June 3, 2018

Dear NIME Attendees:

It gives us great pleasure to welcome you to the 2018 New Interfaces for Musical Expression (NIME) Conference. With over 240 participants from over 25 countries, this conference truly embodies an unparalleled global collaboration around our theme of “Mirrored Resonances” featuring the latest innovative music, digital art, emerging technology, and NIME research. This conference also represents an unprecedented partnership between the University of Virginia and Virginia Tech, two flagship higher education institutions in Virginia.

Over three years in the making, this year we have an exceptional conference featuring close to 200 accepted contributions out of more than 460 submissions across five categories. We have made every effort to build on the preexisting rigor of the NIME conference review process. As a result, all of the applicable categories constituting the final program were selected through a double-blind, critically-peer-reviewed process with extensive feedback conducted by diverse committees made up of expert reviewers from around the world. We have also worked hard towards further strengthening the connections between academia, arts scenes, and industry, with particular focus on diversity and inclusion. Thanks to our sponsor network, we have also expanded the number of awards that further amplify the aforesaid goals. This week we will present four unique keynote creatives showcasing four different approaches to exploring the NIME domain, share break-through music, research and technology across eleven concerts, ten paper sessions, seven installations, seventy-four demos and posters, a dozen workshops, and a panel designed specifically to engage the community in a critical discourse about the future, democratization, and globalization of NIMEs. In addition, throughout the conference the industry partners will be sharing tools and practical experiences in workshops and booths. The topics of paper sessions range broadly and cover critical topic areas, including Networked Communities, Sonocybernetics, Immersive Environments, and Democratizing NIMEs, all of which were selected to be of global interest, highly stimulating, and thought-provoking.

As the conference co-chairs, we would like to thank all the co-organizers and the sub-committees whose hard work was instrumental in enacting a compelling and engaging program. A number of volunteers and the ICAT and Moss Arts Center staff have worked tirelessly to produce this conference on the campus of Virginia Tech. Special gratitude goes out to staff of Virginia Tech Continuing and Professional Education, and to the sponsors and industry partners, as well as our extensive list of stakeholders. Likewise, we would like to thank our keynote guests and dignitaries who will inspire us with their presence, creativity, and vision.

This conference would not have been possible without the careful work of the sub-committee co-chairs, and the selfless contributions from many reviewers from around the world who were asked to respond with detailed feedback on each submission. Most importantly, we thank you, the presenting researchers, composers, performers, artists, and technologists whose contributions have culminated in an unsurpassed wealth of information we now proudly share with the community and the world.

We welcome you to Virginia and where the state slogan is “Virginia is for Lovers.” We sincerely hope you will love and enjoy what the conference has to offer as much as we have enjoyed working on it. We look forward to meeting you personally and warmly welcoming each and every one of you. If there is anything we can do to make your visit to the scenic southwest Virginia and the iconic Virginia Tech campus more comfortable and engaging, please do not hesitate to let us know.

Sincerely,

Ico and Matthew
CONFERENCE PLANNING COMMITTEE

CO-CHAIRS
Ivica Ico Bukvic  
Associate Professor of Creative Technologies in Music, Virginia Tech
Matthew Burtner  
Professor of Composition and Computer Technologies, University of Virginia

PAPER CO-CHAIRS
Luke Dahl  
Assistant Professor of Composition and Computer Technologies, University of Virginia
Doug Bowman  
Professor of Computer Science, Virginia Tech
Tom Martin  
Professor of Electrical and Computer Engineering, Virginia Tech

MUSIC CO-CHAIRS
Ted Coffey  
Associate Professor of Composition and Computer Technologies, University of Virginia
Eric Lyon  
Associate Professor of Creative Technologies in Music, Virginia Tech

INSTALLATIONS CO-CHAIRS
Mona Kasra  
Assistant Professor of Digital Media Design, University of Virginia
Thomas Tucker  
Associate Professor of Creative Technologies, Virginia Tech

WORKSHOPS AND DEMOS CO-CHAIRS
Jon Catherwood-Ginn  
Associate Director of Programming, Moss Arts Center, Virginia Tech
Kyriakos Tsoukalas  
PhD Student, Human Centered Design, Virginia Tech

TELEMATICS CO-CHAIRS
Zachary Duer  
Assistant Professor of Creative Technologies, Virginia Tech
Travis Thacher  
Technical Director of Composition and Computer Technologies, University of Virginia

PUBLICATIONS CHAIR
Sang Won Lee  
Assistant Professor of Computer Science, Virginia Tech

ADVISOR
Ruth Waalkes  
Executive Director, Moss Arts Center; Associate Provost for the Arts, Virginia Tech
Douglas Witney  
Director of Production, Moss Arts Center, Virginia Tech

STAFF

Continuing and Professional Education at Virginia Tech
Sarah Lyon, Project Manager
Jeneen Preston, Project Coordinator
Christy Wallace, Conference Registrar

The Award Winning NIME Design and Branding Team
Meaghan Dee, School of Visual Arts, Virginia Tech
Patrick Finley, School of Visual Arts, Virginia Tech

Institute for Creativity, Arts, and Technology
Tanner Upthegrove, ICAT Lab Research Coordinator
Holly Williams, Assistant Director for Administrative Operations
Melissa Wyers, Administrative and Fiscal Coordinator

School of Performing Arts
Annie Stevens, Percussion Equipment Manager

Graduate Student Staff
Jasmine Edison, Creative Technologies, Virginia Tech
George Hardebeck, Creative Technologies Virginia Tech
Woohun Joo, Human-Centered Design, Virginia Tech
Joseph Kubalak, Mechanical Engineering, Virginia Tech
Deba Pratim Saha, Computer Engineering, Virginia Tech
Disha Sardana, Human-Centered Design, Virginia Tech

L2Ork Members and Conference Volunteers
Tyler Epting, Brandon Hale, Alex Little, DJ Malinowski, Jocelyn Roman, Aline R. S. de Souza, Wynn Yang

We would also like to thank countless volunteers, as well as Moss Arts Center staff who have helped coordinate critical aspects of the conference. Thank you! We could not have done it without you.
ON THE MAP

All conference venues are conveniently located within a walking distance of each other and most hotels.

MOSS ARTS CENTER (1)
190 Alumni Mall, Blacksburg, VA 24060

LEARNING STUDIOS A & B (2)

GRAND LOBBY (3)

ORCH., MEZZANINE & BALCONY LOBBIES (4)

PERFORM STUDIO (5)

EXPERIENCE STUDIO B (6)

THE CUBE (7)

ANNE AND ELLEN FIFE THEATRE (8)

TORGersen HAll: ROOM 2150 (9)
620 Drillfield Dr., Blacksburg, VA 24061

NEw CADET Hall (10)
310 Alumni Mall, Blacksburg, VA 24061

CENTER OF DANCE (11)
460 Turner St NW #101, Blacksburg, VA 24060

ARMORY GALLERY (12)
203 Draper Rd NW, Blacksburg, VA 24061

NEwMAN LIBRARY
560 Drillfield Dr, Blacksburg, VA 24061

DISIS (13)

MULTIPURPOSE ROOM (14)

Interactive directions including hotel locations can be found at:
http://nime2018.icat.vt.edu/travel/
AFFILIATES

NIME 2018

STAKEHOLDERS

VIRGINIA TECH
Office of the Executive Vice President and Provost
College of Liberal Arts and Human Sciences
School of Performing Arts
Institute for Creativity, Arts, and Technology
Institute for Critical Technology and Applied Science
Center for Human-Computer Interaction
Human Centered Design
Graduate School
College of Engineering
Office of the Vice President for Information Technology
Institute for Society, Culture and Environment
University Libraries
Technology-enhanced Learning and Online Strategies
Department of Computer Science
School of Visual Arts

UNIVERSITY OF VIRGINIA
McIntire Department of Music
Composition and Computer Technologies
College of Arts and Sciences Collective Response: Moving Forward
OpenGrounds Studios
Vice Provost for the Arts
KEYNOTE PRESENTERS

ONYX ASHANTI
Composer | Performer | Media Artist
Since being introduced on the world stage by way of a fortuitous TED talk he did in 2011 entitled “This is Beatjazz,” Mississippi native, Onyx Ashanti, has been evolving at a pace that surprises even him. Musician, Programmers, 3d print-designer, writer, performer, inventor...a self described child of the internet, and disciple of the open source philosophy, Onyx has spent the last few years creating a multidimensional expression concept called beatjazz.

R. BENJAMIN KNAPP
Scholar | Researcher | Performer
R. Benjamin Knapp is the Founding Director for the Institute for Creativity, Arts, and Technology (ICAT) and Professor of Computer Science at Virginia Tech. ICAT seeks to promote research and education at the nexus of art, design, engineering, and science. For more than 25 years, Knapp has been working to create meaningful links between human-computer interaction, universal design, and various forms of creativity. His research on human-computer interaction has focused on the development and design of user-interfaces and software that allow both composers and performers to augment the physical control of a musical instrument with direct sensory interaction.
IKUE MORI  
Composer | Performer | Media Artist
Ikue Mori moved from Tokyo to New York in 1977. She started playing drums and soon formed the seminal NO WAVE band DNA with Arto Lindsay. Since the 1990s she has collaborated with numerous musicians and artists throughout the US, Europe, and Asia, while continuing to produce and record her own music. Ikue won the Distinctive Award for Prix Ars Electronica Digital Music category in 1999 and shortly after started using laptop computer to expand her vocabulary, not only playing sounds but creating and controlling visual work as well.

PAMELA Z  
Composer | Performer | Media Artist
Pamela Z is a composer/performer and media artist who works primarily with voice, live electronic processing, sampled sound, and video. A pioneer of live digital looping techniques, she processes her voice in real time to create dense, complex sonic layers. Her solo works combine experimental extended vocal techniques, operatic bel canto, found objects, text, and sampled concrète sounds. She uses Max/MSP and Isadora software along with custom MIDI controllers that allow her to manipulate sound and image with physical gestures. Her performances range in scale from small concerts in galleries to large-scale multi-media works in theaters and concert halls.
PAPER SESSIONS
TORGESEN HALL: ROOM 2150

MONDAY, JUNE 4TH
PAPER SESSION 1 (9:00-10:30AM):
COLLABORATION & AUDIENCE PARTICIPATION

Working Methods and Instrument Design for Cross-Adaptive Sessions
Oeyvind Brandtsegg, Trond Engum, Bernt Isak Wærstad

*12*: Mobile Phone-Based Audience Participation in a Chamber Music Performance
Eran Egozy, Eun Young Lee

Animated Notation in Multiple Parts for Crowd of Non-Professional Performers
Anders Lind

Interacting with Musebots
Andrew R. Brown, Matthew Horrigan, Arne Eigenfeldt, Toby Gifford, Daniel Field, Jon McCormack

Towards New Modes of Collective Musical Expression through Audio Augmented Reality
Chris Kiefer, Cecile Chevalier

PAPER SESSION 2 (1:30-3:00PM):
SOFTWARE & ALGORITHMS

A Framework for Modular VST-based NIMEs Using EDA and Dependency Injection
Patrick Palsbröker, Christine Steinmeier, Dominic Becking

Chunity: Integrated Audiovisual Programming in Unity
Jack Atherton, Ge Wang

Exploring Continuous Time Recurrent Neural Networks through Novelty Search
Steffan Carlos Ianigro, Oliver Bown

All the Noises: Hijacking Listening Machines for Performative Research
John Bowers, Owen Green

A polyphonic Pitch Tracking Embedded System for Rapid Instrument Augmentation
Rodrigo Schramm, Federico Visi, André Brasil, Marcelo O. Johann

PAPER SESSION 3 (3:30-5:00PM):
MOVEMENT & GESTURE

Contextualising Idiomatic Gestures in Musical Interactions with NIMEs
Koray Tahiroglu, Michael Gurevich, R. Benjamin Knapp

GestureRNN: A neural gesture system for the Roli Lightpad Block
Lamtharn Hantrakul

Myo Mapper: a Myo armband to OSC mapper
Balandino Di Donato, Jamie Bullock, Atau Tanaka

Real-Time Motion Capture Analysis and Music Interaction with the Modosc Descriptor Library
Federico Visi, Luke Dahl

TUESDAY, JUNE 5TH
PAPER SESSION 4 (9:00-10:30AM):
MULTI-TOUCH & HAPTICS

The Phone with the Flow: Combining Touch + Optical Flow in Mobile Instruments
Cagan Arslan, Florent Berthaut, Jean Martinet, Ioan Marius Bilasco, Laurent Grisoni

Multi-Touch Enhanced Visual Audio-Morphing
Lars Engeln, Dietrich Kammer, Leon Brandt, Rainer Groh

GrainTrain: A Hand-drawn Multi-touch Interface for Granular Synthesis
Anıl Çamcı

ShIFT: A Semi-haptic Interface for Flute Tutoring
Gus Xia, Roger B. Dannenberg

PAPER SESSION 5 (11:00AM-12:30PM):
THEORY & CRITIQUE

NIME Identity from the Performer’s Perspective
Fabio Morreale, Andrew P. McPherson, Marcelo Wanderley

Who Are the Women Authors in NIME? – Improving Gender Balance in NIME Research
Anna Xambó

Women Who Build Things: Gestural Controllers, Augmented Instruments, and Musical Mechatronics
Sarah Reid, Sara Sithi-Amnuai, Ajay Kapur

Democratising DMIs: the Relationship of Expertise and Control Intimacy
Robert H Jack, Jacob Harrison, Fabio Morreale, Andrew P. McPherson

The Problem of DMI Adoption and Longevity: Envisioning a NIME Performance Pedagogy
Adnan Marquez-Borbon, Juan Pablo Martinez Avila

FOR THE MOST UP-TO-DATE SCHEDULE INCLUDING ERRATA PLEASE VISIT HTTP://NIME2018.ORG/SCHEDULE
PAPER SESSION 6 (2:00-3:30PM): MAKING & NEW INSTRUMENTS

Triplexer: An Expression Pedal with New Degrees of Freedom
Steven Leib, Anıl Çamcı

The halldorophone: The ongoing innovation of a cello-like drone instrument
Halldór Úlfarsson

L2OrkMote: Reimagining a Low-Cost Wearable Controller for a Live Gesture-Centric Music Performance
Kyriakos Tsoukalas, Joseph Kubalak, Ivica Ico Bukvic

Crafting Digital Musical Instruments: An Exploratory Workshop Study
Jack Armitage, Andrew P. McPherson

Individual Fabrication of Cymbals using Incremental Robotic Sheet Forming
Ammar Kalo, Georg Essl

PAPER SESSION 7 (4:00-5:30PM): SKILL, LEARNING & GUITARS

Haptic-Listening and the Classical Guitar
John McDowell

When is a Guitar not a Guitar? Cultural Form, Input Modality and Expertise
Jacob Harrison, Robert H. Jack, Fabio Morreale, Andrew P. McPherson

A Longitudinal Field Trial with a Hemiplegic Guitarist Using The Actuated Guitar
Jeppe Larsen, Hendrik Knoche, Dan Overholt

Co-Tuning Virtual-Acoustic Performance Ecosystems: observations on the development of skill and style in the study of musician-instrument relationships
Paul Stapleton, Maarten van Walstijn, Sandor Mehes

WEDNESDAY, JUNE 6TH

PAPER SESSION 8 (9:00-10:30AM): NEW INSTRUMENTS & INTERACTIONS (CONTINUED)

Bela-Based Augmented Acoustic Guitars for Sonic Microinteraction
Víctor Evaristo Gonzalez Sanchez, Charles Patrick Martin, Agata Zelechowska, Kari Anne Vadstensvik Bjørkestrand, Victoria Johnson, Alexander Refsum Jensenius

Mirroring the past, from typewriting to interactive art: an approach to the re-design of a vintage technology
Giacomo Lepri, Andrew P. McPherson

Alto.Glove: New Techniques for Augmented Violin
Seth Dominicus Thorn

PAPER SESSION 9 (1:30-2:30PM): SOUND GENERATION

Widening the Razor-Thin Edge of Chaos Into a Musical Highway: Connecting Circle Maps to Digital Waveguides
Edgar Berdahl, Eric Sheffield, Andrew Pfalz, Anthony T. Marasco

Neuron-modeled Audio Synthesis: Nonlinear Sound and Control
Jeff Snyder, Aatish Bhatia, Michael R. Mulshine

Fuzzy Logic Control Toolkit 2.0: composing and synthesis by fuzzyification
Rodrigo F. Cádiz, Marie Gonzalez-Inostroza

PAPER SESSION 10 (2:30-3:30PM): ROBOTICS & MECHATRONICS

Guitar Machine: Robotic Augmentation for Hybrid Human-Machine Guitar Play
Sang-won Leigh, Pattie Maes

Robotic Percussive Aerophone
Scott Barton, Karl Sundberg, Andrew Walter, Tanuj Sane, Linda Sara Baker

Mechatronic Performance in Computer Music Compositions
Nathan Daniel Villicaña-Shaw, Spencer Salazar, Ajay Kapur
A physical Unmodeling Instrument: Sound Installation that Re-Physicalizes a Meta-Wind-Instrument Physical Model, Whirlwind
Tomoya Matsuura, Kazuhiro Jo

An approach to stochastic spatialization — A case of Hot Pocket
Ulf A. S. Holbrook

AM MODE: Using AM and FM Synthesis for Acoustic Drum Set Augmentation
Cory Champion, Mo H. Zareei

Kinesynth: Patching, Modulating, and Mixing a Hybrid Kinesthetic Synthesizer.
Don Derek Haddad, Joe Paradise

CABOTO: A Graphic-Based Interactive System for Composing and Performing Electronic Music
Riccardo Marogna

The XT Synth: A New Controller for String Players
Gustavo Oliveira da Silveira

Risky business: Disfluency as a design strategy
S. M. Astrid Bin, Nick Bryan-Kinns, Andrew P. McPherson

The Theremin Textural Expander
Rachel Gibson

Demo of interactions Between a Performer Playing a Smart Mandolin and Audience Members Using Musical Haptic Wearables
Luca Turchet, Mathieu Barthet

Developing a Performance Practice for Mobile Music Technology
Spencer Salazar, Andrew Piepenbrink, Sarah Reid

Siren: Interface for Pattern Languages
Mert Toka, Can Ince, Mehmet Aydin Baytas

MOM: an Extensible Platform for Rapid Prototyping and Design of Electroacoustic Instruments
Ali Momeni, Daniel McNamara, Jesse Stiles

Harmonic Wand: An Instrument for Microtonal Control and Gestural Excitation
Ben Luca Robertson, Luke Dahl

Sansa: A Modified Sansula for Extended Compositional Techniques Using Machine Learning
McLean J Macionis, Ajay Kapur

Mechatronic Expression: Reconsidering Expressivity in Music for Robotic Instruments
Steven Kemper, Scott Barton

Interactive Tango Milonga: Designing DMIs for the Social Dance Context
Courtney Brown

Vocal Musical Expression with a Tactile Resonating Device and its Psychophysiological Effects
Rebecca Kleinberger

Performance Systems for Live Coders and Non Coders
Avneesh Sarwate, Ryan Taylor Rose, Jason Freeman, Jack Armitage

Composing an Ensemble Standstill Work for Myo and Bela
Charles Patrick Martin, Alexander Refsum Jensenius

The T-Stick: Maintaining a 12 year-old Digital Musical Instrument
Alex Nieva, Johny Wang, Joseph Malloch, Marcelo Wanderley

MIDI Keyboard Defined DJ Performance System
Christopher Dewey, Jonathan P. Wakefield

Democratizing Interactive Music Production over the Internet
Trond Engum, Otto Jonassen Wittner

Using the Axoloti Embedded Sound Processing Platform to Foster Experimentation and Creativity
Jean-Francois, Carlos Cotallo Solares, Carlos Toro Tobon, Andrew Willette

Introducing a K-12 Mechatronic NIME Kit
Kyriakos Tsoukalas, Ivica Ico Bukvic

Neurhythmic: A Rhythm Creation Tool Based on Central Pattern Generators
Daniel Bennett, Peter Bennett, Anne Roudaut

Evaluating LED-based interface for Lumanote composition creation tool
James Granger, Mateo Aviles, Joshua Kirby, Austin Griffin, Johnny Yoon, Raniero A. Lara-Garduno, Tracy Hammond

GuitarAMI and GuiaRT: two independent yet complementary projects on augmented nylon guitars
Eduardo Meneses, Sergio Freire, Marcelo Wanderley
### TUESDAY, JUNE 5TH 12:30-2:00PM (CONTINUED)

- **CTRL: A Flexible, Precision Interface for Analog Synthesis**  
  John Harding, Richard Graham, Edwin Park

- **Motivated Learning in Human-Machine Improvisation**  
  Peter Beyls

- **InterFACE: new faces for musical expression**  
  Deepak Chandran, Ge Wang

- **Hand Posture Recognition: IR, IMU and sEMG**  
  Richard Polfreman

- **Playsound.space: Inclusive Free Music Improvisations Using Audio Commons**  
  Ariane de Souza Stolfi, Miguel Ceriani, Luca Turchet, Mathieu Barthet

- **The Digital Orchestra Toolbox for Max**  
  Joseph Malloch, Marlon Mario Schumacher, Stephen Sinclair, Marcelo Wanderley

- **JythonMusic: An Environment for Developing Interactive Music Systems**  
  Bill Manaris, Pangur Brougham-Cook, Dana Hughes, Andrew R. Brown

### WEDNESDAY, JUNE 6TH 12:00-1:30PM

- **Low Frequency Feedback Drones: A non-invasive augmentation of the double bass**  
  Thanos Polymeneas Liontiris

- **The Orchestra of Speech: a speech-based instrument system**  
  Daniel Formo

- **Surveying the Compositional and Performance Practices of Audiovisual Practitioners**  
  Anna Weisling, Anna Xambó, Ireti Olowe, Mathieu Barthet

- **Sound Opinions: Creating a Virtual Tool for Sound Art Installations through Sentiment Analysis of Critical Reviews**  
  Anthony T. Marasco

- **A web-based 3D environment for gestural interaction with virtual music instruments as a STEAM education tool**  
  Kosmas Kritsis, Aggelos Gkiokas, Carlos Árpád Acosta, Quentin Lamerand, Robert Piéchaud, Maximos Kaliakatsos-Papakostas, Vassilis Katsouroso

- **CubeHarmonic: A New Interface from a Magnetic 3D Motion Tracking System to Music Performance**  
  Maria C. Mannone, Eri Kitamura, Jiawei Huang, Ryo Sugawara, Yoshifumi Kitamura

- **The Whammy Bar as a Digital Effect Controller**  
  Martin M. Kristoffersen, Trond Engum

- **Timbre Tuning: Variation in Cello Spectrum Across Pitches and Instruments**  
  Robert Pond, Alexander Klassen, Kirk McNally

- **Tributaries of Our Lost Palpability**  
  Matthew Mosher, Danielle Wood, Tony Obr
MONDAY, JUNE 4TH

11:30AM-1:30PM

Étude No.1, for Curve  
Nathan Asman

Waveguide  
Andrew Blanton

Self/Work: Therapy Games  
Anastasia Clarke

The Tape Machine: I See Spirits  
Anne Hege

Vox Augmento: An Improvisable VR Sampling Interface  
Philip Kobernik, Andrew Luck

Voyage One — Mobile Phone Orchestra 2020  
Conducted by Animated Notation  
Anders Lind

Rain Shadow  
Ben Robertson

Interactive Chinese Shadow Puppetry  
Chenyu Sun

Demo: Real-time 3D Convolution Reverb with High Order Ambisonics  
Tanner Upthegrove

TUESDAY, JUNE 5TH

The Dark Side Demo  
Shawn Lawson, Ryan Ross Smith

Using Accelerometers for Gestural Control of Computer Music  
Christopher Morgan

The First Flowers of the Year Are Always Yellow  
Miguel Ortiz, Hyeon Min Kim

MechDrum™ and SDRdrum™ Sonic Pair Demonstration  
Robert Van Rooyen, Andrew Schloss

Live Painting as an Interface for Generating Music  
Yosuke Sakai, Hiroto Takeuchi

pandemonium trio  
Paul Stapleton, Miguel Ortiz

Her Painting for Performance  
Rachel Tandon

The Phone with the Flow: Combining Touch + Optical Flow in Mobile Instruments  
Cagan Arslan, Florent Berthaut

WEDNESDAY, JUNE 6TH

12:00-1:30PM

Romp in Chaos  
Edgar Berdahl

Musical Chairs  
Matthew Blessing

Unsichtbares Klavier (invisible piano), Virtual Controller  
Remmy Canedo

Paint the Melody in Virtual Reality  
Kaiming Cheng

Body Biopotential Sonification  
Alan Macy  
Jed Osei & Adriana Negron, dancers

OtoKin Installation  
Palle Dahlstedt, Ami Skånberg Dahlstedt

Circles  
Barry Moon  
Kyle Hutchins, saxophone  
Annie Stevens, percussion

game over — a Musical 2D Game Engine  
Christof Ressi

Teeth  
Spencer Salazar
**INSTALLATIONS**

**SUNDAY, JUNE 3**

**MOSS ARTS CENTER: THE CUBE**
12:00-7:30PM

*Forgetfulness | 2018 | CURATED*
Zachary Duer, Ivica Ico Bukvic, Meaghan Dee

**MOSS ARTS CENTER: MEZZANINE, BALCONY LOBBIES, EXPERIENCE STUDIO B**
4:00-6:00PM

Meet NIME 2018 Installations Artists

**SUNDAY-WEDNESDAY**
**JUNE 4TH-6TH**

**MOSS ARTS CENTER: HARRIS AMPHITHEATRE**

*NIME Projection Mapping Exhibit | 2018 | CURATED*
Armi Behzad, David J Franusich, Maahsid Gorjian, George Hardebeck, Tacie Jones, Xindi Liu, Daniel Robert Monzel, Huy Quoc Ngo, Heather Arnold, Jesse Bibel, Zachary Cortez, Justus Darby, Nishat Jamil, Antonia Marigiani, Pei Qiu, Michael Rhoades, Yiming Wang

**SUNDAY-WEDNESDAY**

**ARMORY GALLERY**

*Chorus for Untrained Operator | 2016*
Stephan Moore, Peter Bussigel

*What We Have Lost / What We Have Gained | 2014*
Matthew Mosher

**NIME 2018**
**SUNDAY, JUNE 3RD**

8:00-9:30PM | CONCERT #1

27b/6
Alex Christie

Absalon Crash
Jean-Francois Charles

Alien, L2Orkin’ Around, An Ending | CURATED L2Ork

Ikue Mori | KEYNOTE
Ikue Mori

10:30-11:59PM | CONCERT #2

Bone Piece
Lyn Goeringer

T(w)o Nearly Touch: You
Bob Pritchard
Ziyian Kwan & Emmalena Fredriksson, dancers

Language Embodiment ¿?
Esteban Betancur, Jack Armitage

Fragile Intersections
Javier Jaimovich, Francisca Morand

Experiment in Augmentation 2
Scott Barton

A Sound Walk Through Chaos Forest
Edgar Berdahl

Arrest
Kristina Warren

５ — chi for Candles, Live Voice, and Sounds
Akiko Hatakeyama

**MONDAY, JUNE 4TH**

*LOCATION: THE CUBE*

5:30-7:30PM | CONCERTS #3A & #3B

Sympathetic Resonance
Monica Bolles

Libration Perturbed
Palle Dahlstedt

Texton Mirrors
Erik Nyström

The Murmurator
Eli Stine, Kevin Davis

8:00-9:30PM | CONCERT #4

Collective Response: Moving Forward | CURATED

Who Was That Timbre I Saw You With?
Kerry Hagan, Miller Puckette

Pamela Z | KEYNOTE
Pamela Z

10:30-11:59PM | CONCERT #5

So Predictable!?
Oliver Bown & Sam Ferguson, interactive audio design
Lian Loke & Kirsten Packham, movement
Angelo Fraietta, software support
Liam Bray, hardware support
Vert Designs, fabrication
Shandoah Goldman & Faith Levine, performers

Pythia:Delphine21
Mark Bokowiec
Julie Wilson-Bokowiec, performer

Transplantation
Mengtai Zhang, Yingjia Guo

Clouds and Horses
Spencer Topel

Shapeshifting
Christopher Tignor

SloMo Study #2
Federico Visi

Beckon
Anna Weisling, Anna Xambó
TUESDAY, JUNE 5TH

8:30-10:00PM | CONCERT #6

Windowless
Seth Thorn

Goldstream Variations
Scott Deal
Harry Chaubey & Erzsébet Gaál Rinne, performers

Who Are We Are Here
Ben Sutherland
Elizabeth Crone, flute
David Perry, clarinet

Onyx Ashanti | KEYNOTE
Onyx Ashanti

10:30-11:59PM | CONCERT #7

Imaginary Trainscape
Takuto Fukuda, Ana Dall’Ara-Majek

Stillness Under Tension
Charles Martin, Alexander Refsum Jensenius

Lichens — for soprano saxophone and interactive audiovisual system
Ben Carey

Vibez
ALGOBABEZ = Joanne Armitage & Shelly Knotts

Electroacoustic Guitar
Bernt Isak Wærstad

Mozartkebab
Nick Acorne (Mykyta Prykhodchenko), Jonathan Carter, Takuto Fukuda

WEDNESDAY, JUNE 6TH

*LOCATION: THE CUBE
5:30-7:30PM | CONCERTS #8A & #8B

Black Hole, Life on a Tidally-Locked Planet, and Pi
Gadi Sassoon

Nootherthanthevoid
Tsun Winston Yeung

Quarries HSL
Shawn Greenlee

108 Troubles
Rob Hamilton

9:00-10:30PM | CONCERT #9

Sonicpair #2 — duo for SDRdrum and MechDrum
Andrew Schloss, Robert Van Rooyen

Nhoj Elocin
Nicole Caroll, John Robert Ferguson

Dialogues with Folk-Rnn
Luca Turchet

Chaotic Systems: A Hybrid Analog/Digital Feedback Network
Hunter Brown, Dominic Coles

Hmw3
Jon Bellona

Why Should Our Bodies End at the Skin
Aurie Hsu, Steven Kemper

Robotcowboy
Dan Wilcox
## Workshops

### Sunday, June 3rd

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Location</th>
<th>Speakers/Instructors</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00-10:00 AM</td>
<td>The Animated Music Notation Workshop: Demonstrating the Possibilities for Rhythm-Based Music Education for Young Students</td>
<td>Learning Studio B</td>
<td>Ryan Ross Smith</td>
</tr>
<tr>
<td>9:00 AM-12:00 PM</td>
<td>A NIME Primer</td>
<td>Learning Studio A</td>
<td>Michael Lyons, Sidney S. Fels, Victor Zappi</td>
</tr>
<tr>
<td>9:00 AM-12:00 PM</td>
<td>NexusHUB Distributed Performance Workshop</td>
<td>DISIS</td>
<td>Jesse Allison, Tate Carson</td>
</tr>
<tr>
<td>9:00 AM-4:00 PM</td>
<td>Audio-first VR: Imagining the Future of Virtual Environments for Musical Expression</td>
<td>Perform Studio</td>
<td>Anıl Çamcı, Rob Hamilton</td>
</tr>
<tr>
<td>10:00-11:30 AM</td>
<td>Experiments in Pressure Sensitive Multi-touch Interfaces</td>
<td>Center of Dance</td>
<td>Peter Nyboer</td>
</tr>
<tr>
<td>10:30-11:30 AM</td>
<td>The New Evolution of Ableton Live 10</td>
<td>Multipurpose</td>
<td>Richard Graham</td>
</tr>
<tr>
<td>1:00-4:00 PM</td>
<td>Gender Diversity at NIME</td>
<td>Learning Studio A</td>
<td>S. M. Astrid Bin, Anna Weisling, Sarah Schoemann</td>
</tr>
<tr>
<td>1:00-4:00 PM</td>
<td>Interactive Performances for Dance, Sound and Biosignals</td>
<td>DISIS</td>
<td>Javier Jaimovich, Francisca Morand</td>
</tr>
<tr>
<td>1:00-4:00 PM</td>
<td>Making Embedded Instruments with Bela</td>
<td>Learning Studio B</td>
<td>Andrew P. McPherson, Jack Armitage, S. M. Astrid Bin, Robert H Jack</td>
</tr>
<tr>
<td>1:00-4:00 PM</td>
<td>Re-Engaging the Body and Gesture in Musical Live Coding</td>
<td>Center of Dance</td>
<td>Spencer Salazar, Jack Armitage</td>
</tr>
</tbody>
</table>

### Thursday, June 7th

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Location</th>
<th>Speakers/Instructors</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00-11:00 AM</td>
<td>Interactive Argentine Tango Workshop: Learn How to Dance + Interactive System Demo</td>
<td>Center of Dance</td>
<td>Courtney Brown, Brent Matthew Brimhall</td>
</tr>
<tr>
<td>11:00 AM-12:00 PM</td>
<td>MechXylo: K-12 Educational Mechatronics</td>
<td>Learning Studio A</td>
<td>Kyriakos Tsoukalas</td>
</tr>
<tr>
<td>1:00-2:30 PM</td>
<td>Code+Chords: Using Visualization to Explore Music</td>
<td>Learning Studio A</td>
<td>Elena Ryan, AnnMarie Thomas, Emily Meuer, Lewis J. Tozour Jr., Danny Mahota</td>
</tr>
</tbody>
</table>

For the most up-to-date schedule including errata please visit http://nime2018.org/schedule
SPECIAL EVENTS

SUNDAY, JUNE 3RD
6:00-7:30PM
MOSS ARTS CENTER: ORCHESTRA LOBBY

Opening Reception Featuring Remarks by:
Rosemary Blieszner (VT CLAHS Dean)
Ivica Ico Bukvic (VT ICAT Senior Fellow)
Matthew Burtner (UVA Music Chair)
Francesca Fiorani (UVA Assoc. Dean Arts & Hum.)
Jody Kielbasa (UVA VP Arts)
Paul Steger (VT SOPA Director)
Ruth Waalkes (VT Assoc. Provost for the Arts)

MONDAY, JUNE 4TH
11:00AM-12:15PM
MOSS ARTS CENTER: ANNE AND ELLEN FIFE THEATRE

Keynote
R. Benjamin Knapp

Collaborators
Eric Lyon, composer
Ariana Wyatt, soprano

TUESDAY, JUNE 5TH
6:00-8:00PM
SMITHFIELD PLANTATION

Banquet Featuring Remarks by:
Cyril Clarke (VT Provost)

NEW INTERFACES FOR MUSICAL EXPRESSION
HOSTED BY

WEDNESDAY, JUNE 6TH
11:00AM-12:00PM
MOSS ARTS CENTER: ANNE AND ELLEN FIFE THEATRE

Keynote
Pamela Z

4:00-5:00PM
MOSS ARTS CENTER: ANNE AND ELLEN FIFE THEATRE

Future, Democratization, and Globalization of NIMEs
Onyx Ashanti, panelist
Peter Nyboer, panelist
Anna Xambo, panelist
Pamela Z, panelist
R. Benjamin Knapp, moderator

5:00-6:00PM
MOSS ARTS CENTER: ANNE AND ELLEN FIFE THEATRE

Closing Ceremony

THURSDAY, JUNE 7TH
12:00-1:00PM
LEARNING STUDIO B

Women in Music Technology Social
REVIEWERS

PAPERS EXT. REVIEWERS

INSTALLATIONS

PAPERS PROGRAM COMMITTEE

MUSIC

WORKSHOPS & DEMOS
Liesl Baum, Elizabeth Hoffman, Meggin Hicklin, David Tomassacci, Loga Torkian, Holly Williams.

THANK YOU!