NYU | STEINHARDT

MUSIC AND PERFORMING ARTS PROFESSIONS



INTERACTIVE MULTIMEDIA PERFORMING ARTS COLLABORATIVE TECHNOLOGY

IMPACT 2014

Academic Conference:
Creative Collaboration in Technology and Arts

August 13-16, 2014

Steinhardt Education Building
303 Performance Studio
Frederick Loewe Theatre
The James L. Dolan Music Recording Studio & Technology Suite
35 West 4th Street, New York, NY 10012

steinhardt.nyu.edu/impactconference | | 212-998-5438

ARCHIVE COPY (2026): email contacts removed.

WELCOME TO IMPACT CONFERENCE 2014
IMPACT: Interactive Multimedia Performing Arts Collaborative Technology

NYU Steinhardt and the IMPACT staff invite all level students international and within the US to participate in a creative, collaborative, multimedia workshop, July 28 through August 14. We are working to create experiences that will provide new skills and understandings in the context of your current experience and background. We regard making art the province of all human beings. This workshop is about extending the range of your techniques to be expressive in performance and everyday activities.

We focus on the ***Interactive*** nature of the workshop. This involves our interactions with each other, workshop staff, and with the technologies that are emerging to extend our expressive range as artists and human beings.

Secondly, we emphasize the ***Multimedia*** nature of the works we create. In the emerging and changing world of today, we are challenged to open our traditional stances as artists to become practitioners of multimedia.

The substance of our work involves ***Performing Arts***, in which all arts, including visual arts are conceptualized in performative and performance dimensions, acknowledging the temporal and ephemeral nature of the arts as an ongoing way of knowing and expressing ourselves in the world. Performing Arts are a worlding of the world, and the nature of this dynamic unfolding defines who and what we are. We value you as an individual whether or not you regard yourself as a performing artist. We hope to include your unique perspective as we work together to create new ideas in the workshop. *Perform* means to *form through* action, which pertains to all artistic expression.

At every level of activity we expect that the ***Collaborative*** nature of our working together to create new works magnifies your personal insights and contributions. Such cooperative efforts do not undermine individuality, but honors each contribution as a substantive presence that defines the moment as a spontaneous coming together of ideas and expressive elements.

In the context of the workshop, ***Technology*** exists as an evolving tool of artistic expression. Each year, the IMPACT workshop changes because the technology is in a state of permanent evolution, mirroring our identity as the extension of ourselves. We celebrate a technology that has opened new frontiers of artistic expression and development. Your individual appropriation of technology alters that technology forever, evidence that your presence and interaction continues to transform the world as it is to what it is becoming.

John Gilbert, Tom Beyer
Co-Director of IMPACT

NYU | STEINHARDT

Dept. of Music & Performing Arts Professions
Ronald H. Sadoff, Ph.D.
Assoc. Professor & Director & Chair
Dept. of Music and Performing Arts Professions

35 W. 4th St. - Room 777D
New York, NY 10012
212.998.5779 Fax: 212.995.4043

July 28, 2014

Welcome to NYU Steinhardt and welcome to our 8th season of the ongoing journey of IMPACT (Interactive Multimedia Performing Arts Collaborative Technology). I have witnessed its unique synergy of creative vision and multicultural fusion from the start. Fueled by the diversity and tenor of world cultures, its young participants engage in intensive collaborative efforts through composition, dance, improvisation, and new expressive uses of technology. Each year features a final staged performance that serves as an artistic signature and a celebration of their collective creative spirit.

This year, IMPACT moves to the next stage, enhanced by the inclusion of an accompanying academic conference that will reflect, explore and contextualize the myriad threads that bind creative process and research. This also serves as a hallmark reflection of the modern era of our department, dating from the 1980s when John Gilbert served as Chair. It was marked by the transformation of our performance programs extending their scope and a robust engagement in rich theoretical discourse. IMPACT, in essence, reflects the grand legacy of innovative intellectual and artistic expression that *is* Greenwich Village and NYU Steinhardt. Our artistic license is indeed cast directly from Eugene O'Neil's *Provincetown Playhouse* and its Bohemian legacy, but especially from the experimental and expanded music of the late 1960's *Electric Circus* on St. Mark's Place. Eclectic and iconic, it was sculpted by *The Velvet Underground*, *Andy Warhol*, *Terry Riley*, and electronic music pioneer and current faculty member, *Morton Subotnik*.

On August 2nd, IMPACT will honor two of our faculty innovators who facilitated our journey: David Ecker and Dinu Ghezzo. These *impactors*' intellectual and creative work continues to inform and drive us. In their wake, I look forward to another engaging in a compelling creative experience for IMPACT 2014.



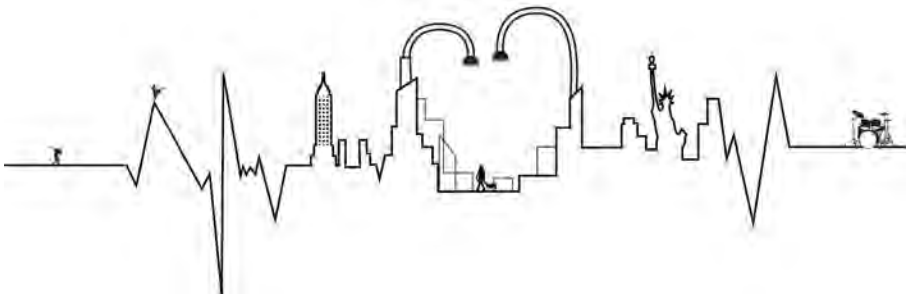
Dr. Ron Sadoff,
Director, Dept. of Music and Performing Arts Professions

IMPACT Conference

Creative Collaboration in Technology and the Arts

DEPT. of MUSIC and PERFORMING ARTS PROFESSIONS

AUG 13 – AUG 16, 2014



Wednesday August 13th

7:00pm **Joint NY Music Tech & Music Tech Educator Meetup** **Room 303**
35 W. 4th Street, Room 303 (3rd Floor). New York, NY 10012

Check out demos of the latest in music technology by StreamingTank HFA, Loudie, MusicFirst, and Lyte.

Sponsored By

NY Music Tech Meetup
http://www.meetup.com/music-techster & http://nymusictech.net

The NYU MusEDLab hosts a NYC Music Technology Educator Meetup on the second Saturday of each month at the NYU Steinhardt Department of Music and Performing Arts Professions. Local music educators, musicians, technologists, developers, and students come together to demo, share, and give feedback on new and existing technologies for music making, learning and engagement. High school students from school and community settings are also encouraged to attend with their teachers to share their music projects and ideas. Most Meetups include extended informal sharing time, along with hands-on workshops and demos of new apps, web services, and curricular ideas.

http://www.meetup.com/NYC-Music-Tech-Educator-Meetup/

Thursday August 14

8:30am light refreshments **3rd Floor**

9:00am **Keynote 1 - Eric Rosenbaum** **Room 303**
Banana pianos and musical cartoons: Learning music through making

10:00am **Interactive Sessions A**

Movement and music: Applications of motion sensors in music and multimedia art Jarrod Ratcliffe, Adriana Madden NYU	*Unpacking the DJ Mystique: An examination of the music making practices of EDM club DJs* Eva Egolf NYU --- *New interactive listening technology for touch screens:* *Musical chairs: From spectator to stage* Leslie Linton and Mike Godwin University of Western Ontario	*Music composition as experience: New composition strategies for the modern classroom* Matt McLean Little Red Schoolhouse & Elizabeth Irwin High School, NYC
6th Floor Conference	**Room 879**	**Room 779**

12:00pm lunch break

1:00pm **Panel on Popular Music Pedagogies** **Room 303**
Rathgeber, Hein, Bell, Egolf, O'Leary, Bledsoe

2:00pm **Interactive Workshops**

Eric Rosenbaum *Making Music with the MaKey MaKey*	Ethan Hein, Jason Sigal, Jamie Ehrenfeld & Jay Mateyko *Exploring Accessible New Interfaces for Digital Music Making and Learning*	Adam Goldberg *21st Century Music Making for All Via the iPad*
6th floor	**Room 879**	**Room 779**

5:00pm Day 1 finished

7:00pm **IMPACT Performance** **Loewe Theater**

Post-performance Reception in Room 303

Friday August 15

8:30am light refreshments **3rd Floor**

9:00am **Keynote 2 - Mike Medvinsky** **Room 303**
"Can we put that on iTunes?" Creating opportunities for learners to engage in authentic musical processes

10:00am **Interactive Sessions B**

Creative play, musical learning, and middle school beta testers Gena Greher & Eric Rosenbaum UMass Lowell and MIT Media Lab	*Interacting with 8-bit* Jared O'Leary Arizona State University
6th Floor Conference	**Room 779**

12:00pm lunch break

1:00pm **App Petting Zoo** **Room 303**
Irlen Wheel, Plink Out, Melody Morph, Singing Fingers, Acclaim, and more...

2:00pm **Interactive Workshops**

Eric Rosenbaum *Making Music with the MaKey MaKey*	Mike Medvinsky *Can We Put That On iTunes?*	Adam Goldberg *21st Century Music Making for All Via the iPad*
6th floor	**Room 879**	**Room 779**

5:00pm Day 2 finished

7:00pm **Robin Cox Concert Event** **Black Box**
82 Washington Square East

Robin Cox - HOURGLASS - IUPUI (Indiana University–Purdue University Indianapolis)

HOURGLASS is a large scale work of fully composed music for live violin, cello, four channel electronic playback, and immersive video projection designed to engender community participation through movement improvisation. By active investment and involvement from attendees, HOURGLASS addressees ways to sustain extended participation in non-verbal and spontaneous communal activity, while representing an alternative performance concept for those lacking interest in experiencing arts through formal recital-style concerts.

Performed by Robin Cox -violin/composer, Jennifer DeVore -cello, movement facilitated by Stephanie Nugent, and video by Lianne Arnold.





Saturday August 16

8:30am light refreshments **3rd Floor**

9:00am **Keynote 3 - Alex Ruthmann** **Room 303**

The NYU MusEDLab: Designing technologies for meaningful musical experiences

10:00am **Interactive Sessions C**

Maker, participatory, and digital cultures in the classroom Ryan Bledsoe *Arizona State University*	*Record, upload, converse: Transforming assessment through Acclaim's collaborative video platform* Jillian Harris *Acclaim - GetAcclaim.com* --- *Theory course for an all-online music education masters degree* Robinson McClellan & Stephen Wilcox *Rutgers University*
6th Floor Conference	**Room 779**

12:00pm lunch break

1:00pm **Interactive Sessions D**

Dialogue with a controller: Projects, pilot-testing, and pedagogy Jesse C. Rathgeber *Arizona State University*	*Fresh Ed: It's bigger than Hip Hop* James Miles, Jamel Mims, & Michael Wiggins *Urban Arts Partnership*
6th Floor Conference	**Room 779**

3:00pm **Interactive Sessions E**

Integrating Computer Music into your Secondary School Performance Ensemble Evan Combs *Juilliard*	*Sound and Sight* Jun Li *Montclair State University*	*Plink Out: Interacting, Learning, and Playing with Color Fretboard Visualizations* Kevin Irlen and Keith Patchel *Modulus Media, Inc.*
6th Floor Conference	**Room 879**	**Room 779**

5:00pm **Closing Session** **Room 303**

Keynote Speaker Bios

Eric Rosenbaum
MIT Media Lab & JoyLabz



Eric Rosenbaum wants to amplify your imagination. He is currently a doctoral student at MIT Media Lab, where he spends his days in the Lego Learning Lab as a member of the Lifelong Kindergarten group. He combines his love for music, improvisation, making, and learning to invent new technologies for playful creation. He is the co-inventor with Jay Silver of the MaKey MaKey invention kit. His other projects have included Singing Fingers, an iPad app for finger painting with sound; Glowdoodle software for painting with light and sharing your creation; and MelodyMorph, an iPad app for creating your own musical instruments and playable compositions. Eric holds a Bachelor's degree in Psychology and a Master's degree in Technology in Education from Harvard University. In his spare time he plays the trombone in an afrobeat band and a jazz ensemble.

Mike Medvinsky
Bloomfield Hills Public Schools, Bloomfield Hills, Michigan



Michael Medvinsky is a middle school general music teacher in the Bloomfield Hills School District in Michigan and lecturer in music education at Oakland University. He uses technology to support musicians in expressing through sound and composing music in styles most familiar to them and then engages them in exploring the less familiar. Michael reevaluates musical experience design which opens a window to inquiry-based music education practices and connects learner/musicians to a global community.

Alex Ruthmann
NYU Music Experience Design Lab (MusEDLab.org)



Dr. S. Alex Ruthmann is Associate Professor of Music Education and Music Technology at NYU Steinhardt where he teaches courses at the intersection of music, education and technology and leads the NYU Music Experience Design Lab, which researches and develops technologies and experiences in collaboration with community and industry partners.

Since joining the faculty at NYU Steinhardt, Ruthmann has co-developed the Play With Your Music MOOC in collaboration with the MIT Media Lab and P2PU. He works collaboratively with students and faculty researchers in the NYU Music and Audio Research Lab on applying basic research in music information retrieval to educational experiences.

He is Past President of the Association for Technology in Music Instruction, Co-Editor of the International Journal of Education & the Arts, Associate Editor of the Journal of Music, Technology, and Education, and serves on the advisory board of the British Journal of Music Education. Dr. Ruthmann is currently a Co-PI on a National Science Foundation grant researching interdisciplinary methods of teaching of computational and musical thinking, and serves on the Board of Directors for the Boston-based Music and Youth Initiative.

Workshop Abstracts

Adam Goldberg
21st Century Music Making for All Via the iPad
District 75, NYCDOE

In the four years since its release, the iPad has become a viable, widely accepted, powerful tool for music making. Reputable music manufacturers such as Korg, Moog, Yamaha, Propellerhead and many others are creating high quality apps for the iOS platform. These apps have a great deal of flexibility built into them, making them perfect for any educational or performance environment. In this workshop, experience hands-on how these apps can be modified and applied to meet the needs of any learner in any music making situation. Several apps will be explored, as well as some of the powerful Accessibility features built into the iOS platform. It is suggested that you bring your own iPad. A limited number will be provided for those who do not have their own.

Ethan Hein, Jason Sigal, Jamie Ehrenfeld & Jay Mateyko
Exploring Accessible New Interfaces for Digital Music
NYU MusEDLab & Montclair State University

Participants will engage in hands-on experiences interacting with the NYU Steinhardt MusEDLab's new musical interfaces both in software and in the physical world that move beyond the piano keyboard metaphor. This workshop will present new and alternative visualization approaches that make abstract musical concepts more concrete and tangible in the context of inexpensive web interfaces and musical construction kits, allowing even young kids to create interfaces of their own.

Mike Medvinsky
Can We Put That On iTunes?
Bloomfield Hills Public Schools, Bloomfield Hills, Michigan

"Can We Put That On iTunes?" This hands-on workshop will extend the thinking talked about in my keynote. We will discuss how to creating opportunities for learners to engage in authentic musical processes. I will share examples from my own classroom as a launch for workshop participants to create, compose, and perform on mobile devices. I will have 8 iPads available, but participants are encouraged to bring their own. We will create original music and perform them for one another. If you would like to use your own device, we will be using the following apps: VidRhythm, MadPad, and GarageBand. We will discuss how engaging with learner/musicians in these practices have transformed my classroom culture from media curators to creators. Working within the soundtrack of learner's lives, this workshop is rooted in contemporary understandings of the nature of learning and teaching and authentic musical practices.

Eric Rosenbaum
MaKey MaKey Music: Beyond the Banana Piano
MIT Media Lab and JoyLabz

MaKey MaKey is an invention kit that lets you transform everday objects into computer keys. You can use it to make a game controller out of play-doh, a piano out of bananas, or whatever else you can imagine. In this hands-on workshop, you'll have a chance to make your own MaKey MaKey creations out of foil, foam, furniture, coffee cups, coins, clay, people, plants and more. We'll connect your creations with with music software to create new physical-digital musical instruments. We'll also reflect on how can we support learners as they get started with MaKey MaKey, and how to inspire them as they launch into ingenious new projects of their own.

Ryan Bledsoe – Arizona State University

Maker, Participatory, and Digital Cultures in the Classroom

In this session, we will experience what a combination of maker, participatory, and digital cultures can look like in the classroom. An emphasis will be placed on collaborative, project-based learning that spans across the disciplines of the STEAM subjects.

People of all ages are makers: makers of food, sounds, instruments, computer programs, tangible items, and much more. An important component of making something is having the space to play, explore, and experiment with materials—something that research shows us young children learn well from, but not something we often incorporate into classrooms and education past early childhood. Play, exploration, and experimentation are also important components of maker and participatory cultures, which can be used in conjunction with digital tools and aspects of digital culture to engage the students in our classrooms in ways that are authentic to real-life artistic practices.

In this experience, participants will creatively interact with music, sound, and visual art in an analog, digital, and/or acoustic manner. Participants will design and create a multimedia piece with tools appropriate for elementary-aged students. We will explore the possibilities of making and using non-traditional musical scores in collaborative, improvisational music making. By using a graphical or visual score, barriers are deconstructed so that people with varying degrees of musical instruction can participate. Additionally, by designing and building their own instruments during this session, participants will encounter decision making in music not often associated with K-12 music classes such as timbre selection, instrument design, and controller design.

Evan Combs – Connections Education/Juilliard

Integrating Computer Music into your Secondary School Performance Ensemble

As a perpetual field, computer music has continued to develop in university music programs at an exponential rate. However, these technologies, theories, and implementations have been struggling to integrate into secondary schools. This session will explore the unique opportunities we, as music educators, can give students to explore and embrace computer music through ensemble performances, engaging Generation Z.

Studying the accessible technologies of the twenty-first century classroom provides a better grasp of what tools and methods should be incorporated in our music curriculum, and available for performance use. Primarily focusing on the use of technology (laptops, smart devices, and video projection) as an instrument and controller in ensembles, the session will cover design methods and ways to develop your own software and app environments for creating and manipulating a variety of new data. This discussion will apply to Open Sound Control (OSC), cross-platform music technology software, and languages with open-source alternatives.

Participants will take the provided steps to designing a secondary level computer music performance piece. When complete, the group will discuss and evaluate each project's logistics, identifying its hardware and software requirements, accessibility, and educational value.

Eva Egolf – NYU/City School District of New Rochelle

Unpacking the DJ Mystique: An examination of the music making practices of EDM club DJs

Early 1980s dance music genres, such as house and techno, have transformed and fractured into a myriad of subgenres and practices. Collectively, these genres are often grouped by the moniker electronic dance music (EDM). EDM historically, and currently, is performed in dance clubs by its hero, the disc jockey (DJ). As the genre's popularity has increased, it has emerged from underground clubland

to become an ubiquitous art form. Within the last five years EDM's status has grown in the United States with expanded radio air time, and prominent EDM DJs such as David Guetta, Armin Van Buuren, Avicii, Afrojack, and Skrillex etching a place in popular music's consciousness with their productions appearing on Billboard's The Hot 100 list of popular songs.

The purpose of this interactive session is to explore the music making processes of EDM club DJs. This project draws on findings from a case study of five local EDM DJs. The interactive session explores mixing techniques using Elliott's (1995,2014) framework for musical understanding. In addition to mixing techniques, the music making context, and programming approaches are described. Fieldwork video footage is used to illustrate musical examples. This presentation utilizes the format of a lecture demonstration, with time allotted for audience questions and experimentation.

Jillian Harris Farrell & Aksel Gungor - Acclaim

Record, Upload, Converse: Transforming Assessment Through Acclaim's Collaborative Video Platform

It is easy to feel overwhelmed by all the different web tools available to instructors: social media, blogs, and polls—the list goes on. Finding the right tool or platform, however, can transform assessment in the classroom or studio in situations where rubrics and score sheets may be not only ineffective but also inefficient and unscalable.

Acclaim is a web platform that facilitates discussion and feedback around video content. Professors and students can securely add videos to the platform (recorded content or curated videos from the web) and then post time coded comments that highlight and link to specific parts of each video. Put simply, the platform makes it easy to annotate video content. Access can be shared among classmates and/or professors for a private, collaborative, and ultimately, constructive learning experience.

For this interactive session, we will address the challenge of assessing performance using traditional methods and show how Acclaim can enhance the precision of instructor feedback and generate a constructive dialogue between teachers and students. We will record the session's attendees engaged in two separate live performance experiences. One group will learn and perform a simple dance phrase, while the other group will read an excerpt of a dramatic monologue. Using Acclaim's features, each group will then provide commentary on one another's performances. The session will conclude with a question and answer period and a discussion of Acclaim's potential applications in realms like music education, trial law, public speaking, and medicine.

Gena Greher – UMass Lowell & Eric Rosenbaum, MIT Media Lab

Creative Play, Musical Learning and Middle School Beta Testers

In collaboration with a graduate class action research project, we worked with middle school students using an iPad app called MelodyMorph that has a novel interface for making and playing musical instruments on the screen. The objective is to evaluate the teaching of musical concepts using this new technology in order to understand what they reveal about music cognition, and to develop ideas for future iterations of the technology. Music education students and the App designer brainstormed strategies for creating and introducing musical activities to the middle school students to support tune recognition, creating musical motifs and creating musical narratives. In addition to presenting several examples of student work, this hands-on interactive workshop will allow participants to explore several of the strategies that were developed over the course of this project, including the creation of musical puzzles to reconstruct tunes, creating music to accompany graphic drawings and musical soundscapes.

Jun Li - Montclair State University

Sound and Sight

The digital evolution of communication and ever-increasing performance of the computer have transformed the visual communication design field into a discipline that synthesizes aural and visual, spatial and temporal elements. Digital technology provides new expressive possibilities for artists working in audio-visual media. The interactive session Sound and Sight engages visual representations of sound, space, and rhythm. Participants will select a sound sequence containing a variety of distinguishable motives and/or themes. The design process consists of identifying different dimensions of contrast in music and working in Max and Processing to simultaneously generate graphic compositions linking image and sound in a synaesthetic relationship. In addition, participants will edit the generated visual sequence, synchronize the audio, and add texts in Adobe AfterEffects.

Robinson McClellan & Stephen Wilcox - Rutgers University, Mason Gross Arts Online

Theory Course for All-Online Music Education Masters Degree

BRING YOUR LAPTOP or IPAD

This online masters course in music education at a large university serves to deepen the practical theory knowledge of future music educators while teaching them to teach via peer assessment and several online tools. IMPACT conference participants in our interactive session will complete a short musical analysis via the basic process used in our course design, in miniature form:

- First, participants 'Teach the Material' by individually creating analyses of a short passage in (guided) blog form.
- Students take the role of teachers for the second stage of the process, 'Teach the Teacher,' providing feedback on one another's mini-blog analyses via a rubric.
- Based on this feedback, each student creates a follow-up in the form of a description detailing how he or she would teach the piece to student performers, or a lesson plan.

In the real course, instructors then grade students both for their analyses and for the quality of the teaching feedback they provide to their peers. Groups rotate through the semester in three-week cycles, creating multiple opportunities for interaction and sharing. All this work is bolstered by an online 'textbook' (written lessons) and semester-long assignments in which students read and react to scholarly articles on music analysis.

Today's teaching environment requires competence with basic music instructional technology such as notation software (for this course, Noteflight), web interactions and audio/video recording. These technologies and their uses in teaching are included as a built-in aspect of the coursework.

Matthew McLean - Young Composers & Improvisors Workshop at LREI

Music Composition as Experience: New Composition Strategies for the Modern Classroom

In the visual art class every student is an artist. Every student can now be a composer in music class. The art student develops skills and learns concepts through immediate experiences such as painting or drawing. With new technologies like the web app Noteflight and other iPad apps, music students can now benefit from the same kind of immediate experience. In this session, we'll examine progressive techniques that help students explore music by being composers. The presentation includes video footage of students working and covers strategies for first time composers, through students working on their 4th compositions and beyond. The techniques can be summed up by the concept of "sound before theory." The strategies use technology or classroom instruments in a way that gives students the experience of "playing" with theoretical concepts in a hands on manner before having to codify or analyze them. We'll examine how a project based composition project can meet every National Standard for music education. The presentation will also touch upon the three important components found to be

necessary in successfully carrying out a composition curriculum on a classroom scale: a progressive curriculum, artists in residence and a community of online support. The strategies in this clinic have been realized while implementing a composition curriculum where since 2010 each and every 5th and 6th grade student at LREI has two compositions performed by professional musicians at two annual young composers concerts.

James Miles, Jamel Mims, & Michael Wiggins – Urban Arts Partnership

Fresh Ed: It's Bigger than Hip Hop

Fresh Prep: It's Bigger than Hip Hop" is an interactive Regents Prep event that uses culturally responsive hip hop pedagogy and process drama to prepare students for the Global and US History Regents Exam. Harnessing the mnemonic elements of original hip hop music, accessing knowledge pop culture, and theatrical techniques, participants will come alive in a creative and musical world of learning.

Jared O'Leary - Arizona State University

Interacting with 8-bit

The early technological constraints imposed on 8-bit composers can act as project criteria for composing and performing 8-bit music that interacts with live 8-bit video games. This two hour session will begin with an interaction with 8-bit media and then break out into groups to create short musical excerpts and sound effects for a live video game. After all of the groups share what they created, the session concludes with a discussion on musical problems, technological constraints impacting creativity, and future projects.

Keith Patchel & Kevin Irlen – Modulus Media, Inc.

PlinkOut: Interacting, Learning and Playing with Color Fretboard Visualizations

PlinkOut is an AudioVisual interface that runs in a web browser. PlinkOut is an online/mobile application which uses sight, sound, color, and motion graphics to teach anyone the core cognitive ideas of music. PlinkOut can be used by children in school, advanced adults, and any music lover at any level, anywhere, anytime. Singing and practicing the musical patterns in PlinkOut will teach the end user how to play an instrument, how to read music, how to understand music theory, and eventually, how to compose.

Jarrod Ratcliffe and Adriana Madden – NYU

Bodies in Motion: Applications of Motion Sensors in Music and Multimedia Art

Physical gesture has been used in the design of musical controllers since the invention of the theremin in 1919, but gestural input has never been as accessible or affordable for public consumption as it is right now. The recent introduction of affordable consumer sensors has opened up vast opportunities for modern musicians and multimedia artists to creatively explore and extend traditional paradigms of musical and artistic expression. Consideration is given to collaborative artistic uses of sensors, and their ability to augment music, dance, theater, and visual art. Such uses can be seen within performance, production, installation and educational contexts.

This interactive session provides an overview of gestural controllers, and gives participants the opportunity to interact with motion-controlled multimedia systems designed by the presenters. There will also be an open discussion where participants will have the opportunity to brainstorm the possible integration of sensors into their own projects.

Jesse Rathgeber – Arizona State University

Dialogue with a Controller: Projects, Pilot-Testing, and Pedagogy

Tools like Scratch and Makey-Makey afford us new ways to think about and create music. With these tools, we can construct new controllers and interfaces that allow us to play with our own sounds on our own terms. We can craft motion controllers that let us interact with sound through gesture. We can design

touch interfaces that power interactive art installations. The possible outcomes of our interaction with these tools are diverse and imaginative. Yet, these creative products are but artifacts of intense, complex, and often meaningful creative processes.

This session explores curricular applications of using Scratch and Makey-Makey to create interactive sound installations with a focus on the process of creating the works. We will explore a pedagogical framework for crafting such works that embraces pilot-testing, iterative design, and collaborative problem solving. Through hands-on engagement with these tools, we will uncover how such a framework can empower students to engage in dialogue with one-another, the potential users of their of their works, and even the works themselves.

HISTORY OF IMPACT

IMPACT (Interactive Multimedia Performing Arts Collaborative Technology) evolved from multimedia productions and experiments at NYU in 1976 when a summer multimedia production program produced 11 multimedia works (operas, dance, theatre, visual arts, instrumental and vocal production) in six weeks, averaging two new productions a week. The entire building at 35 West Fourth Street was appropriated for productions with rehearsals of works in progress virtually on every floor.

In 1996, NYU participated in one of the earliest collaborative exchanges on the Internet, connecting via the older modem connections three sites: a group of actors from NYU, a group of dancers at Fraser University in Vancouver, and a group of musicians at a loft in Greenwich Village. The major sponsors of the event were the composer Dr. Dinu Ghezzo, composer and multimedia artist Dr. John Gilbert, theatre dramaturg Dr. Alistair Martin-Smith, choreographer dancer Lisa Naugle, and Pierre DeKarangal, web artist and theorist.

Music and Performing Arts Professions has pioneered the use of technology in creating new works and enhancing performance. Seven years ago in 2007, a core group of faculty and artists conceived a summer workshop geared primarily to college age (18 years and older) students to introduce them to concepts of performance and collaboration enhanced by applications of technology. The founders were John Gilbert (music and multimedia), Tom Beyer (Video and Audio Technology), Young-mi Ha (composer and developer), Deborah Damast (Dance), and Chianan Yen (Music and Technology).

What emerged from these productions was the spirit of improvisation, spontaneity, and the creation of new work through collaboration of participants using technology and the arts in a multimedia environment.

In 2001, the historic Internet2 production, *Songs of Sorrow, Songs of Hope,* was performed as a tribute to those who had lost their lives in the World Trade attack. This work was a simultaneous performance in California and New York in a collaborative interactive multimedia production involving NYU, UCI, and the European Institute of Design.

In 2007, IMPACT emerged as an extension of this multimedia work, aimed primarily at international students during the summer and now opening to include students at college level age who are ready to explore technology and how it can serve to extend and amplify their artistic expressive range. IMPACT has opened exploration of the imagination and has attracted attention of international researchers and scholars. In 2010, the workshop was invited to present IMPACT in Inchon, Korea and was enthusiastically received.

IMPACT is open to all college age students, and has recently included select high school students to participate. IMPACT is an innovative design to encourage the use of technology to develop collaboration in creating new work based on ideas developed by participants culminating in an original stage production at the end of the conference and workshop.

NAVIGATING GLOBAL CULTURES

IMPACT 2014 will explore an extension of its premise of collaborative process by exploring the ancient and current cultures that shape human experience. New York City is a cultural collection of almost every culture in the world. This has posed a problem in the public schools because of more than 150 languages needed to create understanding between the many students, parents, and teachers.

Navigating Global Cultures is a metaphor created by NYU's Art Philosopher and Educator, Dr. David Ecker in the late 1980s which later became one of the first websites to explore cultural exchange among young people in America, South America, and Asia. Dr. John Gilbert established the website and worked with Dr. Ecker in the early formulation of cross cultural experiments and exchange.

Perhaps one of the best known examples of *Navigating Global Cultures* was the voyage of Columbus on a quest to find passage to India by sailing west across a vast, unknown ocean in 1492. In 1992, NYU hosted the 500 hundredth anniversary year, but noted that the outcome of the exploration resulted in great damage to native cultures through exploitation of people and resources. The 500th anniversary was noted as a new Navigating of Global Cultures through the technologies of communication and the need for reconciliation for the damage brought about by the contact of native cultures in the "new world" with European culture of colonization and empire building.

As the new technology of wireless and wired communication emerged through the Internet, a new era of exploration and discovery had begun. There have been many challenges to the claims of discovery by Columbus. There is extensive evidence to show that the Vikings were in North America long before Columbus.

One of the most thought provoking and controversial claims is the account of 1421 as the year China discovered America. Although the evidence is controversial, there appears to be DNA evidence of a colony of Chinese somewhere in the Virginias. This was the result of the voyage of the Chinese Admiral Zheng who sailed with a fleet of four ships to different parts of the world to discover Australia, New Zealand, the Americas, Antarctica, the Northeast Passage and circumnavigated the world before Magellan. Upon return to China with these fabulous discoveries, a new dynasty feared that further voyages would destroy China so no further exploration was permitted and much of the evidence of this miraculous achievement was destroyed.

In recent times, composer Tan Dun completed a marvelous exchange between the Boston Symphony and his native hometown in China in a wonderful composition that brings the East and West together in a work called *The Map*, capturing the sounds of his village and the native Chinese musicians in interaction with the symphony orchestra. These days, we each are a map of our culture, and mapping the world has created new energy of exchange between individuals and ultimately, cultures of the world.

HOW ARTS AND HUMANITIES INTERFACE WITH IMPACT

NEW MEDIA AND TECHNOLOGIES FOR THE 21ST CENTURY

Writers observe how their narrative and poetic skills meet the needs of emerging art forms and media. They help to develop concepts, write scripts for scenes, and use the writing in new media to document and extend the creative experience as well as enhance the humanistic aspects of technology.

Visual Artists such as painters, sculptors, photographers, videographers, animators, and conceptual artists have New York City as their canvas, as the materials of their artistic ideas, which inspire the media and technology to incorporate their artistic vision in new and innovative contexts.

Composers find traditional and experimental modes of expression and develop them as powerful ideas that add narrative and emotional texture to the collaborative work. They explore new notation, technology of notation, sound sequencers, composing programs that serve to extend their expressive range.

Musicians in traditions of East and West discover new ways to extend their performance skills, explore the power of free and structured improvisation and how new techniques of sound enhancement and recording create additional venues for live performance.

Dancers, choreographers, and movement specialists uncover connections between body and technology; engage physical awareness as the technology of time and space extends presence through interactive media and movement.

Actors redefine their craft as new media requires developing communicative skills incorporating and transcending traditional techniques. Actors may work in scripted and improvisational modes as they interface with other artists and means of expression incorporating movement, space, and sound as additional elements of their craft.

Technologists devise new approaches to integration of artistic expression to employ the latest tools and explore multimedia production from conception of the ideas to their manifestation as a dynamic, artistic presence.

Multimedia Artists and Designers pioneer concepts through deeper understanding and additional skills that provide ways to integrate and isolate media for expressive purposes.

Production Specialists including directors, producers, stage managers, and lighting directors perform strategic roles in shaping the scenes and experiences of the participants while also engaging in other workshops to enhance their understanding and skills.

IMPACT ORGANIZATION AND ACTIVITIES

The IMPACT Workshop is organized like a school with creative artists who conduct focus groups that explore hands on experiences with the participants. Such areas include:

- Theatre and Production
- New Music and Improvisation
- Video and Visioning Experience and Culture
- Audio and Sound
- Dance and Movement
- Texting, Mapping, and Scripting Culture and Experience

Technical Tools: Final Cut, Isadora, Logic Pro, & entry level applications.

The structure for staffing the workshops is similar to that of a School of Performing Arts that provides multilevel experiences for participants of highly varied backgrounds.

Morning Coffee and Technology Fest

The Morning Coffee Hour begins at 9 a.m. each day of the workshop except as noted in the schedule. Steinhardt's Education Building houses the hub of arts technology media including state of the art computers, fully loaded for professional level processing of materials. Bring your laptops. You will be able to connect to NYU Wireless. Your laptops become the first level of processing and developing of ideas that can then be transferred to the main computers for final processing and tweaking of materials.

Each morning we will gather for a continental style breakfast, and have a chance to get to know each other. It will also serve as a place to explore technologies, software, and ideas presented on the Internet. We will use it also as opportunity to develop ideas about the Navigating Global Cultures, and to explore emerging technologies in an informal way.

It is a chance for us to come together, to know each other across schools and disciplines. Following this, the production groups will share warm up activities with the full group

The Culture and Milieu of New York City

In the first week, in the evening we will attend the professional production *Feurza Bruta* that represents the new wave of multimedia artistic production. In addition, you are encouraged to explore New York City on your own and go to concerts, museums, galleries, and other events. You will choose a location to visit to do video that you might incorporate into your scene. Your location choice should be culturally conscious. Explore the cultures of New York City and bring back video and artifacts to use in the final production.

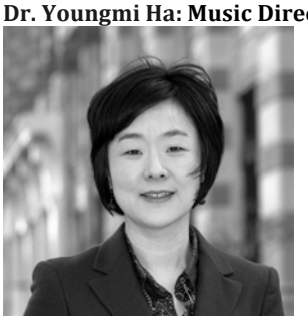
NYU IMPACT 2014 FACULTY/STAFF

Dr. John Gilbert: Director



Dr. John V. Gilbert is IMPACT Director Composer, Educator, Multimedia Artist. He is currently teaching in NYU's Steinhardt Music and Performing Arts Professions, where he has served as Chair. He currently serves as a Director of Steinhardt Music Education. He holds the B.M. and B.A. from Texas Tech University and masters and doctoral degrees from Columbia University. At NYU he played a key role in the development of Music Business, Music Technology, Music theatre, Opera, and Music Education. Since 1996, he has pioneered in developing the Internet as an artistic interactive medium through Distributed Performances of simultaneous productions with University of California. His work has examined the artistic process in the context of technology as an extension of human expression. This work has led to the founding of IMPACT with colleagues in 2007. His compositions have been performed in Europe, U.S., and Asia. He is composer and producer of a new bi-lingual album, "Prayer" featuring vocalist Julie Song with songs commissioned especially for the album. He works with multimedia often in collaboration, his latest is with Lisa Naugle in *Unguarded/Lost Works*.

Dr. Youngmi Ha: Music Director



Youngmi Ha, composer and educator, is a faculty member in Music Theory and Composition Program in New York University. She is one of the original founding members of IMPACT program in 2007 and this year is her 8th year serving as a music director in IMPACT. Her music has performed in Korea, Italy, Germany, England, Romania, and Poland and in the US, at Carnegie Weil Hall, Merkin Concert Hall, NYU, etc., and she has three CDs released by Capstone Record and New Music Association. Recently she has been working on music based on Children's books in English and Korean and also collaborating with dancers.

Tom Beyer: Tech Director



Thomas L. Beyer, a technologist, educator, engineer, composer, instrument builder and percussionist, studied Classical Percussion, with Paul Price, and Twentieth Century Composers at Manhattan School of Music in the late 60s, and continued Jazz and Ethnic music studies with percussion masters, Fredrick Waits, Eddie Blackwell, Jack DeJohnette, Billy Hart and Guillermo Franco. He received his Masters of Composition from NYU, studying with Dinu Ghezzo and Justin Dello Joio. He continues his lifelong quest for knowledge to gain a mastery of how to produce, control and capture sounds.

Tom has taught since an early age and joined the adjunct faculty at New York University in 1999, where he currently is also the Chief Systems Engineer for the Music Technology Program and the Network Administrator for the Department of Music &Performing Arts Professions. In these capacities he has been technical director for over 70 interactive multimedia productions as well as numerous festivals including NIME, and the bi-annual NYU Music Technology Interactive Arts Festival. Recently he oversaw the design and construction of the $6.8 million dollar high tech complex for sound engineering, computer music, audio-visual production and post-production, mastering, scoring for film and multimedia, audio for games, software development, and multimedia production, which was praised by Mix Magazine as "*one of the most technically advanced audio teaching facilities in the United States."*

He has recently started teaching for and assumed the role of Technical Director for the Electronic Music Foundation and was the Director of the Electronic Music Program at The County College of Morris from 2000 – 2004. His compositions, in many genres, ranging from solos to huge multimedia extravaganzas have been performed in many venues and festivals in Europe, Asia as well as all across the United States.

Dr. Chianan Yen: Director of Imaging and Design



Dr. Chianan Yen joined the faculty of the NYU Steinhardt Music and Performing Arts Professions in 2005, and has been one of the founding and active faculty for the NYU IMPACT International Conference since 2007. He holds a Bachelor of Science degree in Electrical Engineering from the National Central University (Taiwan), a Master of Music in Music Technology degree and Stephen F. Temmer Tonmeister Studies Certificate, and a Ph.D. degree in Music Composition from New York University.

Dr. Yen has composed multimedia works for dance, film, animation, instrumentalists, ensembles, and orchestras. Integrating multimedia and interdisciplinary technologies in creating art, publishing, and education have been his main practices and focus. His works have been featured, performed, and published in North America, Europe, and Asia. In addition to his academic works, he has served professionally as a photographer for the Department of Music and Performing Arts Professions since 1999, specializing in real-time stage/performance photography. His current research interests include educational and instructional technology, network learning technology, and mobile application development for teaching and learning.

Dr. Lisa Naugle: Dance and Movement



Lisa Naugle is Professor and Chair of the Dance Department in the Claire Trevor School of the Arts at the University of California, Irvine. Lisa earned her M.F.A. from New York University, Tisch School of the Arts, and her Ph.D. in Dance Education from Steinhardt School in the Department of Music and Performing Arts Professions.

She is a choreographer, dance improviser and educator and has presented her choreography in Eastern and Western Europe, Asia, South and North America. Lisa first articulated the concept and method of "distributed choreography" in her 1999 article, *Distributed Choreography: A Video-Conferencing Environment* and has continued to develop site specific and telepresence performances with national and international collaborators. She has been recognized for her solo dance improvisations and choreography, interacting with live video and live music.

Her career as a soloist, performing improvisation with live music and interactive video, and presenting choreography internationally spans over 20 years. From 2008 – 2012 she was the Director of Choreography for the Improvisation and Choreography Summer Intensive in Malaga-Frigiliana, Spain. In 2009, Lisa founded the DTM2 Improvisation Ensemble which continues to present work as pick-up company. In 2010 she was one of three choreographers selected by the Alwin Nilolais Foundation and honored at Lincoln Center for the Performing Arts for her work in continuing the legacy of Alwin Nikolais thru dance, education and technology. She recently performed and presented choreography with the DTM2 ensemble in Italy at the Museum of Contemporary Art of Rome (MACRO), the Conservatory of Santa Cecilia and the University of Rome. At UC, Irvine she teaches choreography, improvisation, pedagogy, and directs research projects. Lisa is delighted to participate IMPACT 2014 at NYU.

Paula Murray Cole: Theatre Director



Paula Murray Cole is an associate professor of acting, voice and movement in the Department of Theatre Arts at Ithaca College. Her professional work is centered on the development of rasaboxes, a suite of exercises devised by Richard Schechner. Based on a combination of performance theories, practices and contemporary emotion science, rasaboxes trains emotional awareness and expressivity through the use of breath, body, voice, and sensation. She has taught performance workshops at NYU, the University of Tennessee at Knoxville, Central Washington University, The Dell' Arte International School of Physical Theatre, Brown University, among others. She has presented rasaboxes at conferences in Montreal, Turkey, Singapore, China and Poland; for the International Society for Researchers on Emotion Conference (2004), the Association for Theatre Movement Educators Colloquium, ATHE and the RS&PS Conference, Israel.

She co-authored "The Actor As Athlete of the Emotions: The Rasaboxes Exercise" with rasaboxes co-developer, Michele Minnick, for *Movement For Actors*, edited by Nicole Potter. She has acted in Schechner's productions of *Three Sisters* and *Hamle*t with East Coast Artists. She performed at The Kitchen (NYC) and Lincoln Center's Outdoor Festival in a piece by choreographer Douglas Dunn and composer Joshua Fried. She worked as the casting director for Paul Ekman's photo sessions of actors demonstrating facial expressions of emotion for use in his training programs. She is a member of Actors Equity Association, The International Society of Researchers on Emotion, the Association of Theatre Movement Educators and is a Licensed Massage Therapist in New York State."

Alex Ruthmann: Consultant of New Technologies & Director of IMPACT Conference: "Creative Collaboration on Technology and the Arts"



Dr. S. Alex Ruthmann is Associate Professor of Music Education and Music Technology at NYU Steinhardt where he teaches courses at the intersection of music, education, technology and design. He leads the NYU Music Experience Design Lab, which connects students and faculty with community and industry partners in researching and designing new technologies and experiences for music making, learning and engagement.

Since joining the faculty at NYU Steinhardt, Ruthmann has co-developed the Play With Your Music MOOC in collaboration with the MIT Media Lab and P2PU. He works collaboratively with students and faculty researchers in the NYU Music and Audio Research Lab on applying basic research in music information retrieval to educational experiences.

He is Past President of the Association for Technology in Music Instruction, Co-Editor of the *International Journal of Education & the Arts*, Associate Editor of the *Journal of Music, Technology, and Education*, and serves on the advisory board of the *British Journal of Music Education*. Dr. Ruthmann is currently a Co-PI on a National Science Foundation grant researching interdisciplinary methods of teaching of computational and musical thinking, and serves on the Board of Directors for the Boston-based Music and Youth Initiative. Active in social media, you can follow his curated posts on music learning, teaching and technology as @alexruthmann on Twitter.

Mitchell Gustin: Teaching Assistant



Mitchell Gustin is a pianist, composer, video and performing artist. He is pursuing a BM in music composition at Cornish College of the Arts in Seattle, Washington, and plans to further his education at the graduate level studying film and video. He first participated in the IMPACT 2012 conference, which led to him serving as Teaching Assistant for the conference held in 2013. Today, Mitchell joins us again as Teaching Assistant for IMPACT 2014.

This past spring, Mitchell led music direction for a fellow student's original musical titled *Going*; constructed a documentary spotlight on a fellow Cornish student; and sang in Seattle's most premier community choir, the Esoterics. Along with completing a recent piano solo, *Waves*, he has expanded his world of making electronic music through software called AudioMulch. In Seattle, alongside collaborator Anthony Cammarota, he performs in art galleries and at special events under the name Clü Clay—a duo specializing in electro-ambient improvisation. While Anthony contributes with guitar, laptop, and keys, Mitchell adds to the mix with keyboard, alto saxophone, laptop, found objects, ocarina, and voice.

It is Mitchell's passion to bring artists and non-artists together in a setting that encourages community art making. He was selected to be President of the Cornish Student Leadership Council in efforts to build a stronger Cornish and expand upon the improvements of community through artistic practice. He hopes to challenge those involved in IMPACT 2014 to continue creating regardless of an end product and plans to encourage those who have maybe hit a dead end, to continue moving forward.

David Stoecker: Assistant Tech Director



Dave Stoecker is a recent graduate of the NYU Steinhardt undergraduate music technology degree. He has spent his time at NYU developing and adding to his system installation, management and live sound background under the employment of Tom Beyer, as a studio technician and assistant, at Madison Square Park as a sound engineer and production assistant, at Radio City Music Hall as a stagehand and at Kayne Live Productions as a production coordinator and live sound technician.

Currently, Dave is working as production hospitality and audio engineer at the 2014 Madison Square Park Kids Series, a 9 week long series that brings bands for all ages of children to the parks stage. This will be his fifth year coordinating this event. He is also working at NYU Steinhardt, as a technician during a time of several renovations of not only the studios but of the whole building. He was recently tasked with designing the audio layout of the Yahoo" Pride Parade float that traveled with the parade, as well as the design and implementation of the A/V system utilized in an unveiling event for Royal Enfield Motorcycles.

Dave hopes to continue his career of live sound, event production and management and technical installation as a freelance sound engineer in New York, building off his previous experiences to attain more challenging opportunities and positions. As an IMPACT team member he brings live event experience and hands on technical knowledge to the program to foster both learning and hands on use of equipment for the participants of IMPACT.

Kat Jirles: Tech Assistant



Kat Jirles, a senior at New York University majoring in Music Technology, with a focus in production sound and audio post-production in film and television. Kat has worked on various student productions, credits including sound designer in "Five Ways to Fill Silence," production sound mixer on "Missy May," production sound mixer on "Second Wind," and sound design in "Dusk", among others. She has also interned at esteemed post-production companies including Flavorlab and Smart Post Sound. Kat also has experience in live sound reproduction and sound design for theatre as a student sound designer for Tisch's production of "Execution of Justice." Kat currently works as a studio technician in the Music Technology program.

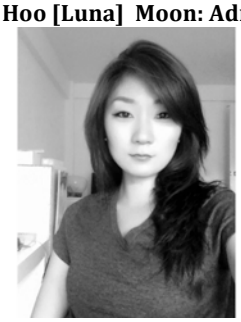
Sunmin Kim: Historian and Researcher



Sunmin is a songwriter, a composer, a musician, a doctoral candidate, and a researcher at NYU. She learned piano and started write her own melody when she was a child. She continued to learn classical piano and write her own songs. She earned her Diploma in Professional Music with a concentration in Composition and Songwriting from Berklee College of Music in 2001. Sunmin returned to Korea to work as both a teacher and composer. At the Departments of Practical Music at Cheonan University, Bakseok University, and Yonsei Digital Music School, Sunmin taught courses in practical music department. Along with teaching, Sunmin worked as a songwriter in the Korean pop music industry; among the many Korean pop songs that she published were major hits such as "Leave Me" by the signer B.M.K, and "Fever" and "Never, Ever' by Chakra. She published many other Korean pop songs as well.

Sunmin moved to New York City in 2005 to attend New York University, where she earned her M.A. in Music Education and began her doctoral studies. While studying in the doctoral program in Steinhardt school of Music& Performinag Arts at N.Y.U, she expanded her activity to get involved in internet 2 Collaborative performances supervised by Dr. John Gilbert at N.Y.U such as Memory, Memory II: Touching by making the film and writing song as well as doing technical assistance. She also started to work as a counselor for the IMPACT- The international summer program at N.Y.U since 2009 and continues to work. She also produced her own multimedia work, *bridge of the moment* which was performed at Frederick Loewe's theater at N.Y.U. Sunmin Kim has been working as a keyboardist at Churches and in bands and continues to teach private lessons in piano, harmony. Sunmin Kim is currently working as a researcher and historian for IMPACT workshop at New York University.

Ji Hoo [Luna] Moon: Administrative Coordinator



Ji Hoo [Luna] Moon is a graduate student at NYU in Music Education. She was born in Korea and lived and studied in many different countries including Canada, Singapore, and Japan. She was a exchange student at Elliott School at George Washington University focusing on International Relations as an extension of her studies at Waseda University.

She holds her M.A. from Waseda University in Tokyo, Japan, majoring in International Relations. She has a degree in Marketing and Management from Newcastle University. She recently came to the New York to continue her graduate studies while developing interests and opportunities in business and education. She is a freelance interpreter and working with fashion designers from Korea. She also is an organizer of Eastern Asian Language Lovers and teaches English and Korean.

Her research interests are breaking new ground in by exploring the development of business practices and concepts in Music Education. This is emerging as an important extension of her business interests in language and cultural education..

Ethan Hein: Teaching Artist



Ethan Hein is a professor of music technology at Montclair State University and a researcher with the NYU Steinhardt Music Experience Design Lab (MusEDLab). The lab's flagship project is Play With Your Music, an online audio production class serving thousands of students simultaneously. The current session is based on the music of Peter Gabriel, and students learn mixing and editing by working directly on Peter's original multitracks. The MusEDLab is also designing new software and physical interfaces for creative music-making, including a circular harp strung with conductive rubber bands.

Ethan has taught guitar, composition, music theory and production privately for the past fifteen years, and is an active freelance producer and session musician. He is a regular contributor to the Disquiet Junto, a group of musicians who respond to weekly, fast-turnaround assignments to compose, record, and share new music. Ethan's recent Junto project, a modern rendering of a 100 year old blues song, was recently featured on WNYC's Soundcheck. You can hear this piece and many others here: http://soundcloud.com/ethanhein/

Ethan maintains an influential music blog. Essays appearing there have been assigned in course syllabi at The Cooper Union, Wesleyan College, City College of New York, Florida State University, the University of the Andes, Wittenberg University and elsewhere. His writing has also appeared on Slate.com and in a forthcoming book on the use of video games in education. Read more: http://ethanhein.com/

Dr. Wendy Luck: Teaching Artist



Wendy Luck, internationally recognized flutist, vocalist, composer, and multimedia artist has concertized in the United States, Italy, France, Poland, Germany, Budapest, Morocco, Portugal, Greece, Egypt, Israel, and Mexico. Residing in New York City, her array of artistic venues ranges from orchestral/chamber performances at Lincoln Center, Carnegie Hall and Merkin Hall, to Big Band music as lead vocalist/flutist at the Rainbow Room in New York City, to jazz and avant-garde at the Knitting Factory, Roulette, and The Kitchen, to the comedy club circuit, as comedienne with "The Outcasts," to recording her own compositions in Egypt inside the Great Pyramid and in the temples along the Nile. These CDs are entitled *The Ancient Key* and *The Ancient Journey*. In performance, she utilizes the uniquely edited video footage taken during her experience in Egypt. This original performance piece integrates her playing live with the footage, creating a multidimensional musical experience. She has been asked by the Egyptian Embassy to become a "Music Ambassador of Peace," performing her music at the National Press Club in Washington, DC. A third CD, *See You in Rio*, which was recorded in Brazil with the notable rhythm section (Nelson Faria, Ney Conceiçao, Kiko Frietas) of legendary composer and singer João Bosco, features Brazilian jazz. A fourth CD, *Orchids and Moonbeams*, a jazz and classical alchemy, features her lyrics, voice and flute playing, with the music of Michael Kraft. Her originally conceived, written, and performed one-woman show entitled *Aquatic Information*, a multimedia presentation consisting of her music compositions, video backdrops, live video projection, animation, characters, and staging, was selected for presentation in J-Fest and the Venus Theater Festival for Women Playwrights Competition in New York City.

Boroka Nagy: Teaching Artist



Boroka Nagy is a dancer, choreographer, film maker born in Budapest, Hungary and now based in Orange Country, CA. She began her formal dance training at Fiorello H. LaGuardia High School of Music & Art and Performing Arts in New York City and continued onto the Ailey/Fordham B.F.A. Program to obtain a degree in dance, with a second major in film communications.

In 2009, Boroka performed Bertram Ross's *Nocturne* at the 75th Anniversary celebration of the 92nd Street Y, and in 2011, she was selected to perform Alvin Ailey's *Memoria* with the Alvin Ailey American Dance Theater at New York City Center. In 2011 and 2012, she danced in the tribute to the late Denise Jefferson at the Apollo Theater in New York. Boroka has performed works by a number of choreographers such as Paul Taylor, Alvin Ailey, Robert Battle, Milton Myers, Desmond Richardson, Dwight Rhoden, and many more. Her choreography has been shown at The Ailey Citigroup Theater and Salvatore Capezio Theater in New York City; at the Claire Trevor Theater in Irvine, California; at the National Academy of St. Cecilia and the University of Rome Tor Vergata in Rome, Italy. She is a choreographer for the Indie Ballet Collaborative, a NYC based company using dance in synergy with other art forms.

Between 2012 and 2014, she worked on several short dance films. In February 2014, o*ublier le temps* (16mm film fully produced by Boroka) was screened at the 42nd Annual Dance on Camera Festival in New York City. Currently, Boroka is pursuing an M.F.A. in Dance at the University of California, Irvine, exploring the artistry of movement and dance on film, and the collaboration of music, video, and dance in a live multimedia performance setting.

Dafna Naphtali: Teaching Artist



Dafna Naphtali is a singer/instrumentalist/electronic-musician and educator. She composes and performs experimental, interactive electro-acoustic music, since the mid-90's, using her custom Max/MSP programming for live sound processing of voice and other instruments. She draws on an eclectic musical background in jazz, classical, rock and near-eastern music, and as performer she also interprets the music of Cage, Stockhausen and contemporary composers, in a large variety of projects with well-regarded musicians around the world. Dafna has received fellowships and awards including from New York Foundation for the Arts (2013 Music/Sound, 2001 Computer Arts), New York State Council on the Arts, Franklin Furnace, American Composers Forum, Foundation for Contemporary Arts and American Music Center. She teaches university courses and guest workshops in Music Technology, Max/MSP programming, Electronic Music Performance and experimental voice, both to graduate / undergraduate students and working artists around New York and internationally (this August in Helsinki at UniArts Sound Academy.) Dafna has recorded several CDs, including "What is it Like to be a Bat?" a digital punk trio with Kitty Brazelton (on Tzadik label)

JiaoYue: Teaching Artist



Jiaoyue Lyu is an outstanding pianist, guqin performer, and calligrapher. She received her BA from Nanjing Normal University in Music Education and Masters in Music Education from New York University. Ms. Lyu started playing piano at the age of four and garnered many awards from competitions throughout China and abroad. She has held several solo concerts for both piano and guqin in China. She performed *Clear Moon Inspiring Rhyme Strings*, the first ever guqin concert in the 110-year history of Nanjing Normal University. This concert was chronicled by the school and reported on by notable Chinese media organizations.

During her tenure at Nanjing, Ms. Lyu assisted Professor Yao in the research project: *The Significance of Introducing Guqin in Education into University General Education Curriculum*, which they coauthored and published in a national journal. In June of 2014, Ms. Lyu performed her guqin recital: *Serene Moon——Jiaoyue Lyu Guqin Recital* at Carnegie Hall. The recital shared traditional Chinese music with American audiences, and was the first ever guqin recital at Carnegie Hall. Ms. Lyu has also performed as a member of the NYU Jazz Choir and University Singers at New York Fashion Week and other venues in NYC and Japan. She was also invited several times to perform guqin at the New York Mei An Qin School and the New York Qin Society. Ms. Lyu was invited to serve as a teaching assistant, interpreter, backstage director, and MC at Carnegie Hall during the China Meets America Cultural Festival in New York City. Finally, Ms. Lyu is also proficient in Chinese calligraphy and has won many awards in China and abroad.

Julia Caruso: Tech Assistant



Julia Caruso is the Studio Manager for the Music Technology Department. Before taking on the Studio Manager position at NYU, Julia Caruso was working as a broadcast engineer at CBS Radio. Additionally, she was also a live sound engineer at Columbia University and at the Frank Sinatra School of the Arts. Julia holds a B.M. in Music Technology from NYU.

Jay Mateyko: IMPACT Conference Assistant



Julianna Mateyko is a Masters candidate studying Music Education at New York University. Her undergraduate degree, completed at Syracuse University, is also in Music Education. Mateyko has a variety of teaching experience, from first grade general music to high school marching band. These experiences have led to an interest in classroom community and how it can be developed to support students and their involvement with music in and out of school settings. Other research interests include music education philosophy and practical application of theoretical concepts in the classroom. Upon graduating from NYU in 2015, Mateyko intends to begin her teaching career.