

NIME 2009 Conference Schedule



Wednesday June 3

Registration begins 5pm–7pm

College of Fine Arts' Great Hall Registration/Info Desk

Things to see/do on campus and around Pittsburgh on June 3:

Special Robotics Seminar

11am – Rm 3305 Newell Simon Hall, Carnegie Mellon

Speaker: Dr. Jorge Solis (Waseda University)

Title: The Development of Anthropomorphic Musical Performance Robots and Their Applications

Museums: Carnegie Museum of Modern Art, Carnegie Museum of Natural History, Andy Warhol Museum <http://www.carnegiemuseums.org/>

Jam sessions and Jazz: <http://www.cityserve.com/calendar.php>

Concerts: <http://calendar.triblive.com/pittsburgh-pa/venues/show/181796-club-cafe>

Gallery: Machine Improvisations, Wood St. Galleries <http://www.woodstreetgalleries.org/home.html>

8pm – STORIES OF CLOCKWORK (dulcimer duo from Indianapolis, Indiana) with Keir Neuringer & DJ Sniff (NYC sax & turntables improv) and Steve Pellegrino. Garfield Artworks – 4931 Penn Avenue, Pittsburgh PA 15224

Thursday June 4

8:30am–6:30pm, Registration/Info Desk

College of Fine Arts' Great Hall

12pm – 6pm, Installations

Regina Gouger Miller Gallery

9am, Welcome Address

Giant Eagle Auditorium, Baker Hall

Noel Zahler – Head, Carnegie Mellon School of Music

9am–11am, Session 1: Evaluation and Modeling

Giant Eagle Auditorium, Baker Hall

From Real to Virtual: A Comparison of Input Devices for Percussion Tasks
Mike Collicutt, Carmine Casciato and Marcelo Wanderley

Probabilistic Model of Pianists' Arm Touch Movement
Aristotelis Hadjakos, Erwin Aitenbichler and Max Mühlhäuser

A Quantitative Evaluation of the Differences between Knobs and Sliders
Steven Gelineck and Stefania Serafin

Evaluation of 3D Haptic Target Rendering to Support Timing in Music Tasks
Ricardo Pedrosa and Karon Maclean

Evaluating Interactive Music Systems: An HCI Approach
William Hsu and Marc Sosnick

11:15am, NIME 2009 Panel: "Tradition Meets Innovation"

Giant Eagle Auditorium, Baker Hall

International teleconference with computer music pioneers John Chowning, Roger Linn and Max Mathews

11am–2pm, Great Hall – Carnegie Mellon Bookstore Booth

12:15pm–1:45pm, 3:45pm–4:30pm, Session 2: Posters and Demos

College of Fine Arts' Alumni Concert Hall

The Ghetto Bastard: A Portable Noise Instrument
Neal Spowage

The Navi Activity Monitor: On Using Kinematic Data to Humanize Computer Music
Eric Humphrey and Colby Leider

Utilizing Tactile Feedback to Guide Movements Between Sounds
Alexander Müller and Georg Essl

An Interface for Live Interactive Sonification
Samuel Ferguson and Kirsty Beilharz

Responsive Music Interfaces for Performance
Alexander Reben, Mat Laibowitz and Joseph Paradiso

Hands On Stage: A Sound and Image Performance Interface
Chi-Hsia Lai

The Vibrobyte: A Haptic Interface for Co-Located Performance
Kyle McDonald, Dane Kouttron, Curtis Bahn, Jonas Braasch and Pauline Oliveros

Multi-Laser Gestural Musical Interfaces: Solutions for Cost-Effective and Open
Source Controllers
James Wiley and Ajay Kapur

Mims: Interactive Multimedia Live Performance System
Ryo Kanda, Mitsuyo Hashida and Haruhiro Katayose

Life Game Orchestra as an Interactive Music Composition System Translating
Cellular Patterns of Automata into Musical Scales
Keisuke Ogawa and Yasuo Kuhara

Natural Materials on Stage: Custom Controllers for Aesthetic Effect
John Toenjes

The Kalichord: A Physically Modeled Electro-Acoustic Plucked String Instrument
Daniel Schlessinger and Julius O. Smith III

Controlling Live Generative Electronic Music with Deviate
Sarah Keith

SpiralSet: A Sound Toy Utilizing Game Engine Technologies
Andrew Dolphin

LUMI: Live Performance Paradigms Utilizing Software Integrated Touch Screen
and Pressure Sensitive Button Matrix
Mike Gao and Craig Hanson

The SARC EyesWeb Catalog: A Pattern Recognition Toolbox for Musician-
Computer Interaction
Nicholas Gillian, R. Benjamin Knapp and Sile O'Modhrain

A 2D Fiducial Tracking Method Based on Topological Region Adjacency and
Angle Information
Hiroki Nishino

1:45pm-3:45 pm, Session 3: Robotics and New Interfaces

Giant Eagle Auditorium, Baker Hall

Anthropomorphic Musical Performance Robots at Waseda University: Towards Understanding the Nature of Human Musical Interaction

Jorge Solis, Takeshi Ninomiya, Klaus Petersen, Maasaki Takeuchi and Atsuo Takanishi

The Creation of a Multi-Human, Multi-Robot Interactive Jam Session

Gil Weinberg, Brian Blosser, Trishul Mallikarjuna and Aparna Raman

MusicGrip: A Writing Instrument for Music Control

Nan-Wei Gong, Mat Laibowitz and Joseph Paradiso

Let Loose with WallBalls, a Collaborative Tabletop Instrument for Tomorrow

Grant Partridge, Pourang Irani and Gordon Fitzell

SORISU: Sound with Numbers

Hye Ki Min

The Tactus: A Tangible, Rhythmic Grid Interface Using Found-Objects

Yotam Mann, Jeff Lubow and Adrian Freed

Real-Time Phase Vocoder Manipulation by Runner's Pace

Jason Hockman, Marcelo Wanderley and Ichiro Fujinaga

4:30pm-6pm, Session 4: Electroacoustics

Giant Eagle Auditorium, Baker Hall

A Discussion of Multidimensional Mapping in the Nymphone2

Kristian Nymoen and Alexander Refsum Jensenius

The Kalichord: A Physically Modeled Electro-Acoustic Plucked String Instrument

Daniel Schlessinger and Julius O. Smith III

Augmenting Chordophones with Hybrid Percussive Sound Possibilities

Otso lahdeoja

An Electroacoustically Controlled Vibrating Plate

Mark Kahrs, David Skulina, Stefan Bilbao and Murray Campbell

Don't Forget the Loudspeaker: A History of Hemispherical Speakers at Princeton, Plus a DIY Guide

Scott Smallwood, Perry Cook and Dan Trueman

7:30pm Box Office opens

8pm, Concert Program 1 – Kresge Theater

Robert Wechsler – The Oklo Phenomenon (excerpt)

David Lieberman – Anigraphical Etude 9

Min Eui Hong – Cosmic Strings II

Troy Rogers, Steven Kemper and Scott Barton – Study no. 1 for PAM and MADI

Garth Paine – Fue Sho

Tarik Barri – Versum – Fluor

Friday June 5

8:30am–6:30pm, Registration/Info Desk

College of Fine Arts' Great Hall

12pm – 6pm, Installations

Regina Gouger Miller Gallery

9am–11am, Session 5: Computer Systems

Giant Eagle Auditorium, Baker Hall

Features and Future of Open Sound Control Version 1.1 for NIME

Adrian Freed, Andrew Schmeder

A Low-Level Embedded Service Architecture for Rapid DIY Design of Real-Time Musical Instruments

Andrew Schmeder, Adrian Freed

Firmata: Towards Making the Microcontroller Act Like Extensions of the Computer

Hans-Christoph Steiner

Sharing Data in Collaborative, Interactive Performances: The SenseWorld DataNetwork

Marije A.J. Baalman, Harry C. Smoak, Christopher L. Salter, Joseph Malloch, Marcelo M. Wanderley

Challenges and Performance of High-Fidelity Audio Streaming for Interactive Performances

Nicolas Bouillot, Jeremy R. Cooperstock

“Extension du Corps Sonore” – Dancing Viola

Todor Todoroff, Frederic Bettens, Loic Reboursiere and Wen-Yang Chu

11am–2pm, Great Hall – Carnegie Mellon Bookstore Booth

11:15 am NIME 2009 Keynote, “Buried in Music” – Paul DeMarinis

Giant Eagle Auditorium

12:15pm–1:45pm, 3:45pm–4:30pm, Session 6: Posters and Demos

Alumni Concert Hall

Real-time Phase Vocoder Manipulation by Runner's Pace

Jason Hockman, Marcelo Wanderley and Ichiro Fujinaga

SORISU: Sound with Numbers

Hye Ki Min

The elBo and footpad: Toward Personalized Hardware for Audio Manipulation

Colby Leider, Douglas Mann, Daniel Plazas, Mike Battaglia and Reid Draper

The MIDI-AirGuitar, a Serious Musical Controller with a Funny Name

Langdon Crawford and Wiliam Fastenow

An Early Prototype of the Augmented PsychoPhone

Niels Böttcher and Smilen Dimitrov

Catch Your Breath

Diana Siwiak, Jonathan Berger and Yao Yang

A Wii-based Gestural Interface for Computer Conducting Systems

Lijuan Peng and David Gerhard

Chess-based Composition and Improvisation for Non-musicians

Dale Parson

MagNular: Symbolic Control of an External Sound Engine Using an Animated Interface

Andrew Dolphin

AUDIO ORIENTEERING: Navigating an Invisible Terrain

Noah Feehan

Developing the Cyclotactor
Staas De Jong

The Tactus: A Tangible, Rhythmic Grid Interface Using Found-Objects
Yotam Mann, Jeff Lubow and Adrian Freed

Designing for Conversational Interaction
Andrew Johnston, Linda Candy and Ernest Edmonds

midOSC: A Gumstix-Based MIDI-to-OSC Converter
Sébastien Schiesser

Parallel Processing System Design with “Propeller” Processor
Yoichi Nagashima

Where Did It All Go Wrong? A Model of Error From the Spectator’s Perspective
A. Cavan Fyans, Michael Gurevich and Paul Stapleton

Advanced Techniques for Vertical Tablet Playing: An Overview of Two Years of Practicing the HandSketch 1.x
Nicolas d’Alessandro and Thierry Dutoit

Gyroscope-Based Conducting Gesture Recognition
Andreas Höfer, Aristotelis Hadjakos and Max Mühlhäuser

1:45pm–3:45 pm, Session 7: Haptics and Extended Instruments
Giant Eagle Auditorium, Baker Hall

Using Haptics to Assist Performers in Making Gestures to a Musical Instrument
Edgar Berdahl, Guenter Niemeyer and Julius Smith III

Using Haptic Devices to Interface Directly with Digital Waveguide-Based Musical Instruments
Edgar Berdahl, Guenter Niemeyer and Julius Smith III

Haptic Carillon – Analysis & Implementation
Mark Havryliv, Fazel Naghdy, Greg Schiemer and Timothy Hurd

The Electrumpet: a Hybrid Electro-Acoustic Instrument
Hans Leeuw

Sensor Technology and The Remaking of Instruments from the Past
Emmanuelle Gallin and Marc Sirguy

Twenty-First Century Piano
Sarah Nicolls

4:30pm–6pm, Session 8: Design and Graphics
Giant Eagle Auditorium, Baker Hall

Designing for Conversational Interaction
Andrew Johnston, Linda Candy, Ernest Edmonds

Designing for Style in New Musical Interactions
Michael Gurevich, Paul Stapleton and Peter Bennett

Re-Designing Principles for Computer Music Controllers : A Case Study of
SqueezeVox Maggie:
Perry Cook

Interfacing Graphic and Musical Elements in Counterlines
Jaroslaw Kapuscinski, Javier Sanchez

FrameWorks 3D: Composition in the Third Dimension
Richard Polfreman

7:30pm Box Office opens

8pm Concert Program 2, Kresge Theater
Chikashi Miyama – Angry Sparrow
Eric Lyon, Ben Knapp, Gascia Ouzounian
Marjie A.J. Baalman – Code LiveCode Live, or livecode embodied
Guiseppe Torre, Robert Sazdov and Dorota Konczewska – MOLITVA –
Composition for Voice, Live Electronics, Pointing-at Glove Device and 3D Setup
of Speakers

10pm Club Performance/Informal jam session
Skibo Café, University Center (UC)

Saturday June 6

8:30am–6:30pm, Registration/Info Desk
College of Fine Arts' Great Hall

12pm – 6pm, Installations

Regina Gouger Miller Gallery

9am–11am, Session 9: Sensing and Conducting

Giant Eagle Auditorium, Baker Hall

Novel and Forgotten Current-steering Techniques for Resistive Multitouch, Duotouch, and Polytouch Position Sensing with Pressure

Adrian Freed

A Force-Sensitive Surface for Intimate Control

Randy Jones, Peter Driessen, Andrew Schloss and George Tzanetakis

A Flexible Mapping Editor for Multi-Touch Musical Instruments

Greg Kellum, Alain Crevoisier

Phalanger: Controlling Music Software With Hand Movement Using A Computer Vision and Machine Learning Approach

Chris Kiefer, Nick Collins and Geraldine Fitzpatrick

The UBS Virtual Maestro: an Interactive Conducting System

Teresa Nakra, Yuri Ivanov, Paris Smaragdis and Chris Ault

The Vocal Augmentation and Manipulation Prosthesis (VAMP): A Conducting-Based Gestural Controller for Vocal Performance

Elena Jessop

11am–2pm, Great Hall – Carnegie Mellon Bookstore Booth

12:15pm–1:45pm, 3:45pm–4:30pm, Session 10: Posters and Demos

College of Fine Arts' Alumni Concert Hall

The Vocal Augmentation and Manipulation Prosthesis (VAMP): A Conducting-Based Gestural Controller for Vocal Performance

Elena Jessop

Designing Smule's iPhone Ocarina

Ge Wang

The Drummer: a Collaborative Musical Interface with Mobility

Andrea Bianchi and Woon Seung Yeo

The Electrumpet, a Hybrid Electro-Acoustic Instrument

Hans Leeuw

Double Slide Controller

J. Tomas Henriques

Using Haptics to Assist Performers in Making Gestures to a Musical Instrument

Edgar Berdahl, Guenter Niemeyer and Julius Smith III

Scratch-Off: A Gesture Based Mobile Music Game with Tactile Feedback

Nicholas Gillian, Sile O'Modhrain and Georg Essl

Designing for Style in New Musical Interactions

Michael Gurevich, Paul Stapleton and Peter Bennett

Re-Designing Principles for Computer Music Controllers : A Case Study of SqueezeVox Maggie

Perry Cook

A Flexible Mapping Editor for Multi-Touch Musical Instruments

Greg Kellum and Alain Crevoisier

A Force-Sensitive Surface for Intimate Control

Randy Jones, Peter Driessen, Andrew Schloss and George Tzanetakis

HSP: A Simple and Effective Open-Source Platform for Implementing Haptic Musical Instruments

Edgar Berdahl, Günter Niemeyer and Julius Smith III

Phalanger: Controlling Music Software With Hand Movement Using A Computer Vision and Machine Learning Approach

Chris Kiefer, Nic Collins and Geraldine Fitzpatrick

VERSUM: Audiovisual Composing in 3D

Tarik Barri

Towards a Humane Graphical User Interface for Live Electronic Music

Jamie Bullock, Lamberto Coccioli

YARMI, an Augmented Reality Musical Instrument.

Tomás Laurenzo, Ernesto Rodríguez and Juan Fabrizio Castro

SpeedDial: Rapid and On-The-Fly Mapping of Mobile Phone Instruments

Georg Essl

ForTouch: A Wearable Digital Ventriloquized Actor
Sidney Fels, Robert Pritchard and Allison Lenters

1:45pm–3:45 pm, Session 11: Control Strategies and Installations
Giant Eagle Auditorium, Baker Hall

Words, Movement and Timbre
Alex McLean, Geraint Wiggins

A Meta-Instrument for Interactive, On-the-fly Machine Learning
Rebecca Fiebrink, Dan Trueman and Perry R. Cook

Action and Perception in Interactive Sound Installations: An Ecological Approach
Jan Schacher

The Argus Project: Underwater Soundscape Composition with Laser-Controlled Modulation
Jonathon Kirk, Lee Weisert

PlaySoundGround: An Interactive Musical Playground
Michael St. Clair, Sasha Leitman

The Fragmented Orchestra
Daniel Jones, Tim Hodgson, Jane Grant, John Matthias, Nicholas Outram and Nick Ryan

4:30pm–6pm, Session 12: Mobile Music
Giant Eagle Auditorium, Baker Hall

Designing Smule's iPhone Ocarina
Ge Wang

Scratch-Off: A Gesture Based Mobile Music Game with Tactile Feedback
Nicholas Gillian, Sile O'Modhrain and Georg Essl

ZooZBeat: A Gesture Based Mobile Music Studio
Gil Weinberg, Andrew Beck and Mark Godfrey

The Drummer: A Collaborative Musical Interface with Mobility
Andrea Bianchi, Woon Seung Yeo

6pm–8pm, Banquet. Doors open at 5:30pm.

Rangos Ballroom, University Center

7:30 – Box Office opens

8pm Concert Program 4 – Kresge Theater

Colby Leider – Afflux/Reflux

Ge Wang and Rebecca Fiebrink – PLOrk Beat Science 2.0

David Wessel – “Hands On” 2009 – a new work for SLABS controller and generative algorithms

Ben Neill and Eric Singer – Ben Neill and LEMUR

R. Luke DuBois and Lesley Flanigan – Bioluminescence

Installations:

Elemental & Cyrene Reefs

Ivica Bukvic and Eric Standley

<http://ico.bukvic.net/>

Cellphonia: 4' 33"

Scot Gresham–Lancaster and Steve Bull

<http://www.cellphonia.org/video/>

Pendaphonics

Dan Overholt, Byron Lahey, Anne–Marie Skriver Hansen, Winslow Burleson,
Camilla Nørgaard Jensen

www.pendaphonics.com

Sound Lanterns

Scott Smallwood

<http://silvertone.princeton.edu/~skot/sunbeamsounds/>

AANN: Artificial Analog Neural Network

Phillip Stearns

<http://www.art-rash.com/pixelform/installation/AANN>