted to tracking School events and concerts through all stages of production. Participated in National Association of Schools of Music accreditation.

### **Higher Education Administration (con't):**

Chair, Department of Performing Arts Technology - April 1996 to June 2009

Developed and directed four interdisciplinary undergraduate curricula (B.Mus., BFA, and B.S.) and graduate curricula (M.A.) designed to advance the aesthetics and techniques of emerging technologies in the performing arts through composition, performance, and research. Responsible for recruiting, admissions, curriculum development, academic advising, fundraising, and corporate relations. Supervised faculty and technical support staff. Chaired the 1998 International Computer Music Conference (ICMC98). Chaired the ICMC98 Commissioning Program resulting in world premiere performances.

Director, Center for Performing Arts & Technology - September 1994 to June 2009

Oversaw the acquisition, delivery, and management of academic and research information technology products and services for the School of Music including all MIDI, digital media, and recording facilities. Liaison to high-tech corporations. Extensive fundraising and grant writing to meet Center objectives. Served on the Building Committee of the Duderstadt Center.

Director, Residence Halls Computing Program (ResComp) - September 1986 to September 1994 Managed the administrative, financial, technical, and human resource operations of seventeen networked computing sites equipped with six hundred microcomputers servicing 14,000 residential students and 300 resident staff. Supervised a staff of 125 professionals, technicals, clericals, and paraprofessionals. Developed, implemented, and managed assessment strategies for dynamic non-credit peer education curricula.

MICHIGAN STATE UNIVERSITY, East Lansing, MI

Concert Production Advisor, Associated Students of Michigan State University (ASMSU) September 1981 to June 1983

Responsible for all facets of concert production including contract negotiations and compliance, human resource management (IATSE, non-union, and student work force), producer negotiations, safety, budgeting, marketing, and promotion. Produced 10-15 concerts annually featuring such artists as Prince, Kenny Rogers, REO Speedwagon, Earl Klugh, and Spyrogyra in major performing arts and athletic venues. Served on the Building Committee for the Wharton Center for the Performing Arts.

Assistant Director, University Housing Programs - September 1979 to June 1981

Advised student government and judiciary. Selected, trained, supervised, and evaluated undergraduate and graduate resident staff.

## **Teaching:**

RENSSELAER POLYTECHNIC INSTITUTE, TROY, NY

Professor, Department of the Arts, 2011-present

Professor Affiliate, Center for Biotechnology and Interdisciplinary Studies, 2015-present

UNIVERSITY OF MICHIGAN, Ann Arbor, MI

Professor, Performing Arts Technology, September 2005 to 2011

Professor Affiliate, Design Science Program, College of Engineering, 2007 to 2015

Associate Professor, Performing Arts Technology – September 2000 to 2005

Assistant Professor, Performing Arts Technology - September 1994 to 2000

Developed and taught courses in the media arts, electroacoustic composition, algorithmic composition (Max/MSP<sup>TM</sup>, LISP, and Common Music), multimedia composition and performance, digital sound synthesis & signal processing (Csound, Logic<sup>TM</sup> and ProTools<sup>TM</sup>), performance systems, record label production, and entrepreneurship and the business of music. Interdisciplinary curriculum development for two Bachelor of Fine Arts degrees (Music Technology and Media Arts), a Bachelor of Science degree (Sound Engineering), and a Master of Arts degree (Media Arts). Developed and coordinated the interdisciplinary Music Engineering seminar series. Faculty advisor to *Principles of Virtual Reality*. Faculty mentor to Undergraduate Research Opportunities Program (UROP).

Director, Performing Arts Technology Camp, Summer, 2000-2006

Directed middle and high school music technology camps designed to enhance composition and performance practice using technology.

Lecturer and Curricular Consultant, School of Music - September, 1990 to May, 1994

Developed and taught courses in digital sound synthesis and algorithmic composition. Assisted in the curricular design of B.Mus., Music Technology.

### Teaching (con't):

BERKLEE COLLEGE OF MUSIC, Boston, MA

Faculty in Music Synthesis - December 1985 to June 1986

Developed and taught courses in the newly created Music Synthesis Department. Courses included the theory, programming, and performance using analog, digital, and hybrid synthesis systems.

LANSING COMMUNITY COLLEGE, Lansing, MI

Instructor, Music - September 1981 to December 1985

Taught theory, sight singing, ear training, piano, composition, and music history. Curriculum development and course design in digital sound synthesis, computer-assisted music analysis, and composition.

Instructor, Computer Science - September 1981 to December 1985

Taught information theory and programming languages. Course Coordinator for Computer Science curriculum responsible for developing and standardizing instructional materials in collaboration with faculty. Designed, authored, and implemented computer-assisted instructional software for music theory.

LANSING PUBLIC SCHOOLS, Lansing, MI. Mt. Hope Elementary. Taught K-8 general and vocal music. MICHIGAN STATE UNIVERSITY, East Lansing, MI

Instructor, School of Education - September 1981 to June 1983

Taught leadership skills to undergraduate Education majors.

SAGINAW CATHOLIC SCHOOLS, Saginaw, MI

Music Director - September 1977 to June 1979

Directed elementary, middle, and high school instrumental and vocal ensembles at St. Mary's Cathedral School (K-12), St. Stephen's School (K-12), and instituted a new instrumental program at St. Helen's School (K-8).

## **Interdisciplinary Research:**

MUSICAL INTELLIGENCE & KNOWLEDGE AGENT (MIKA), Interdisciplinary research spanning music, architectural acoustics, and computer science aimed at advancing research in artificial intelligence and machine learning in the pedagogy, performance, and improvisation of music. IBM Corporation and Rensselaer Polytechnic Institute, Troy, NY 2018-present

PLURAL ANALYSIS, International interdisciplinary group researching the application of diverse methodologies to the theory and analysis of music. Technische Universität, Berlin, Germany 2015-present

THE MANDARIN PROJECT, Administrative Project Director for research in language learning and cultural competency in immersive virtual learning environments. . Research project currently resides with the Cognitive and Immersive Systems Laboratory at the Experimental Media & Performing Arts Center. Rensselaer Polytechnic Institute, Troy, NY 2013-present

NEW MUSICAL INSTRUMENTS WITH HAPTIC FORCE FEEDBACK INTERFACE, Grant Opportunities [Collaborative Spaces], Duderstadt Center, University of Michigan, Ann Arbor, MI 2009-2011 INTERNET PUBLICATION: THE PRODUCTION, DELIVERY AND DISSEMINATION OF MEDIA-RICH SCHOLARLY AND CREATIVE RESEARCH, Office of the Provost, University of Michigan, Ann Arbor, MI 2004-2007

Chair of multidisciplinary committees of faculty and staff from the School of Music, University Libraries, and the Duderstadt Center pursuing internet publication of scholarly and artistic content addressing intellectual property rights, media capture and presentation, process and workflow among complex organizational and technological systems, and electronic publication and commerce.

MUSEN: A JOINT RESEARCH PROGRAM BETWEEN THE SCHOOL OF MUSIC and COLLEGE OF ENGINEERING, University of Michigan, Ann Arbor, MI 1994 - 2011

Co-Director and Co-Founder with Professor Gregory Wakefield, College of Engineering. Research in automated music transcription, music information retrieval, digital signal processing, musical signal visualization, and theoretical and analytical models for electro-acoustic music.

### **Interdisciplinary Research (con't):**

RESCOMP RESEARCH: A JOINT RESEARCH PROGRAM BETWEEN STUDENT AFFAIRS AND THE INSTITUTE OF PUBLIC POLICY, University of Michigan, Ann Arbor, MI 1988-1992

Chair, Multi-variant longitudinal research program that studied the use of technology by undergraduate residence hall students and staff.

#### **Service:**

RENSSELAER POLYTECHNIC INSTITUTE, Troy, NY

Art\_X – Developing pedagogies that lead to student discovery of the art of science and the science of art (2014-present)

Middle States Commission on Higher Education, Accreditation Steering Committee (2014-2016) Co-Chair, Dean of Science Search Committee (2014)

Experimental Media and Performing Arts Center (EMPAC) Steering Committee (2013-present ) UNIVERSITY OF MICHIGAN, Ann Arbor, MI

Office of the Provost, Non-Traditional Educational Programs Task Force (2009-2011)

Office of the Provost, University Accreditation Team (2009-2011)

School of Music, Theatre & Dance, Chair (ex-officio) Faculty Research Committee (2008-2011)

University Libraries, Scholarly Publications Advisory Group, 2007-2011

Office of the President, North Campus Planning Committee, 2005-2011

Office of the Provost, Dean's Search Committee, 2004-2005

Office for the Vice President for Research

Research Associate Dean Committee member and Research and Scholarship in the Arts member 2005-2011

Conflict of Interest & Conflict of Commitment University Committee

Rackham Graduate School, Executive Board, Elected Member for Humanities and the Arts, 2006-2011

School of Music, Theatre & Dance, Performing Arts Study, 2005-2006

Lead author of study researching physical plant and space utilization issues that resulted in a program statement for new construction.

School of Music, Theatre & Dance, Master of Arts, Media Arts Program Committee, 1998-2011 Chair of a committee of faculty from College of Engineering, Art & Design, and Music engaged in the design and delivery an interdisciplinary graduate program in the media arts.

School of Music and Information Technology Central Services Partnership, 1994-2002

Co-Director. Reviewed and administered instructional technology grants to faculty. Initiated programs in audio streaming via the web and non-credit courses in music technology.

Research Computing Advisory Council, 1994-1999

Member of a cross-campus advisory council to the Vice-President for Research. Assisted in strategic planning for university-wide information technology resources in support of research.

Creative Arts Advisory Council, Chairperson, 1995-1999

Chair of a multi-disciplinary faculty advisory team to the Duderstadt Center leadership. Faculty representatives from Engineering, Art & Design, Music, Architecture & Urban Planning, and the Film Video Program advised Duderstadt Center leadership on resource acquisition, policy development, and training programs for the Audio Studio, Video Studio, Electronic Music Studios, and Project Studios.

Interdisciplinary Virtual Reality Advisory Group, 1995-1999

Member of a faculty advisory committee to the Duderstadt Center leadership regarding development of virtual reality programs for teaching and research.

Academic Computing Advisory Council, 1996-1997

Member of a cross-campus advisory council to the Provost. Assisted in strategic planning for the development and deployment of technology to enhance pedagogy and instruction.

Invention & Creativity Living-Learning Council, 1996-1998

Co-chair, advisory committee to Student Affairs. Co-authored a proposal to initiate a living-learning program in Bursley Residence Hall.

Apple Learning Initiative, 1998-2002

Co-director. Initiated web audio streaming services to support course instruction.

- Selected Publications (\* following the entry indicates refereed or invited publication or presentation):
  - Simoni, M. ONCE.THEN-ONCE.MORE: The composition, performance, and recording of my *Piano Trio with Electronics*. (expected August 2020) Ideas Sónicas, Roberto Morales, editor. Centro Mexiano para la Música y las Artes Sonoras. \*
  - Simoni, M. (submitted and being translated to German) Invited book chapter for the <u>Plural Analysis</u>

     <u>Methodological Diversity in Musical Analysis</u>, Oliver Schwab-Felisch, Ariane Jeßulat, Jan-Philipp Sprick, and Christian Thorau, editors, J.B. Metzler. \*
  - Stewart, J., Goodheart, M., Braasch, J., Simoni, M., Bahn, C., and Dahlbom, D. (2019) "Music Intelligence and Knowledge Agent (MIKA)." International Computer Music Conference, New York, NY, International Computer Music Association. \*
  - Keil, N., Dahlbom, D., Stewart, J., Goodheart, M., Bahn, C., Simoni, M., Perrone, M., Braasch, J. (2019). "Polyphonic pitch perception in rooms using deep learning networks with data rendered in auditory virtual environments." *Proceedings of the Acoustical Society of America*.\*
  - Simoni, M. (2017) Book chapter on the "Analysis of Electroacoustic Music" for the <u>Cambridge Companion to Electronic Music</u>, 2<sup>nd</sup> Edition. Julio D'Escrivan and Nick Collins, editors, Cambridge University Press. \*
  - Simoni, M. (2017) Book chapter "Audience Reception of Algorithmic Music" for the Oxford Handbook of Algorithmic Composition, Roger Dean and Alex McLean, editors, Oxford University Press. \*
  - Simoni, M. (2013). "The Pedagogy of Electroacoustic Music" Invited editor. Organised Sound, Cambridge University Press 18(2). \*
  - Simoni, M. and K. Fosdick (2010). "Acoustic Communication and Compositional Technique" by Barry Truax. The Computer Music Journal 34(2). \*
  - Simoni, M. (2008). Book chapter "Toward the Gender Ideal" for Oxford Handbook of Computer Music and Digital Sound Culture, Roger Dean, editor, Oxford University Press. \*
  - Simoni, M. and B.A. Younker (2008). "Project Lovelace: Teenage Girls and Technology Based Composition." International Computer Music Conference, Belfast, N. Ireland, International Computer Music Association. \*
  - Simoni, M. (2007). "Rodney Waschka II: Saint Ambrose." The Computer Music Journal 31(3). \* Simoni, M., director (2007) "Studio Report Center for Performing Arts & Technology". The
  - Computer Music Journal DVD Volume 31.
  - Simoni, M. "Stop, Look, and Listen" eContact, 8(2). Communications of the Canadian Electroacoustic Community, December 2005. \*
  - Simoni, M. et al. Invited panelist. International Computer Music Conference, Barcelona, Spain. September, 2005.\*
  - Simoni, M. (2005). Panelist. Feminist Theory and Music Conference, New York University, New York. June, 2005.\*
  - Adams, N. H. and M. Simoni. "Visualization of Electroacoustic Music." Invited paper for the 2005 National Conference of the Society of Electro-Acoustic Musicians in the United States.\*
  - Hinkle-Turner, E. (2003). "Simoni, Mary." Crossing the Line: Women Composers and Music Technology, Ashgate Press.
  - Simoni, M. (2003). "Project Lovelace: Unprecedented Opportunities for Music Education." Organised Sound 8(1): 57-60.\*
  - Burns, K. (2002). "Music Technology." Women and Music in America since 1900: An Encyclopedia, Greenwood Press. 2. Featured composer.
  - Simoni, M. (2002). "Bright Air/Brilliant Fire." The Computer Music Journal 24(4).\*
  - Simoni, M. (2002). "Priscilla McClean." Women and Music in America Since 1900: An Encyclopedia. K. Burns, The Oryx Press.\*
  - Simoni, M. (2002). "Daria Semegen." Women and Music in America Since 1900: An Encyclopedia. K. Burns, The Oryx Press.\*
  - Simoni, M., Schattle, E. (2002). "Collaboration Software for Music Analysis." 2002 International Computer Music Conference, Goteburg, Sweden, International Computer Music Association.\*
  - Alamkan, C., Birmingham, W., Simoni, M. (1999). "Stylistic Structures: An Initial Investigation into the Stochastic Generation of Tonal Music." Ann Arbor, University of Michigan.
  - Simoni, M. (1999). "Interdisciplinary Research Strategies." Wiesner Symposium, Ann Arbor, MI.\*
  - Simoni, M. (1999). "Profiles of Determination." The Computer Music Journal 22(4): 19-28.\*
    Simoni, M. et al. (1999). "The Sonification Report: Status of the Field and Research Agency
  - Simoni, M. et al (1999). "The Sonification Report: Status of the Field and Research Agenda." International Conference on Auditory Display commissioned by the National Science Foundation.\*

#### **Selected Publications (con't):**

- Simoni, M., Broening, B., Rozell, C., Meek, C., and Wakefield, G. (1999). "A Theoretical Framework for Electro-acoustic Music." 1999 International Computer Music Conference, Beijing, China, International Computer Music Association. \*
- Sterian, A. Wakefield, Simoni, M. (1999). "Model-Based Musical Transcription." 1999 International Computer Music Conference, Beijing, China, International Computer Music Association.\*
- Simoni, M. (1998). "Gender Issues in Music Technology." College Music Society, Puerto Rico. \* Daida, J., Simoni, M. (1997). "Creating Listener-Adaptive Environments for Data Sonification." Washington, DC, National Science Foundation.\*
- Simoni, M. (1997). "Diane Thome's Palaces of Memory." Women of Note Quarterly 5(1).\*
- Simoni, M. (1997). "Physical Modeling Synthesis: History and Pedagogy." The Resource Guide for Music Educators 3(2). \*
- Simoni, M. (1996). "Diane Thome's *Palaces of Memory*." Array: Communications of the International Computer Music Association.
- Simoni, M. (1996). "Multimedia: A New Venue for Artistic Expression." Michigan Academician 28(3).\*
- Simoni, M. (1996). "The Norton/Grove Dictionary of Women Composers." The Computer Music Journal 20(3).\*
- Simoni, M. (1996). Invited CD Reviews, Electronic Music Foundation. http://www.emf.org.\*
- Wakefield, G., Simoni, M. (1996). "Exploring Instrument Constancy Through A New Method for the Design of Synthetic Instruments." 1996 International Computer Music Conference, Hong Kong, International Computer Music Association.\*
- Pielemeier, W. J., Wakefield, G., and Simoni, M. (1995). "Time Frequency Analysis of Musical Signals." The Institute for Electrical Engineers (IEEE) Proceedings 84(9): 1216-1230.\*
- Simoni, M. (1995). "A Survey of Gender Issues is Computer Music and Strategies for Change." 1995 International Computer Music Conference, Banff Centre for the Arts, Alberta, Canada, International Computer Music Association.\*
- Simoni, M. (1995). "Interdisciplinary Media Arts Teams at the Undergraduate Level." The Society for Electro-Acoustic Musicians in the United States, Ithaca, NY.\*
- Simoni, M. (1995). "A Tutorial on the Application of Artificial Intelligence to Music." The Society for Electro-Acoustic Musicians in the United States, Ithaca, NY.\*
- Simoni, M. (1995). "Curriculum Development in the Media Arts." The National Conference on Teaching and Learning, Jacksonville, FL.\*
- Simoni, M. (1994). "Orchestrating Change: A Cultural Revolution Through Technology." The National Association for Student Personnel Administrators, Dallas, TX.\*
- Simoni, M. (1993). "State of the Art: Technology and the Performing Arts." Information Technology Digest of the University of Michigan. Vol. 3.\*
- Simoni, M., Crawford, D. (1993). "Computer Music Studies." The Encyclopedia of Library and Information Sciences. A. Kent. New York, M. Dekker.\*
- Simoni, M. (1990). "Networking in Residence Halls: Participation and Impact." The Association for the Management of Information Technology in Higher Education, Montreal, Quebec, Canada.\*
- Simoni, M. (1989). "Operational Issues of Residence Hall Computing Programs." Educom, Ann Arbor, MI.\*
- Simoni, M. (1987). "The Use of the Computer as a Compositional Tool." Women in Music, Buffalo, NY.\*

#### **Books:**

- Simoni, M. with Roger B. Dannenberg. (2013). <u>Algorithmic Composition: A Guide to Composing Music with Nyquist.</u> Ann Arbor, MI: University of Michigan Press.
- Simoni, M. (2006). <u>Analytical Methods of Electroacoustic Music.</u> New York: Taylor and Francis Group.
- Simoni, M. (2003). <u>Algorithmic Composition: A Gentle Introduction to Music Composition using Common LISP and Common Music</u>. Initial contract with The MIT Press was transferred to University of Michigan Scholarly Publishing Office.
- Simoni, M. (1998). <u>Proceedings of the 1998 International Computer Music Conference</u>. San Francisco, CA: The International Computer Music Association.
- Kingsley, L. and Simoni, M. (1997). LifeDance. A screenplay. Writers Guild of America Registry.

## Compact Discs, DVDs, CD-ROMs:

Simoni, M. (2013). <u>the questions that tempt the sleeper.</u> Based on a play by Shannon Dowd and M. Simoni. Pennsauken, NJ: Producer.

Simoni, M. with SILK (2006). <u>A Christmas Cantata.</u> Libretto by E.C. Fesl. Pennsauken, NJ: SILK. Producer.

Simoni, M. (2001). <u>The International Computer Music Association Commission Awards</u>, 1997-99. Baton Rouge, LA, Centaur Records. Producer.

Simoni, M. (2000). <u>Alternating Currents.</u> "Doxology." Baton Rouge, LA: Centaur Records. Producer and Composer.

Simoni, M. and Marchant, J. (1998). <u>Cyberquilt.</u> "Emma Speaks." San Francisco, CA: International Computer Music Association. Producer and Composer.

Simoni, M. (1998). Songs for the Journey. "Mass of Miracles." Producer and Composer.

Simoni, M. (1997). <u>Cocks Crow, Dogs Bark: New Compositional Intentions.</u> "Eulogy." San Francisco, CA: Leonardo Music Journal. Composer.

#### Journal Editor:

Simoni, M. (2000-present). International Computer Music Association Representative Editor. Cambridge University Press, United Kingdom: <u>Organised Sound: An International Journal of Music Technology</u>.

# Selected Compositions and Performances (\* following the entry indicates a juried, commissioned, or curated performance, † following the entry indicates available for streaming from iTunes & Spotify):

C-H-A-D-A-B-E\*† (stereo or eight-channel playback) 2022

Piano Quartet \* (violin, viola, 'cello, piano) 2021 Commissioned by Cambridge University,

ENGLAND to use COVID-19 data and artificial intelligence/machine learning as part of the compositional process

Hail! Cheer Old R.P.I (S A T B and symphonic band) 2021

Lyme Disease Blues † (soprano and blues band) 2017

in memoriam pauline oliveros \* † (stereo playback) 2016

Quotations from Questions that Tempt the Sleeper (5.1 surround playback) 2014

Vox Novus International Competition\*. Numerous international performances (2014-present)

Giggles † (soprano, piano, percussion, guitar, bassoon) 2011

Steinway Hall, New York City, November 2017

Chapel + Cultural Center, Troy, NY, June 2013

Experimental and Performing Arts Center (EMPAC), Troy, NY, April 2012

Armé Arirang \* † (clarinet and iPad) 2011

Third Practice Festival, Richmond University, Richmond, VA, November 2016\*

International Clarinet Association, Baton Rouge, LA, July 2014\*

College Music Society, March 2014\*

New Interfaces for Musical Expression (NIME) 2013, S. KOREA May, 2013\*

Chapel + Cultural Center, Troy, NY, June 2013

North Dakota State University, Composer Residency, March 2013\*

Experimental and Performing Arts Center (EMPAC), Troy, NY, April 2012

Piano Trio \* † (violin, cello, piano and two laptops) 2009-10

Chamber Music Marathon, Chapel & Cultural Center, Troy, NY, March 2016

ONCE. MORE Festival, November 2010\*

Michigan Chamber Players (1st movement), February 2009\*

Fuga Nervosa \* (stereo playback) 2010

Vox Novus, International Mix\* & Sanguine Mix\*. Numerous international performances (2010-present)

Experimental and Performing Arts Center (EMPAC), Troy, NY, April 2012

De Profundis (soprano and piano) 2007

Chapel + Cultural Center, Troy, NY, (revised to include clarinet) June 2013

St. Mary's Parish, Pinckney, MI (2007-2011)

## **Selected Compositions and Performances (con't)**

Connemara (piano and electronics) 2005\*

Society for Electro-Acoustic Musicians in the United States National Conference, Iowa State University of Science and Technology, March 2007\*

Windsor Art Gallery, CANDADA, March 2006\*

WDET-FM Detroit Public Radio, March 2006\*

Society for Electro-Acoustic Music in the United States Regional Concert, University of Michigan, November 2005\*

International LISP Conference, Invited Composer. Center for Computer Research in Music and Acoustics, Stanford University, CA, June 2005\*

Columbia University, June 2005\*

Fly Far (double bass and electronics) 2004\*

"Voices on the Edge," California State University, Fullerton, CA, March 2006\*

WDET-FM Detroit Public Radio, March 2006\*

Columbia University, New York, NY, June 2005\*

Society of Electro-Acoustic Musicians in the United States National Conference, Ball State University, IN, April 2005\*

Society for Electro-Acoustic Music in the United States Regional Concert, University of Michigan, November 2004

Pane (4-channel sound or 5.1 DVD) 2004

Society for Electro-Acoustic Music in the United States National Conference, University of Oregon, March, 2006 (DVD version)\*

Bluffton University, OH, (DVD version), February 2006\*

Society for Electro-Acoustic Music in the United States Regional Concert, University of Michigan, November 2005 (DVD version)

International Computer Music Conference, University of Miami, FL, 2004\*

Hearing Voices Festival, California State University, Fullerton, CA, March 2004\*

Third Practice Festival, University of Richmond, VA, 2004\*

Ideas Festival, Indiana University, IN, April 2004\*

Electronica Microfestival, University of Michigan, March 2004\*

Canticle of Tobias (SATB, organ, brass and percussion) 2003\*

Diocese of Lansing. MI repertoire, 2003-present

Dedication of a Church and Altar, St. Mary's Catholic Church, Diocese of Lansing, MI, May 2003

Annaghmakerrig (piano and 2-channel sound) 2001\*

Windsor Art Gallery, CANADA, March 2006\*

Ball State University, IN, January 2005\*

Society of Electro-Acoustic Musicians in the United States. National Electro-Acoustic Music Month, University of Michigan, November 2003\*

Duo Runedako, piano duo, University of Michigan, March 2003\*

Third Practice Electro-Acoustic and New Media Arts Festival, University of Richmond, VA, November 2002\*

Tyrone Guthrie Centre at Annaghmakerrig, Newbliss, IRELAND, May 2001\*

Doxology (stereo playback) 2000

Philadelphia Museum of Art, PA, October 2009\*

Martian Gardens, WMUA 91.1 FM, Amherst, MA, April 2004

Hearing Voices: Enlistening the Future, California State University at Fullerton, CA, March 2004\*

Between Earth and Sky, Temple University, PA, April 2003\*

Stitch (film score for piano, flute, cello and computer) 1999\*

Mass of Miracles (piano, SA, guitar, flute) 1998

WDEO AM 990, Radio Interview, June 1998\*

## Selected Compositions and Performances (con't)

Eulogy (stereo playback) 1996

Inner Voices, California State University at Fullerton, CA, March 2007\*

WGDR FM 91.1, November 2000

Hong Kong University of Science and Technology, HONG KONG, November 1998\*

International Computer Music Conference, Thessaloniki, GREECE, September 1997\*

Suite for Electronic Oboe (oboe and effects unit) 1995\*

Portland State University, OR, March 1996\*

University of Michigan, February 1996

Emma Speaks (interactive media). 1995

International Computer Music Conference, HONG KONG August, 1996\*

Media Union Dedication, June 1996\*

President's Weekend, University of Michigan 1995

Death Dance (piano duet, computer & MIDI controller, or piano and computer) 1993

Selected by Music Educators of New Jersey as repertoire for 2-piano competition

Vox Novus, Athena Mix, numerous international performances, 2012-present\*

Experimental and Performing Arts Center (EMPAC), Troy, NY, April 2012

Duo Runedako, University of Michigan, March 2003

Duo Runedako, Furman University, SC, 1997

Duo Runedako, Central Michigan University, MI, 1996

Duo Runedako, Heritage Chamber Society, Greenville, SC, 1996

Collage Concert, University of Michigan, January 1995\*

State University of New York, Buffalo, NY, 1993\*

Toon (computer-based multimedia exploration of musical temperament) Mills College, 1991\*

In Memory of T.S. Dowd (orchestra) 1983

Okemos High School Orchestra, April 1984

Recrudescence (symphonic band) 1981

Michigan State University Symphony Band, 1982\*

To Sylvia (piano) 1979

North Texas State University, TX, 1985

Lansing Community College, MI, 1984

Michigan State University, 1980

State University of New York, Buffalo, NY, 1979

Suite for Unaccompanied Violin (violin) 1979

Experimental Media and Performing Arts Center, 2012

#### **Appearances as a Guest Composer or Pianist:**

State University of New York at Stonybrook, New York 2021 (invited talk on machine learning algorithms applied to music composition)

Royal Institute of Technology, Stockholm, SWEDEN 2020 (invited talk on application of AI to my compositional process)

Royal Institute of Technology, Stockholm, SWEDEN 2020 (invited panelist on "The Future

Artificial Musician" at the Joint Conference on AI Music Creativity)

Rosewood at Sandhill, Menlo Park, CA, 2019 (pianist)

Steinway Hall, New York City, NY, 2018 (composer and pianist)

New York City Electroacoustic Music Festival, New York City, NY, 2017 (composer and pianist)

Experimental Media & Performing Arts Center (EMPAC)-2012, 2014, 2016, 2019 (composer and pianist)

Troy Savings Bank Music Hall, Troy, NY 2015 (pianist)

N. Dakota State University, Fargo, ND 2013 (composer)

SUNY Stony Brook, NY, 2010 (composer and pianist)

Iowa State University of Science and Technology, IA, 2007 (composer and pianist)

University of Oregon, OR, 2006 (composer)

Windsor Art Gallery, CANADA, 2006 (composer and pianist)

Ball State University, IN, 2005 (composer and pianist)

Stanford University, CA, 2005 (composer and pianist)

#### Appearances as a Guest Composer or Pianist (con't):

Columbia University, NY, 2005 (composer and pianist)

National University of Singapore, SINGAPORE 2002 (pianist)

New Music and Art Festival, Bowling Green State University via teleconference, 2002 (composer)

University of Richmond, VA, 2001 & 2016 (composer and pianist)

Queens University, Belfast, NORTHERN IRELAND, 2001 (composer)

Tyrone Guthrie Centre for the Arts, Newbliss, IRELAND, 2001 (composer)

Kammermusiksaal der Philharmonie, Berlin, GERMANY, 2000 (pianist)

June in Buffalo Festival, Buffalo, NY, 1996 (composer and pianist)

International Computer Music Conference, Banff Centre for the Arts, Alberta, CANADA, 1995 (composer)

June in Buffalo Festival, Buffalo, NY, 1979 (composer and pianist)

## **Doctoral and Master's Committees (University of Michigan):**

Alexander, Rob. Ph.D. Design Science, College of Engineering (2015)

Zyskowski, Collin. M.A. Media Arts, School of Music (2010)

Alexander, Rob. M.A. Media Arts, School of Music (2009)

Fienup, David. M.A. Media Arts, School of Music (2009)

Hill, Alvin, Jr. M.A. Media Arts, School of Music (2009)

Sullivan, Timothy, Ph.D. Music Theory & Composition, School of Music (2008)

Kuhner, Russell. *The Preserver*. MA Media Arts, School of Music (2007)

Adams, Norman H. "The Binaural Display of Reverberant Space Using MIMO State-Space Systems" Ph.D. Electrical Engineering, College of Engineering (2007)

Flood, Timothy. The American Transhumanist Society. M.A. Media Arts, School of Music (2006)

Richman, Jacob. Three Yiddish Lullabies. M.A. Media Arts, School of Music (2006)

Veomett, Angela. Chernobyl Generation. M.A. Media Arts, School of Music (2006)

Colin Meek, "Modeling Error in Query-by-Humming Music Information Retrieval Systems" Ph.D. Computer Systems Engineering, College of Engineering (2003).

Michael Hopkins, "A Comparative Study of the Effects of Computer-Based Expository and Discovery Methods of Instruction for Fostering Aural Recognition of Musical Concepts" Ph.D. Music Education, School of Music (2001).

Andrew Sterian, "Model-Based Segmentation of Time-Frequency Images for Musical Transcription" Ph.D. Electrical Engineering, College of Engineering (1999).

Claude Alamkan, "The Stochastic Analysis and Generation of Tonal Music" M.Eng. College of Engineering (1999).

Rowena Guevera, "Modal Distribution of Piano Analysis and Synthesis" Ph.D. Electrical Engineering, College of Engineering (1997).

## **Doctoral and Master's Committees (External):**

Madison Heying, "A Complex and Interactive Network: Carla Scaletti, Kyma, and the Kyma User Community" Ph.D. Musicology, The University of California, Santa Cruz (expected 2019).

Jonathan C. Hoefs, "Bioresonance and the Implicate in Musicking" Doctor of Musical Arts in Music Composition, The University of California, Santa Cruz.

## **Grants and Fellowships:**

IBM & Office for Research (2018) \$125K for Musical Intelligence & Knowledge Agent

Office for the Vice President for Research (2010-2013) \$60K for Faculty Block Grant Program

Center for Educational Outreach (2009) \$5K for Detroit Community Engagement

Office of the Provost (2007) \$684K for renovation of the Electronic Music Studios

Rackham Graduate School (2007) \$4K for graduate student summer stipends

Knight Foundation (2006) \$20K "Technology Based Musical Creativity in Teenage Girls" with Professor Betty Anne Younker

Office of the Provost (2005) \$860K for renovation of the Audio Studio

Office for the Vice-President for Research (2004-2007) \$150K

Rackham/CARAT Fellowship (2004-05) \$27.9K

### Grants and Fellowships (con't):

Edward Ginsberg Center for Community Service and Learning (\$300)

Information Technology Partnership (2002) \$17K

Office for the Vice-President for Research (2002) \$22K

Rackham/CARAT Fellowship (2001-02) \$31K

National Science Foundation, ITR Program: Music Information Retrieval (2000) \$1.7M

College of Engineering-MUSEN (1999-2002) \$150K

IBM SUR Grant (1999) \$13K

Yamaha Corporation, Pro Audio Division (1999) \$7K

Office for the Vice-President for Research (1998-2001) \$78K

Information Technology Division, Real Audio Pilot Grant (1998-99) \$50K

Rackham Interdisciplinary Institute (1998) \$7K

Undergraduate Research Opportunities Program (1998) \$2K

MIT Press (1998) \$3K

Radius Corporation (1997) \$3K

Year of the Humanities (1997) \$5K

Whitaker Fund for the Improvement of Teaching (1996) \$5K

Apple Computer, Inc., World-Wide Partnership Program (1996) \$12K

School of Music Faculty Research Fund, University of Michigan (1995, 1996, 1999, 2001) \$18K

Korg, USA (1995) \$5K

Presidential Initiative Fund, University of Michigan (1995-98) \$240K

IBM (1989) \$225K

Apple Computer, Inc., (1987) \$380K

IBM (1987) \$285K

Michigan Council for the Arts and Cultural Affairs (1985) \$2K

#### Awards:

STEINWAY ARTIST, 2017

AMERICAN PRIZE IN COMPOSITION-CHAMBER MUSIC (SEMI-FINALIST), 2014

VOX NOVUS COMPOSITION AWARD for Questions that Tempt the Sleeper, 2013

ARTIST IN RESIDENCE, Tyrone Guthrie Centre, Newbliss, IRELAND. 2001, 2011, 2014

VOX NOVUS COMPOSITION AWARD for Fuga Nervosa. 2010

EXEMPLARY TEAM AWARD. Internet Publication Task Force, University of Michigan, Chair. 2006

MEDAL LAUREATE. Computerworld Honors Program. Media, Arts and Entertainment. 2002

SIMONI SERVICE AWARD, namesake. ResComp, University of Michigan. 2001

PRIZE IN COMPOSITION for Death Dance. ArtNET Virtual Museum, 1993

VISITING SCHOLAR. MILLS COLLEGE, Oakland, CA 1990-1991 - One of eleven scholars selected nationally to pursue research in the application of multimedia technology to pedagogy in the liberal arts. Authored software that facilitated the exploration of historical and experimental musical temperaments using real-time DSP sound synthesis that integrated digitized images and video.

## **Professional Organizations:**

International Computer Music Association (ICMA), San Francisco, CA

Board of Directors (1994-2004)

President (2000-2004) and Publications Coordinator (1996-2000). Established endowment program and implemented e-commerce system for membership dues. Oversaw international conferences during periods of international unrest (Cuba, September 2001 post September 11<sup>th</sup> attacks and Singapore, October 2003 post SARS epidemic). Oversaw transition to full-paper submission and web-based peer review for annual publication of the Proceedings of International Computer Music Conference. Negotiated and administered contracts with the University of Miami, the National University of Singapore, Göteborg University, the Instituto Cubano de la Música, Berliner Kulturberanstaltungs, Suvisoft Corporation of Finland, the Edith and Eric Siday Charitable Foundation, Swets & Zeitlinger Publishers of The Netherlands, and ICMA Commission recipients. Implemented fully-searchable password-protected web-based publication of the Proceedings of the International Computer Music Conference.

## **Professional Organizations (con't):**

Established ISBN system for ICMA Publications. Served as the Association's first female elected President.

Society of Electro-Acoustic Musicians in the United States (SEAMUS). San Jose, CA

College Music Society. Committee on Music, Women, and Gender (1998-2000), Missoula, MT

American Society of Composers, Authors and Publishers (ASCAP). New York, NY

Pi Kappa Lambda. National Music Honorary Society

Audio Engineering Society (AES). New York, NY

Society for College and University Planners (SCUP). Ann Arbor, MI

Council of Colleges of Arts & Sciences (CCAS). Williamsburg, VA

## **Consulting & Reviews:**

American University, Washington, DC

Ann Arbor Hands-On Museum, Ann Arbor, MI

Aristotle University of Thessaloniki, GREECE

Austrian Science Foundation, AUSTRIA

Augustana College, Rock Island, IL

Bennington College, Bennington, VT

Bowling Green State University, Bowling Green, OH

Butler University, Indianapolis, IN

Butzel Long, Attorneys and Counselors

Calvin College, Grand Rapids, MI

Canadian Innovation Foundation, Toronto, CANADA

Cambridge University Press, Cambridge, UNITED KINGDOM

Central Missouri State, Warrensburg, MO

Dartmouth College, Hanover, NH

Deaf Performing Artists Network, Detroit, MI

Eastman School of Music, Rochester, NY

Edinboro State College, Edinboro, PA

Eric and Edith Siday Charitable Foundation

Flint School for the Performing Arts, Flint, MI

GAMUT: The Journal of the Music Theory Society of the Mid-Atlantic

Georgia Institute of Technology

Google, Inc. Mountain View, CA

Grand Valley State University, Allendale, MI

Hamline University, St. Paul, MN

Hillsdale College, Hillsdale, MI

Hong Kong Institute of Science and Technology, HONG KONG

Impression 5 Science Museum, Lansing, MI

Iowa State University, Ames, IA

James Madison University, Harrisonburg, VA

Journal of New Music Research, UNITED KINGDOM

Lansing Arts Gallery, Lansing, MI

Lansing Matinée Musicale, Lansing, MI

Louisiana State University, Baton Rouge, LA

McGill University, Montreal, CANADA

Michigan Technological University, Houghton, MI

National Endowment for the Humanities, Washington, DC

National Peace Foundation, Washington, DC

National Science Foundation, Washington, DC

New York University, ABU DHABI

New York University, New York, NY

Northwestern State University, Alva, OK

Northwestern State University, Natchitoches, LA

Ohio State University, Columbus, OH

President's Council Curriculum Review

### Consulting & Reviews (con't):

Queen's University, Belfast, N. IRELAND

Spring Arbor College, Spring Arbor, MI

State University of New York, Albany, NY

State University of New York, Stony Brook, NY

Tyrone Guthrie Centre, Newbliss, IRELAND

The MIT Press, Cambridge, MA

United States Army Research Office, Research Triangle Park, NC

University of California, Santa Cruz, CA

University of Cincinnati, College-Conservatory of Music, OH

University of Colorado, Denver, CO

University of Miami, Miami, FL

University of Nebraska, Lincoln, NE

University of North Texas, Denton, TX

University of Oregon, Eugene, OR

University of Sydney, AUSTRALIA

University of Texas, Austin, TX

University of Windsor, Windsor, CANADA

Yong Siew Toh Conservatory of Music, National University of Singapore, SINGAPORE

#### **Additional Credentials:**

Integrated Planning for Higher Education. Society for College and University Planning

#### **Volunteerism:**

Board of Trustees, WMHT. 2021-present. Board Member.

Board of Directors, **Bob Moog Foundation**. 2019-present. Board member.

Board of Directors, Electronic Music Foundation Institute, 2018-present. Board member.

Board of Directors, Troy Savings Bank Music Hall, Troy, NY, 2014-2017. Board member.

Habitat for Humanity, Jackson, MI. 2009-2011. Grant writer.

St. Mary's Catholic Parish, Pinckney, MI. 1995-2011. Served on the Project Management & Building Team and oversaw the construction of a \$10M facility. Developed the program statement for music programs and determined sound system requirements.

Juvenile Diabetes Foundation International. 1991-2011. Participated in annual fundraising campaigns.