

UNIVERSITY of VIRGINIA  
MCINTIRE DEPARTMENT of **music**

*presents*

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# Technosonics '21

The computer music festival of the University of Virginia

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Thursday, November 18-20, 2021

Three days of virtual and live concerts and  
talks

# Concert 1 - Nov 18 Old Cabell Hall 8PM

*Push Onward*

Christopher Jette  
Kevin Davis - cello  
Lisa Edwards-Burrs - voice

*frostbYte - chalk outline*

Daniel Blinkhorn  
John Mayhood - piano

*Encroaching*

Elsa Jaeyoung Park

*Animus/Anima*

Matthew Burtner  
Jocelyn Zelasko - soprano  
Matthew Duvall - percussion

*Sansing i Strandsona (Remote Sensing on the Beach)*

Natasha Barrett

*Adventure on Mt. Hehuan (Mountain of Joy in Chinese)*

Judith Shatin  
I-Jen Fang - percussion

# Concert 1 - Program Notes and Bios

*Push Onward*

Christopher Jette

Text of the songs (pages of "Farthest North" noted)

01 SilentOh

" Silent, oh, so silent !" – p 578

03 HearVibrations

"You can hear the vibrations of your own nerves. I seem as if I were gliding over and over these plains into infinite space. Is this not an image of what is to come? Eternity and peace are here. Nirvana must be cold and bright as such an eternal star- night." -p 578

05 OhSilent

" Silent, oh, so silent !" – p 578

The arctic through the lens of Fredtjof Nansen in 1893, is a pristine expanse which overwhelms the human sensorial apparatus with intensity. This vastness inspires detailed musings which catalog the experiences and provoke personal reflection and contemplation of his internal landscape. The precarious position of the last solitude of ice, indeed, a coastline in continual evolution, is nearing a point of no return here in 2020. Stories of decimation and the projections of irreparable damage are not difficult to find, this in fact dominates the conversation around this melting coastline. In order to remind us about the hope these wonderful places can inspire, an account which both celebrates and optimistically quantifies the arctic is used. It is hoped that this inspires a future where this appreciation becomes possible again.

Christopher Jette is a curator of lovely sounds, creating work as a composer and new media artist. His creative work explores the artistic possibilities at the intersection of human performers/creators and technological tools. Christopher's research details his technical and aesthetic investigations and explores technology as a physical manifestation of formalized human constructs. A highly collaborative artist, Jette has created works that involve dance, theater, websites, electronics, food, toys, typewriters, cell phones, instrument design and good ol'

fashioned wood and steel instruments. In addition to creating concert music, Christopher served as a core member of the Anchorage based Light Brigade, exploring Creative Placemaking through site-specific and interactive works. He was the 2015-16 he was the Interdisciplinary Grant Wood Fellow at University of Iowa and ran the Max Lab at CCRMA, Stanford between 2017-2018.

*Kevin Davis is a composer, improviser, and cellist. Originally from Appalachian Tennessee, he has at various times been based out of Memphis, Chicago, New York, and Istanbul, where he has played in and composed for a large variety of musical situations across a wide spectrum of contemporary music. He has recorded and performed in the United States, Europe, and the Middle East. He has degrees in music composition from the University of Memphis (B. Music) and the Centre for Advanced Musical Studies (MIAM) in Istanbul, Turkey (MA). He completed the PhD in Composition and Computer Technologies at the University of Virginia and currently teaches at UVA.*

*Lisa Edwards-Burrs received degrees in Vocal Performance from Virginia Commonwealth University in Richmond, Virginia (B.M. and M.M.) and The Catholic University of America in Washington, D.C. (D.M.A.). An accomplished lyric-coloratura soprano, her performances in recital, oratorio and chamber music are extensive. Her operatic roles include Athena in The Furies, Ola/Harriet Tubman in Vanqui, Blanche in Dialogues of the Carmelites, Monica in The Medium, Despina in Così fan tutti, Treemonisha in Treemonisha, Adina in L'elisir d'amore and Poppea in L'incoronazione di Poppea. She has received numerous prizes and awards including the Carson Silver Medal in the Savannah! Onstage American Traditions Vocal Competition and the Outstanding Vocalist of the Year for Excellence in the Arts from Richmond Magazine. Internationally, she represented the United States as an Artistic Ambassador, touring several countries in South America for five weeks presenting concerts, lectures and master classes. Her performances of the works of African-American composers and other contemporary works have received critical acclaim. She is a Associate Professor of Voice at Longwood University in Virginia.*

*frostbYte - chalk outline*  
Daniel Blinkhorn

In frostbYte – chalk outline I wanted to capture some of the delicate

complexity, and unified, sonorous symmetries produced through the charismatic, audible ecosystems that are indelibly linked to each of the glacial calving's increasingly populating arctic shorelines and coastal regions. In order to transcribe/ translate, then sculpt these natural calving's into musical gestures and phrases within the pieces, I chose to deconstruct a number of hydrophone recordings into discrete elements, often organised into families of sound shapes. These typomorphologies were then re-constructed into a variety of gestures, phrases and forms, each of which contained its own attendant ecosystem of sound, much like the original field recordings. From a broader perspective, the resultant phrases in each work are intended to mimic the idea of something that is calved, or 'sculptured' using an array of tools and techniques produced when physically 'carving' ice sculptures. To my mind the final geometries and patterns sculptured became like those of the short-lived glacial fragments, each populating its own unique ecosystem and all subject to the natural forces at play around them.

Daniel Blinkhorn is an Australian composer and new media artist who works extensively with environmental sound. He has worked in a variety of creative, academic and research contexts, and is lecturer in composition and music technology at the Conservatorium of Music, University of Sydney. He is an ardent location field recordist, where he has embarked upon a growing number of recording expeditions throughout Africa, Alaska, Amazon, Australia, Cuba, West Indies, Mexico, Madagascar, Middle East, Northern Europe, and the high Arctic/ North Pole region of Svalbard. His creative works have received a number of awards at important international composition competitions, and whilst entirely self-taught in environmental sound, electroacoustic music and sound art, Daniel has formally studied composition and the creative arts at a number of Australian universities.

Pianist John Mayhood enjoys a busy performance schedule that in recent seasons has taken him across the North America and Europe in a wide variety of solo and collaborative settings and in repertoire that spans from the English virginalists to music of the present day. His concerts often explore the works of a single composer, combining solo piano and chamber music – he has dedicated complete evenings to the works of Poulenc, Hindemith, Feldman, and Schubert, and to new works by emerging composers. He has recently given world premieres of works by Matthew Burtner, Daniel Kessner, and James Sochinski, and the US premiere of Bruce Mather's *Doisy Daëne III*. His perfor-

mances are often featured on NPR, CBC, and SRC radio, and his recordings can be heard on Ravello Records and the EcoSono label. Also a scholar, he has presented work on 'transformational theory' and 'theory and performance' at the University of Chicago and at the annual meeting of the Deutsche Gesellschaft für Musiktheorie. His main interest is the philosophy of music, particularly meaning in abstract music and the philosophy of performance. John holds the Master of Music degree from the University of Illinois at Urbana-Champaign, where he studied with Ian Hobson; his other major teachers are Caio Pagano and Jean-Paul Sévilla. He has taught piano at the University of Illinois and philosophy at Brown University and the Rhode Island School of Design. He currently resides in Charlottesville, Virginia, where he is head of the piano faculty at the University of Virginia.

### *Encroaching*

Elsa Jaeyoung Park

"What gets us into trouble is not what we don't know. It's what we know for sure that just ain't so"-Mark Twain. 'Encroaching' is a piece that deals with an experience of unpleasant truth - human's attitude to nature, consisting of sonic environment and marine data of four seasons of Haeundae Beach, Busan in 2019. Inspired by the beauty of the sea, the piece is firstly created from the recording of Haeundae beach last year. Such as sounds of waves, people amused and the motorbikes on the road were captured. After then, a film about climate change encouraged me to look back on the moment I simply enjoyed the sea while not knowing the actual condition of the environment. Thus, I used oceanographic observation data of the beach from April to December in 2019 in the piece, then such numerical data were translated into musical data through Supercollider. During the process, I was in the position of experiencer and interpreter as to the collage of what computer-generated marine data and raw sound of the sea deliver. Also, the varying gradations of swaying gestures in the piece manifest composer's changing experiences towards nature from a feeling of awe to the awareness of problems and become distant from the issues at some point. Therefore, 'Encroaching' is to invite listeners to explore and share demeanours to nature, acknowledging people's connections and gaps to the environment.

Elsa Jaeyoung Park is a composer based in South Korea. She studied

electroacoustic music at the University of Birmingham and Jazz Piano at Seoul Institute of the Arts. Her main interests focus on exploring uncomfortable or ignored emotions primarily in the composition of electroacoustic music and data sonification. Park's music has been heard in various locations including the UK, Germany, Australia, Korea, and USA. Her music has also been featured in international events such as International Computer Music Conference (ICMC), Seoul International Computer Music Festival (SICMF) and film festivals. Park won the best piece of ICMA 2018 regional award Asia-Oceanic at ICMC.

### *Animus/Anima*

Matthew Burtner

*Animus/Anima* (2001) for voice, percussion and electronics, is inspired by Epicurean philosopher, Titus Lucretius Carus's (c.100-c.55BC) poem, *De Rerum Natura* (On the Nature of the Universe), particularly the theory of sonic embodiment described in this work. In *Animus/Anima*, the voice sings through a large bass drum, coupling and extending the vocal diaphragm of the singer through the large drum. A microphone on the other side of the drum amplifies the reembodied voice. The drum is further manipulated by a percussionist. Lucretius explains embodiment through the relationship atoms of thought and emotion (*animus*) concentrated in the chest, and a sensory network of atoms spread throughout the body (*anima*). The interaction between voice, ear, and imagination is accomplished through this atomic exchange. In the words of Lucretius: "All forms of sound and vocal utterance become audible when they have slipped into the ear and provoked sensation by the impact of their own bodies... Undoubtedly, if voices and words have this power of causing pain, they must consist of corporeal particles. "

Lucretius describes emotion as specially connected with the voice and the ear through the body of its sound. Vocal expressions cause sensation because sound is a physical phenomena that can cause sensation. In another passage he states: "Again, sounds are disseminated in all directions because each one, after its initial splintering into a great many parts, gives birth to others, just as a spark of fire often propagates itself by starting fires of its own. ...Even a voice, however, is blunted in its passage through barriers and is blurred when it pierces our ears, so that we seem to hear a mere noise rather than words."

Animus/Anima was composed in 2001 for Haleh Abghari, the same year that Matthew Burtner came to UVA. This new version of the piece for Jocelyn Zelasko and Matthew Duvall commemorates Matthew teaching for 20 years at the University of Virginia.

Matthew Burtner ([www.matthewburtner.com](http://www.matthewburtner.com)) is the Eleanor Shea Professor of Music at the University of Virginia ([www.virginia.edu](http://www.virginia.edu)) where he Co-Directs the Coastal Future Conservatory (<http://www.coastalconservatory.org>) and teaches in the Composition and Computer Technologies (CCT) Program. He is also Founder and Director of the Alaska-based environmental music non-profit organization, EcoSono ([www.ecosono.org](http://www.ecosono.org)). In the 1990s, Burtner developed musical ecoacoustics to compose sound art from environmental change during a time of dramatic global warming in the north. His climate-change music has been performed in concerts around the world and featured by NASA, PBS NewsHour, the American Geophysical Union (AGU), the BBC, the U.S. State Department under President Obama, and National Geographic. He published three evening-length intermedia climate change works including the IDEA Award-winning telematic opera, Auksalaq. In 2020 he received an Emmy Award for “Composing Music with Snow and Glaciers” a feature on his Glacier Music by Alaska Public Media. In 2021 he published the album Avian Telemetry/Six Ecoacoustic Quintets (Parma Records), and the immersive multimedia environment, Dwelling in the Enfolding (Anchorage Museum) with Mona Kasra, a work available through the Oculus platform. In addition to ecology, his music focuses on embodiment, temporality and noise.

Metro-Detroit based soprano, Jocelyn Zelasko, is a versatile musician who is celebrated as an insightful performer with a captivating stage presence. She is the vocalist for Detroit’s premiere ensemble, New Music Detroit, and a founding member of ensembles Juxtatonal and Whoopknox. Her career began in the classical realm, but a passion for making complex vocal music accessible to audiences led her to pursue new music. As an advocate for the creation of new works, Zelasko has commissioned 18 composers including Angélica Negrón, Vid Smooke, Michelle McQuade Dewhirst, and Jorge Sosa. She also originated the title role, Pat Sturn, in the new mixed-media chamber opera, “Pat & Emilia” (Smallman/Gervais with Sievers-Hunt) which toured extensively in Canada and the Great Lakes region. Recognized for her “vocal brilliance” (City Pleasures) and “absolutely thrilling” voice (Around the Town Chicago), she has performed world premieres with

Grammy award-winning ensemble Eighth Blackbird, Eastman Broad-band Ensemble, and Matt Ulery Trio. She has also sung premieres with many outstanding performers including Tony Arnold, Vicky Chow, and Matthew Duvall. Zelasko received bachelor's degrees in vocal performance and economics from Oakland University and a master's degree in music from the University of Iowa. When not creating, you can find her competing on the golf course, surfing in the ocean, or squishing her kittens and husband.

Matthew Duvall is a founder, co-Artistic Director, and percussionist of Eighth Blackbird. Four Grammy awards, the MacArthur Award for Creative and Effective Institutions, Musical America Ensemble of the Year 2016, Chamber Music America Visionary Award 2016, competition wins with Concert Artists Guild and the Naumburg Foundation. Recording catalogue with Cedille records. Matthew proudly endorses Pearl Drums and Adams Musical Instruments, Vic Firth Sticks and Mallets, Zildjian Cymbals, and Black Swamp Percussion Accessories. More information can be found at [www.eighthblackbird.org](http://www.eighthblackbird.org).

*Sansing i Strandsona (Remote Sensing on the Beach)*

Natasha Barrett

The hidden treasures of everyday soundscapes are often side-lined by the bustle of modern life, and we travel the world in search of interesting experiences which may already lie on our own doorstep. “Sansing i Strandsona” is one in a series of works aimed to evoke a new awareness of everyday sound environments as a catalyst for us to appreciate common surroundings in a new and more curious way. The work combines high precision 3D field recordings made during summer and winter in the Inner Oslo Fjord (EigenMike 4th order Ambisonics), with the sonification of spatial data extracted from these recordings. This data was used to re-process the spatial and frequency content of the original sounds, revealing and enhancing fleeting details that are easily missed. To obtain meaningful data for the sonification, EigenMike recordings were decomposed into spatial-frequency components by applying interactive beamforming and data extraction techniques developed in the composers' research work. The opening is framed by a sonification of the local topography surrounding the recording site. High resolution elevation data traced along 20 sightlines converging on the recording location was sonified, mapped to both sound modulation (pitch, amplitude and spatial location) and to sine tones. The data

was obtained from the Norwegian Mapping Authority and describes a projection of the surroundings. Sound travels towards the listening position, tumbling over the peaks and valleys. The work then unfolds from spring to summer. It ends with the cracking of the winter ice layer pushed by the wake of distant boats, the sound resonating over the landscape.

Natasha Barrett (1972, NO/UK) composes acousmatic and live electroacoustic concert works, sound-art, installations and interactive music. Her inspiration comes from the natural and social world around us: the way it sounds and behaves, systems, processes and resulting phenomena. These interests have led her into worlds of cutting-edge audio technologies, geoscience, sonification, motion tracking and some exciting collaborations with soloists, chamber ensembles, visual artists, architects and scientists. Binding together these inspirations is an overarching search for new music and the way it can touch the listener. Originally from the UK, Barrett moved to Norway in 1999. Active in performance, education and research, she founded and co-directs EAU (Electric Audio Unit – the Norwegian spatial- music performance ensemble), 3DA (the Norwegian society for 3-D sound-art), and is professor of composition at the Norwegian Academy for Music, Oslo.

*Adventure on Mt. Hehuan (Mountain of Joy in Chinese)*  
Judith Shatin

*Adventure on Mt. Hehuan (Mountain of Joy in Chinese)* was inspired by, and is dedicated to, the brilliant percussionist I-Jen Fang, my colleague and friend at the University of Virginia, and my teacher during a fascinating ongoing exploration of percussion instruments. While originally inspired to create the piece by an exquisite untitled mountain painting by I-Jen's late father, one morning, having dreamt of his painting, I decided to look up mountains in Taiwan, where I-Jen is from. I happened on a beautiful image of Mt. Hehuan, and when I learned that the name meant 'Mountain of Joy,' I realized the title should include this. I scored the piece for solo bass drum after exploring its extended timbral potential, depending on such minute details as the exact types of mallets, its placement on the drum and the exact placement on the mallets themselves. The decision to include optional interactive electronics grew from the further timbral characters that these afford, creating a new world of sonic shading, as well as the additional adventure of the

duet between the bass player and MIDI controllist. Rather than choose between acoustic and electroacoustic formats, I chose both. The interactive electronics draw on a MAX program created in consultation with me by composer/ technologist Maxwell Tfirm.

Described as an “intrepid percussionist” by Fanfare Magazine, I-Jen Fang has a career as a solo performer, chamber musician, orchestral player, and teacher. She joined the faculty of the McIntire Department of Music at the University of Virginia in 2005 and as Principal Timpanist and Percussionist of the Charlottesville Symphony.

As a soloist, I-Jen has performed as a marimba soloist in Taiwan, U.S., Austria, France, Hungary, Romania, and South Africa. As a chamber musician, I-Jen has performed or recorded with EcoSono Ensemble, Cantata Profana, Attacca Percussion Group, and DaCapo Chamber Players. She has appeared in Heritage Theater Festival, Staunton Music Festival, Charlottesville Chamber Music Festival, Wintergreen Festival, Percussive Arts Society International Convention and Regional PAS Day of Percussion.

Born in Taipei, Taiwan, I-Jen began her musical education at age six taking piano. Taking up percussion at the age of nine, she came to the United States at age fifteen to pursue her Bachelor of Fine Arts degree in Percussion Performance at Carnegie Mellon University. She received her Master of Music degree from Northwestern University and her Doctor of Musical Arts degree from the University of North Texas where she served as a teaching fellow.

I-Jen is an Innovative Percussion artist.

Composer Judith Shatin ([www.judithshatin.com](http://www.judithshatin.com)) is William R. Kenan Jr. Professor Emerita at the University of Virginia, where she founded and directed the Virginia Center for Computer Music. Her music is sparked by the world around us, from the quotidian to the transcendent, and engages social, cultural and physical environments. She draws on both traditional and expanded instrumental palettes, from machines in a working coal mine to the calls of animals, the shuttle of a wooden loom, the pull of a zipper. She embraces both acoustic and digital media, often combining the two. Her music has been commissioned by organizations and ensembles including the Barlow Endowment, Fromm Foundation, American Composers Orchestra, Carnegie Hall, the National Symphony, Kronos Quartet, the Library of Congress, Ensemble Berlin PianoPercussion and the Dutch Hexagon Ensemble. She has received

four NEA Composer Fellowships as well as grants from the American Music Center, the Lila Acheson Wallace-Readers Digest Arts Partners Program, Meet the Composer and the Virginia Commission for the Arts. Residencies include those at the Rockefeller Center at Bellagio, Brahms Haus, Casa Zia Lina, La Cité des Arts, MacDowell, Yaddo and the Virginia Center for Creative Arts. Her music has been featured at festivals such as Aspen, Grand Teton, Moscow Autumn, Seal Bay, and West Cork. Her music can be heard on more than 30 albums, including those on Innova (two portrait discs), Neuma, New World and Ravello. A noted teacher, Shatin served as senior composer at the Wellesley Composers Conference, as Master Artist at the Atlantic Center for the Arts, as guest composer at the Aspen Music Festival and at the Chamber Music Festival of the East at Bennington.

# Concert 2 - Nov 19 The Bridge PAI 8PM

*m A ĩ x*

MICE Ensemble

*And you still won't find it, even after you stopped looking*

Becky Brown

*Dronetics*

Varun Kishore

*Tubes*

Alex Christie

*Gizzards*

Heather Mease

## Concert 2 - Program Notes and Bios

*m A ĩ x*

*MICE Artificial Intelligence Xperience*

MICE, The Mobile Interactive Computer Ensemble makes live computer music using interactive systems and mobile instruments. Since 2001 MICE has been the resident computer music ensemble of UVA, performing in Virginia, Namibia, Washington DC, India, New York, South Africa, Delaware, Japan and in the middle of the Pacific, Atlantic and Indian oceans. The group has worked with composers such as Philip Glass, Paula Matthusen, Sarah O'Halloran and Erik DeLuca. MICE has also been featured on two albums – “MICE World Tour” and “Agents Against Agency” – and created the world’s largest human-computer orchestra, a 300-person networked laptop orchestra conducted by the MICEtro robot.

MICE Ensemble are: Katerine Mosier, Alex Christie, Colin Davis, Meagan Gillette, Jeff Dutter, Yena Lee, Devon Gildea, Danna Jaber, Jack Goodman, Hunter McGuire, under the direction of Matthew Burtner

*And you still won't find it, even after you stopped looking*

Becky Brown

Listen, I just count myself lucky these days, even though some are more challenging than others. It's not something I can talk about with most people, right? This has been great, though - thank you for being so open. Huge load off my shoulders. Anyways, I swear I don't know any more than what I told you. Please leave me alone.

Becky Brown is a composer, harpist, artist, and web designer, interested in producing intensely personal works across the multimedia spectrum. She focuses on narrative, emotional exposure, and catharsis, with a vested interest in using technology and the voice to deeply connect with an audience, wherever they are. She is currently pursuing graduate studies in Composition and Computer Technologies at the University of Virginia.

## *Dronetics*

Varun Kishore

Dronetics is a framework for performing drone music using phonetic text scores. These scores contain a grid of “text-sounds” to be interpreted as language, before attempting to reproduce an approximation of those sounds through an instrument. As one progresses through the score, these text-sound fragments become more abstract, resisting direct translation to sound; the performer must rely increasingly on imagination to play them. Instrumentation includes electric guitar, ebow, and a custom drone synthesizer built in Max.

Varun Kishore is a composer from Kolkata, India. His work explores interdisciplinary approaches to music technology, literature, and the audiovisual, with a focus on designing frameworks for composition and improvisation to investigate what he sees as the ‘apocalyptic’ nature of creative practice. His current areas of interest include drone music, digital instrument and interface design, alternative notation, and video. ([www.varunkishore.net](http://www.varunkishore.net))

### *Operating Manual: Cartographical System Maintenance*

*Alex Christie*

*What you see is a visual translation of an electronic signal. This signal is generated using both audio and video technologies. It could also be translated into sound, as was the original intention of this piece. However, the sonic translation of this signal is not as compelling as the visual translation and when the two are coupled together they explain too much of each other.*

*You may notice that the video (the visual translation of the signal) has musical properties. It has rhythm, texture, dynamics, and states of stability and instability. This video is as musical as its unrealized sonic partner.*

*What I hope happens is that you will imagine the sound for yourself. If you do this, you will produce a non-cochlear music inflected by the activity of these TVs and your own sensory processes. In other words, I am asking for your participation in the composition of this piece.*

*Alex Christie has been stranded on Earth for 35 Earth-years.*

## **GIZZARDS**

Heather Mease & Aaron Glasser

Aaron Glasser makes moving images using sound. Heather Mease re-interprets those images back into sound.

Aaron Glasser explores creative intuitions, researches thought at a university, and curates experimental cinema for local audiences.

Heather Mease generally likes music.

# Concert 3 - Nov 20 The Bridge PAI 3:30PM - New Music Ensemble

*LIVE: DEAD LAPTOPS (2021)\**

Becky Brown

*Graphic Mobile*

M. William Karlins

*Side Steps\**

Bob DuCharme

*On the Ontology of Sound in Multidimensional Space\**

Becky Brown

*In C*

Terry Riley

*For Cage 99*

Nomi Epstein

\*world premiere

# **Colloquium - Friday Old Cabell Hall**

## **3:30 PM - Natasha Barrett**

Natasha Barrett will discuss her work *Sansing i Strandsona* and other current research in computer music composition, particularly related to environmental sensing. This Colloquium is part of the Technosonics Festival which will also feature concerts on Thursday, Friday and Saturday night.

The University of Virginia Department of Music's Composition and Computer Technologies (CCT) program emphasizes the integration of acoustic, electric, and computer-based composition, considered as part of a diverse multimedia and interdisciplinary 21st Century field of art, design, and music. UVA Music faculty and staff collaborate to build a unique climate of creative and technical research. In addition to making original compositions and sound art works, students have the opportunity to create their own new technologies and become involved with on-going CCT research groups. Current work involves multichannel digital audio composition, improvisation, motion capture research, music for dance, installation art, songwriting, mobile app development, new media opera, video game design, vocal and chamber music composition, ecoacoustics, and the creation of new interfaces for musical expression. CCT Ph.D. application deadline is December 15th. Visit <https://music.virginia.edu/degree/phd> to apply.



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