

Performances Workshops Talks and roundtables Installations

Posters/demonstrations

# International Conference on

## Live Interfaces 2014 //

### 19th - 23rd November 2014

@Liveinterfaces





#### WEDNESDAY NOVEMBER 19TH

#### IADE - Instituto de Arte, Design e Empresa:

#### WORKSHOP 1 | 9h30-13h00

#### Michele Mengucci and Francisco Medeiros: Visual Programming with Pure Data (10€/p)

Participants will learn how to create multimedia applications of interaction between sound and image, using Pure Data.

#### THURSDAY NOVEMBER 20TH

#### IADE – Instituto de Arte, Design e Empresa:

#### WORKSHOP 2 9h30-16h00

#### Jared Hawkey and Sofia Oliveira: Human Entities... An artistic approach to the IoT (participation free)

Active examination of the class of technologies described as the Internet of Things (IoT). Participants will explore its problematic implications for the notions of human agency and social identity, through a set of exploratory questions and practical exercises

#### Museu Nacional de Arte Contemporânea do Chiado:

#### INSTALLATIONS | Thursday 20th-Sunday 23rd Opening and welcome reception | Thursday 17h30-21h00

#### Alessio Chierico: Trāţaka

The visitor is invited to wear a brain-computer interface and concentrate their attention on a candle flame. The level of attention controls an airflow under the flame; the highest level of attention makes the air flow strong enough to extinguish the flame.

#### André Gonçalves: Displaced Acts of (Un)Related Causality

This work incorporates and intertwines some of André's best visual and sound explorations transposed to performative and installation contexts. It makes use of a modular synthesizer system to generate landscapes of ever changing musical patterns leading to a contemplative state.

#### Ian Willcock: You. Here. Now.

The work constantly trawls the websites of news organizations, sampling all visual imagery it comes across. As the passer-by examines the piece, their portrait emerges from several hundred tiny fragments of collected data.

#### Rodrigo Carvalho, Yago de Quay and Shen Jun: The Interpreter

Glitch ambient sounds and visual patterns are generated from pre-recorded dance motion data. The visitor creates new interpretations by manipulating the data through a touchscreen.

#### FRIDAY NOVEMBER 21ST

#### Faculdade de Belas-Artes da Universidade de Lisboa:

#### WORKSHOP 3 | 9h30-13h00

#### Martin Howse: Detection (10€/p)

This workshop examines how to make audible minute material change and process. Participants will learn how to: a) build devices to play back and decode surface marks and inscriptions using a custom designed FM radio transmitter, and learn to use a simple reflecting laser pickup; and b) make audible fluctuations in laser light and sonify electrochemical reactions (DIY interferometer).

#### ROUNDTABLE: Questioning foundations | 15h00-16h00

Teresa Cruz: art - dead or alive? Joel Ryan: "Knowing When" Mick Grierson: interaction design: personal vs. common use? Edwin van der Heide: audience and space as performers Moderation: Adriana Sa

#### João Cordeiro: FuXi

Audio-visual performance that uses the position of a fish in a fish tank as an input. The fish's behavior is tracked with a camera. The image is also projected on the screen, combined with graphics influenced by the fish's behavior.

#### Franziska Schroeder, Pedro Rebelo and Ricardo Jacinto: Interfacing fragility

Franziska plays saxophone, Ricardo plays cello, and Pedro plays piano with a custom interface that modifies the acoustic behavior of the piano: a small wooden board with strings and pick-ups connected to a small amplifier, placed inside the piano.

#### Amelie Hinrichsen, Dominik Lopes and Till Bovermann: PushPull – Balgerei

Performance with three similar instruments. Central control element is a bellow combining inertial sensor data with mechano-analog sound input and digital synthesis. The trio touches chaotic elements as well as rhythmical patterns, while shifting between audio feedback and harmonic structures.

#### Horácio Tomé-Marques, João Menezes, Tiago Ângelo and Miguel Carvalhais: EshoFuni@TheAbyss

Audio-visual performance with real-time representation of brain data (EEG). The interface uses a virtual physics engine (made with Max/MSP) to process EEG signal.

#### SATURDAY NOVEMBER 22ND

#### Faculdade de Belas-Artes da Universidade de Lisboa:

#### PAPER SESSION 3: Performative arena | 10h30-11h45

#### Isabel Pires and Rui Pereira Jorge:

Musical Virtual Instruments and Auditory Perception - some issues Thinking of "virtual instruments" and performative gestures while considering the coherence between the auditory expectation generated in the listener / viewer, and the actual sound result.

#### Marko Ciciliani: Towards an Aesthetic of Electronic-Music Performance Practice A method to aesthetically evaluate the different performance practices that have emerged in electronic music, so as to reach a better understanding of the differing concepts and artistic implementations of performance in electronic music

#### Edwin van der Heide: Interaction in Physical Space

The works 'Radioscape' and 'The Speed of Sound' will be used to convey two different approaches to interaction with(in) our surrounding physical space.

#### Adam Parkinson and Alex McLean:

Interfacing with the Night - intersecting club music and academia A critical view of the club as a site for music research: notions of dance as embodied listening, the curatorial role of club music promoters in creating space for new communities and culture, and crossovers with concert hall performance.

#### PAPER SESSION 4: User interaction II | 11h55-13h05

#### Nuno N. Correia and Atau Tanaka: User-Centered Design of a Tool for Interactive Computer-Generated Audiovisuals A user-centered design study aiming to develop a software tool for audiovisual performances, using computer-generated sound and graphics, combining ease of use with expressiveness, and taking into account audience participation.

#### Cesar Vandevelde, Peter Conradie, Jolien De Ville and Jelle Saldien: Playful Interaction - exploring the design of a tangible rhythmic musical interface Introducing the Drum Duino, a fun, playful interactive instrument for children to compose and explore rhythms played on different objects, inspired by traditional methods of play.

Pedro Cardoso and Miguel Carvalhais: Playing in 7D - considerations for a study of a musical instrumentality in the gameplay of video games

Seven dimensions of action in video games, which define gameplay; how they may convey instrumentality in music, sonic composition and performance.

Koichi Samuels: Enabling Creativity - inclusive musical control interfaces and practices Discussing how inclusive music technologies and practices overcome barriers to participation for people with disabilities.

#### Yaxu: Launderette

Yaxu (Alex McLean) generates live beats from code, projecting his screen so audience members can see how the music is made, while dancing to it. Alex is cofounder of the algorave movement, a portmanteau of "algorithm" and "rave".

#### SUNDAY NOVEMBER 23RD

#### Escola de Música do Conservatório Nacional

#### POSTER SESSION | 14h00-17h00

Ikhsan Assaat and Kia Ng: Reimagining "Talempong" as a Digital Musical Interface A transposition of the West Sumatran traditional music instrument.

Rui Avelans Coelho: "A Window Into the Past" – demonstration of an immersive interactive experience at the Castelo de São Jorge Software enabling multiple narratives about the Castle of São Jorge in Lisbon.

Mat Dalgleish: Reconsidering process - bringing thoughtfulness to the design of digital musical instruments for disabled users An argument concluding that new musical instrument designs should only be produced if existing designs are ruled out.

Polina Dronyaeva and Alexander Senko: New Media as Technologies of Self An argument concluding that the manipulation of new media is an activity interesting in itself, so that content becomes irrelevant.

#### Paulo Fontes, Ana Figueiredo and Carlos Oliveira: Hug Me – a tangible interactive multimedia installation that explores human sentience Documenting an installation where sound and image are influenced by how people

hug a mannequin.

Clara Gomes: Cyberformance - interfacing the physical and the virtual A re-definition of "cyberformance", which sees digital platforms as augmented and hypermediated environments, rather than immersive environments.

#### Jose Tomás Henriques: Sonik SpringTM - real-time sculpting of sound and video Handheld wireless controller, designed for electronic music performance, real-time

sound processing, DJing and Video-DJing.

#### Shelly Knotts: Controller

An interface that varies the level of control of participant performers during collective improvisation.

#### Michele Mengucci, Francisco Medeiros and Miguel Amaral: Image Sonification

An application originally developed as a tool to aid blind users, which converts the colors and light/in a digital/image into sound

#### Lorna Moore: PULse - Amelia and Me

An interface for dance performance, where video images from the landscape of Amelia (Italy) are controlled via a biometric heart rate monitor

#### Andrew Robertson and Steve Webster:

The Synchotron - designing an interactive sequencer Reinventing the step-sequencer to record during live performance.

#### Tim Sayer: Hypnagogia and Improvisation - using biofeedback as an intervention in live improvised performance

Mapping cognitive states using biofeedback (EEG) and machine learning, so as to influence the performer's behavioral pallet, rather than control external processes.

#### Christoph Theiler and Renate Pittroff: Fluid Control

A tool for controlling electronic sounds through water.

#### Sophie Wagner: Poietry

A musical interface powered by brainwaves, which translates emotions into compositional sound structures.

#### Victor Zappi and Andrew McPherson:

Design and Use of a Hackable Digital Instrument A new digital musical instrument specifically designed to elicit unexpected creative uses and to support modification and customization by the performer.

#### PAPER SESSION 1: User interaction I | 16h10-17h25

Luisa Ribas: On Performativity - a perspective on audiovisual interactive systems as aesthetic artifacts Exploring three different views on performativity while discussing the role of user and system as agents in the production of audiovisual outcomes.

#### Kia Ng, Joanne Armitage, Matt Benatan, Ian Symonds, Laurie Johnson and David Moore: Interactive Musical Chair - seated percussion with real-time visualizations Adapting a sound-colour synaesthetic mapping concept from a recent project on visual accompaniment for live concert performance, to an installation for a science museum to engage a wider range of users.

#### Paulo Fontes, Ana Carina Figueiredo and Carlos Oliveira: Hug Me - a tangible interactive multimedia installation that explores human sentience

Concept, implementation and analysis of a tangible interactive multimedia installation that explores human emotions and participants' feelings, based on how they hug.

Ian Willcock: Now and then - The possibilities for contextual content in digital art Examining how context is related to key theories of live digital art, and how networked technologies might help artists include contextual content in their work.

#### PAPER SESSION 2: Author interaction I | 17h35-18h50

#### Polina Zioga, Minhua Ma, Frank Pollick and Paul Chapman: A Wireless Future performance art, interaction and the brain-computer interfaces

The use of brain-computer Interfaces in real-time audio-visual and mixed-media performances; the new wireless devices, performative and neuroscientific challenges, future trends and a model of possible interactions.

Pete Furniss and Martin Parker: gruntCount (bass clarinet edition) - blurring the piece/ system/instrument distinction in electronically augmented instrumental practice Challenging traditional definitions of what constitutes a 'piece' or 'instrument' while establishing an environment for human-machine improvisation that serves the musical result and not just the system itself.

#### Tom Mudd, Simon Holland, Paul Mulholland and Nick Dalton: Nonlinear Dynamical Systems as Enablers of Exploratory Engagement with Musical Instruments The roles played by nonlinear dynamical systems in musical instruments; their relation to exploratory engagement, free improvisation, and approaches to making music that focus on a two-way relationship between musicians and tools.

#### Victor Zappi and Andrew McPherson:

Design and Use of a Hackable Digital Instrument Introducing the D-Box, a new digital musical instrument, based on embedded Linux technologies and specifically designed to elicit unexpected creative uses through hacking and circuit bending.

#### WORKSHOP REPORTS | 19h00-19h40 SUMMARY OF THE DAY by Thor Magnusson | 19h40-19h55

#### Escola de Música do Conservatório Nacional:

#### PERFORMANCE SESSION 1 | 21h30-24h00

#### Ikhsan Assaat: The Tribute v2.0

A fusion of acoustic and digital percussion performance in the realm of an Indonesian traditional instrument - talempong. The performance features a digital 'talempong' with gestural control on an iPhone interface, with accompaniment using acoustic drums and traditional 'talempong' instruments.

#### PAPER SESSION 5: Author interaction II | 14h30-15h45

Amelie Hinrichsen, Sarah Hardjowirogo, Dominik Lopes and Till Bovermann: PushPull - reflections on building a musical instrument prototype Describing how hopes and requirements, as they emerged in the design process of a new musical instrument, inform the interpretation of the notion "complexity" within the context of music making.

#### Horácio Marques, Bruce Pennycook and Miguel Carvalhais: Brain - the ultimate enactive interface?

A philosophical insight based on a transdisciplinary approach to the brain apparatus and phenomena beyond brain-computer interfaces and assumed explanations of any kind.

#### Pedro Rebelo: Instrumental Parasites - interfacing the fragile and the robust The parasitical relationship between the grand plano and the myriad objects used in its preparation as pioneered by John Cage is here discussed from a perspective of free improvisation practice.

#### Chris Kiefer: Interacting with Text and Music - exploring tangible augmentations to the live-coding interface

An exploration of the interactive affordances of live-coding environments, an experiment in 'approximate programming', and the presentation of a novel interface for performing music with code as a medium.

#### SUMMARY OF THE DAY by Alex McLean and Miguel Carvalhais | 15h45-16h00

#### Escola de Música do Conservatório Nacional:

#### PERFORMANCE SESSION 2 | 19h30-20h30

#### Thor Magnusson and Miguel Mira: Fermata

Thor's Threnoscope system scores and visualizes harmonic relationships between extended notes that can be spatialized in multichannel sound. The kaleidoscopic textures of Miguel's cello are an ideal accompaniment to the non-percussive and moving sonic landscapes.

#### Atau Tanaka and Adam Parkinson: AA Soundsystem

Atau performs with the BioMuse, which captures neuron impulses resulting from muscle tension (EMG). Adam performs using Pure Data patches on a single-board computer, distilling the laptop to a circuit board.

#### ZDB - zedosbois:

#### PERFORMANCE SESSION 3 | 22h30-02h00

#### Frances Wang: Stream Dye

A textile interface using 3D positional tracking to control sound and motion graphics; videomapping enables the visuals to appear at the exact position where the gestures are performed.

#### Marko Ciciliani: Intersection

Audio-visual performance with images of people in transit. Marko uses a tablet to affect both the visual and the auditory aspects of the work, creating rapid chromatic inversions and light fixtures.

#### Chris Kiefer: Inflorescence

A live-coding performance with a plant-like interface consisting of motion sensing wire stalks, which Chris manipulates to control sound.

#### Shawn Lawson and Ryan Smith: Kessel Run

A live-coding performance where the generative coding is integrated into the visuals. Shawn and Ryan's successes, struggles, and failures substantiate in the intertwining of signal and logic.

#### SUMMARY OF THE DAY by Edwin van der Heide | 17h00-17h15 ROUNDTABLE: Further directions | 17h15-18h00

Joel Ryan: the role of effort in music and the materiality of musical instruments Atau Tanaka: handling gaps between art & science Alex McLean: ICLI 2012 - bringing philosophical perspectives into a technocentric field Thor Magnusson: preliminary thoughts about ICLI 2016

#### Moderation: Adriana Sa ZDB – zedosbois:

#### PERFORMANCE SESSION 4 21h30-24h00

#### Sébastien Piquemal and Tim Shaw: Fields

Sébastien and Tim explore mobile technology as a medium for sound diffusion, creating an omni-directional sonic experience. Audience members can join in by connecting to a specific website with their mobile phone, laptop or tablet.

#### Leon McCarthy: betav09 – Audience Interaction / Performer Reaction

An audio-visual performance during which the audience will use twitter to post comments to the projections. Through the dynamics of his performance, can Leon play a game of cat-and-mouse, shifting the audience's focus between writing and watching?

#### Myriam Bleau: Soft Revolvers

Myriam plays 4 spinning tops built with clear acrylic, creating shifting rhythmic soundscapes. The tops are equipped with gyroscopes and accelerometers, which inform Pure Data algorithms. A camera provides video feed that is manipulated and projected back on the screen.

#### Juan Regino and Ana Gutieszca: Sonic Drawings

Juan and Ana synthesize sound and image by drawing on paper, with graphite pencils and conductive ink tools. The interface measures conductivity from graphite traces. A camera is used for live tracking hand position gesture speed.

#### Pete Furniss and Martin Parker: gruntCount (bass clarinet edition)

An improvisation for bass clarinet and computer, in which aspects of timing, flow, duration and effort are controlled by the performer, who negotiates a plotted and nuanced journey through sound processing modules which have been specifically designed around his individual playing style.

#### THURSDAY 20 - SUNDAY NOVEMBER 23

Andrea Cohen and Wiska Radkiewicz / SoundSon Project: Room of Mirrors Andrea and Wiska will use audio recordings made throughout the conference to create a collaborative composition, documenting the intensity of this gathering. Living in different countries, they will exchange sounds through the Internet and make the resulting piece available online.

#### General chair: Adriana Sa

#### Co-chairs: Miguel Carvalhais and Alex McLean

Scientific committee: Samuel Aaron, Baptiste Caramiaux, Miguel Carvalhais, Maria Chatzichristodoulou, Teresa Cruz, Emilia Duarte, Mick Grierson, Edwin van der Heide, Martin Kaltenbrunner, Alex McLean, Thor Magnusson, Kia Ng, Rui Penha, Carlos Pimenta, Isabel Pires, Pedro Rebelo, Luisa Ribas, Adriana Sa, Daniel Schorno, Franziska Schroeder, Atau Tanaka

Technical coordination: John Klima