# Aalborg Universitet



# **Digital Creativity**

Children's Playful Mastery of Technology Petersson Brooks, Eva; Brooks, Anthony Lewis

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ISTANBUL NOVEMBER 10-12 2014

# 4<sup>th</sup> International Conference on Arts & Technology



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ArtsIT2014 delegates; distinguished guests/keynote speaker; attending students; local and international organising teams and individual representatives of ArtsIT2014 sponsors and partners, namely, the European Alliance of Innovation, CREATE-NET, Sabancı University, and AMBER Electronic Arts.

#### Dear all,

It is with great honour that I welcome you all on behalf of the ArtsIT steering committee to Istanbul and the fourth ArtsIT international conference.

This event has been realised thanks to many months of preparations and hard work, both locally and internationally, and the steering committee is indebted to all involved. So, to those both in front and behind the scenes of ArtsIT2014, please accept our gratitude and acknowledgement for the time and effort in volunteering to make this event happen— THANK YOU!

The steering committee also sends its thanks to you, the delegates and students attending ArtsIT. Together these days, you will experience selected works of researchers, artists, designers and industry members whose ideas and creative outputs will help shape the future of art and technology. It's expected that attendees should gain insights into novel innovative technologies and trans-disciplinary activities that are making strong impacts both on the world of the arts and on society at large. Experiences embedded from these days are anticipated to influence and motivate attendees' future contribution to their relevant and diverse fields such that a desire to return to showcase your own work is evoked. We thank you for understanding the potentials from attending ArtsIT events.

At this point, I insert a personal note. When visiting to work with the local team is setting up this event, during my days as tourist, I became aware of the richness of Ottoman art, both the architecture and the textbased images in languages I did not understand. The aesthetics drew me in: I was fascinated.

It was an art seeped in history with clear influences of Hittites, Ancient Greeks, Islamic, Persian and Byzantines. I also experienced ceramic mosaics, coloured tiles in palaces, mosques and türbe mausolea... the Basilica Cistern (my underground excursion), Aya Sofya, Topkapı Palace, Blue Mosque, Süleymaniye Mosque, Chora Church, Galata Tower,

I realised how little I knew about this wonderful place and its historic and ongoing contribution to the art(s) world(s), both physical and virtual, as well as to life itself.

This time maybe I try a massage at the Ayasofya Hürrem Sultan Hamam; a public ferry up the Bosphorus to Andalou Kavagi to climb the Genoese Castle to see amazing views of the Black Sea, including fish at the wonderful local restaurants, and finishing with a tram up the Grand Rue de Pera (İstiklal Caddesi). There is so much to experience in this wonderful cultural centre — what a fitting place for an ArtsIT event!

In closing this introduction, I admit to feeling inapt to fully represent what you have ahead over these days. I know that the local team has targeted a very special experience for all and I can only recommend that you embrace that opportunity, whatever your situation and background, to openly perceive all that is possible to absorb of this wonderful host city and its riches beyond material wealth that are offered... get your DigArt+Istanbul "fix"... then you too will want to return, as I do, to be able to again experience the wonderful hospitality and sharing that I have experienced in my visits to Istanbul.

Welcome to ArtsIT2014 + Welcome to Istanbul: Experience it, embrace it, enjoy it, - have fun and learn from it.

ArtsIT Steering Committee Anthony Lewis Brooks

Program 🔶

09:00	Registration
09:30	Welcome to ArtsIT 2014 in Istanbul by Elif Ayiter
09:45	ArtsIT 2014 Introduction by Anthony Lewis Brooks
10:30	Coffee Break
11:00	<b>The Substance of the Body in the Societies of the</b> <b>Contemporary Arts</b> by Emmanouela Vogiatzaki and Artur Krukowski
11:30	Google DevArt: Following the Success of Google's Android Market in the Visual Arts? by JungHyun Anna Park, Sang-Yeal Han
12:00	Lunch break
14:00	Keynote talk: From Analog to Digital, Fictive vs. Documentary: An Ongoing Journey by Murat Germen
15:00	Coffee Break
15:30	<b>Art Session:</b> Begüm Bahçecik, Berkay Kaya, Deniz Cem Önduygu, Doruk Türkmen, Mert Toka, Murat Durusoy, Osman Koç, Servet Ulaş, Sina Cem Çetin.

09:00	Generation of Engineering Research Directions through
	Artistic Process by Marco Pinter, Angus Graeme Forbes, Danny
	Bazo, and George Legrady   SKYPE CONFERENCE

- 09:30 Virtual Idol Hatsune Miku: New Auratic Experience of the Performer as a Collaborative Platform by Jelena Guga
- 10:00 **Traditional Painting Revised: The Ambient Intelligence Approach to Creativity** Nikolaos Partarakis, Margherita Antona, Emmanouel Zidianakis, Panagiotis Koutlemanis and Constantine Stephanidis

#### 10:30 Coffee break

- 11:00 When Technology Collaborates: Politics and the Aesthetic of "We" Human-and-Technology by Hyunkyoung cho, Timothy W. Luke, and Joonsung Yoon
- 11:30 Poetry of Separation: The aesthetics of spatial montage and generative editing for multi-layered screens by Bahng So Jung, Yoo Doo Won,Hutchings Patrick, Shi Chung Kon, Wakefield Graham

### 12:00 Lunch break

14:00 Keynote talk: Notes Towards a History of Art, Code and Autonomy by Paul Brown

#### 15:00 Coffee break

- 15:30 **Technologies Expand Aesthetic Dimensions: Visualization and Sonification of Embodied Penwald Drawings** by Myounghoon Jeon, Steven Landry, Joseph D. Ryan, and James W. Walker
- 16:00 **Exploring Felt Qualities of Embodied Interaction with Movement and Sound** by Cumhur Erkut, AnuRajala Erkut, Sofia Dahl
- 20:00 **GALA DINNER** SubHotel, Karaköy See the Event Booklet for Map

WEDNESDAY NOVEMBER 12

- 09:00 A Proposal for the Creation of a Dance Ontology by Annabel Clarance
- 09:30 Interactive Internet theatre (Interactive multimedia solutions at the New Aleksandrinsky Theatre Stage) by NikolayBorisov, ArtemSmolin, Denis Stolyarov, Pavel Shcherbakov
- 10:00 **Design of a non-intrusive augmented trumpet** by Claudia Rinaldi, Federica Battisti, Marco Carli, and Luigi Pomante
- 10:30 Coffee Break
- 11:00 **Digital Creativity: Children's Playful Mastery of Technology** by Eva Petersson Brooks, Anthony Lewis Brooks
- 11:30 **Authoring of digital games via card games: make playful play happen** by Andrea Valente, Emanuela Marchetti
- 12:00 Lunch break
- 14:00 Large-Scale Analysis of Art Proportions by Kristoffer Jensen
- 14:30 **Augmented Sculptures: What You See is not What You See** by Selçuk Artut
- 15:00 Coffee Break
- 15:30 **Roundtable Discussion: ICTARTCONNECT.study @ ArtsIT:** What is the outcome if work on novel ICT - Information and Communication Technologies - is linked with artistic expression? This is the question asked by the study 'ICT ART CONNECT' funded by the European Commission (DG CONNECT) and the question raised during the roundtable.

# Presentations $\rightarrow$

#### KEYNOTE SPEAKER

### **Murat Germen**



Murat Germen is an artist using photography as a research tool. Has an MArch degree from M.I.T, where he went as a Fulbright scholar and received AIA Henry Adams Gold Medal for academic excellence. Works as a professor of art, photography, new media at Sabancı University, Istanbul. Has presented at conferences like SIGGRAPH, ISEA, Mutamorphosis, TSC, CAe, CAC2, EVA-London, eCAADe, ASCAAD. Has opened over seventy inter/national group/solo exhibitions. He is represented by C.A.M. Gallery (Turkey), ARTITLED! (Netherlands-Belgium), Rosier Gallery (USA). More than 300 editions of the artist's artworks are in personal collections inter/nationally, in addition to a few that are in Istanbul Modern's and Proje4L Elgiz Museum of Contemporary Art (Istanbul) collections.

Photo by Michelia Kramer

#### ABSTRACT NOVEMBER 10, MONDAY, 14:00 muratgermen.com

#### From Analog to Digital, Fictive vs. Documentary: An Ongoing Journey

This talk will focus upon a personal update of my sojourn as an artist/academician - a journey that has led me from the analog to the electronic medium spanning a timeline of 30 odd years. The exploration, still in progress, will start with city planning, architecture and photography where I acquired, and developed my analog skills. Following this, I will focus on my encounter with the digital revolution, right at a time when the foundations were being laid at one of the leading institutions of the world. I will then ponder on the possible common grounds between analog / digital also by bringing in notions such as serendipity, surprise, uncertainty, inadvertence. These will constitute the grounds upon which I base my artistic experimentations and my academic research on various transformations in contemporary aesthetics. Since my main visualization area is photography; indispensable conceptual components such as representation, real, surreal, objectivity, subjectivity, construct will be mentioned and linked to an empirical process based practice.

In addition to investigations on possible relations between art and engineering, I will also reveal my cultural, social, political stance in the light of issues like local vs. global and rhizomatic vs. hierarchic. I will then conclude with my recent concentration on documentary work, after numerous fictive constructions in the digital realm. My objective is to emphasize participatory, collective culture and history making by taking advantage of the democratization brought by ubiquitous mobile imaging and social media communication.

#### ABSTRACT NOVEMBER 11, TUESDAY, 14:00 paul-brown.com brown-and-son.com

Photo by Francesca Franco

#### **REYNOTE SPEAKER Paul Brown**



isan artist and writer who has specialised in art, science &technology since the late-1960s and in computational & generativeart since the mid 1970s. His early work included creatinglarge-scale lighting works for musicians and performance groupslike Meredith Monk, Music Electronica Viva, Pink Floyd, etc... and he has an international exhibition record that includes thecreation of both permanent and temporary public artworks datingfrom the late 1960s. He has participated in shows at major venueslike the TATE, Victoria & Albert and ICA in the UK; the AdelaideFestival; ARCO in Spain, the Substation in Singapore and the Venice Biennale and his work is represented in public, corporate and private collections in Australia, Asia, Europe, Russia and theUSA. With Charlie Gere, Nick Lambert and Catherine Mason he was aco-editor of White Heat Cold Logic - British Computer Art 1960-1980 (MIT Press, Leonardo Imprint, 2009). Since 2005 hehas been honorary visiting professor and artist-in-residence atthe Centre for Computational Neuroscience and Robotics, School of Engineering and Informatics at the University of Sussex.

Paul Brown was a member of that group at the Slade School and

#### Notes Towards a History of Art, Code and Autonomy

The work of Paul Cezanne, Georges Seurat and their contemporarieshad a profound influence on the art of the 20th century. Art asa formal analysis of it's own internal processes became a commontheme of several inter-related art movements that, in the 1960's, overthrew the concept of art as object and replaced it with one of art as process. The systems and conceptual artistsembraced and developed these ideas and then, in the 1970's, anew generation of artists began to encode these concepts using theformal linguistics made possible by the new science of computing. Computer art, as such, was not new: by 1970 it wasat least 20 years old and already in 1968 Jasia Reichardt, atLondon's Institute of Contemporary Art (ICA), had curated amajor historical survey of the field called CyberneticSerendipity . But it was the young artists working at the SladeSchool of Art's postgraduate Experimental and Computing Department from 1974 to 82 who were specifically applying theideas from both systems and conceptual art within the context of the emergent computational domain

#### NOVEMBER 10, MONDAY, 11:00

# The Substance of the Body in the Societies of the Contemporary Arts

#### Emmanouela Vogiatzaki

Open University of Cyprus, Department of Theatre Studies, Cyprus **Artur Krukowski** Intracom S. A. Telecom Solutions, R&D Unit2, Greece

This paper observes the substance of the body in the Performance Art. By taking into account that the Art reflects social, cultural and sometimes political realities, we attempt to trace what kind of messages an artwork with advanced technological means transmits to us, the spectators or artists. This study concentrates on the Cyborg Theatre, in which the technology is a very important element in order for a performance to be staged. It is a technological performance, which cannot occur without the presence of a body. Here we refer to a cyborg body as an extended human organism, a cyborg being with mechanical parts, which integrates non organic means in order to obtain substance inside the artwork. Focusing at this kind of theatrical performance, we observe the relationship that develops between the performer and the spectator. It is an unusual interaction between those two parties, which deserves our attention. We claim that both the performer and the spectator take part in a social event that not only transmits societal realities, but also indicates future ones.

**KEYWORDS** Technology | Performance Art | Body | Society | Cyborg Theatre

#### NOVEMBER 10, MONDAY, 11:30

# Google DevArt: Following the Success of Google's Android Market in the Visual Arts?

#### JungHyun Anna Park | Sang-Yeal Han

Graduate School of Innovation and Technology Management, Korea

This paper describes the creation of SwarmVision, a system of autonomous robotic cameras that functions both as the basis for an art installation and as an instrument for generating novel engineering research. Through a series of interviews with engineers who examined the project, we illustrate how experimentation with the instrument could lead to potential new research directions in computer vision, machine learning, swarm robotics, remote collaboration, and visualization. This suggests that an unstructured and aesthetic approach to research can inform and inspire new engineering research directions, within and beyond the scope of this particular project.

 $\textbf{keywords} \ \text{Visual Arts} \ | \ \text{Platform} \ | \ \text{Innovation} \ | \ \text{Google} \ | \ \text{DevArt} \ | \ \text{Application Store}$ 

#### NOVEMBER 11, TUESDAY, 09:00

# Generation of Engineering Research Directions through Artistic Process (SKYPE CONFERENCE)

Marco Pinter | Danny Bazo | George Legrady University of California, Santa Barbara, USA **Angus Graeme Forbes** University of Illinois at Chicago, USA

This paper describes the creation of SwarmVision, a system of autonomous robotic cameras that functions both as the basis for an art installation and as an instrument for generating novel engineering research. Through a series of interviews with engineers who examined the project, we illustrate how experimentation with the instrument could lead to potential new research directions in computer vision, machine learning, swarm robotics, remote collaboration, and visualization. This suggests that an unstructured and aesthetic approach to research can inform and inspire new engineering research directions, within and beyond the scope of this particular project.

**KEYWORDS** Media Arts Methodologies | Computational Photography | Swarm Robotics Autonomous Robotic Cameras | Arts | Engineering

#### NOVEMBER 11, TUESDAY, 09:30

# Virtual Idol Hatsune Miku: New Auratic Experience of the Performer as a Collaborative Platform

#### Jelena Guga

University of West Bohemia, Czech Republic

In this paper, the phenomenon of virtual idol Hatsune Miku will be analyzed in the context of critical theory, emerging technologies, and theory of digital art practices. The first part focuses on the phenomenon of the virtual ce-lebrity seen as Deleuze and Guattari's concept of 'body without organs.' The second part examines how the state-of-the-art technologies have enabled the ex-istence of Hatsune Miku who is simultaneously a corporate software product, a pop icon, a performance artist, and a collaborative multimedia artwork. Based on the reading of Hatsune Miku as a hybrid product emerging from the fusion of arts and IT, the last part revolves around the concept of 'aura' (Benjamin) generated by virtual idol's presence. Finally, the notion of hyperterminality is introduced not only to differentiate between entities/identities appearing on the surface of the screen and those virtual constructs co-existing with us in the spaces of physical reality, but also to explore how these newly emerging "phygital" entities transform the existing conceptions of body and identity.

**KEYWORDS** Virtual Idol | Body | Without Organs | Hyperterminality | Hologram | Aura | Collaborative Art | Augmented Reality

#### NOVEMBER 11, TUESDAY, 10:00

# Traditional Painting Revised: The Ambient Intelligence Approach to Creativity

Nikolaos Partarakis | Margherita Antona | Emmanouel Zidianakis | Panagiotis Koutlemanis Foundation for Research and Technology - Hellas, Institute of Computer Science, Greece Constantine Stephanidis University of Crete, Greece

Today, many forms of art are influenced by the emergence of interactive technologies, including the mixing of physical media with digital technology for forming new hybrid works of art and the usage of mobile phones to create art projected on public spaces. Many artists and painters use digital technology to augment their work technically and creatively. In the same context many believe that the time of transition from traditional analogue art to postmodern digital art, that is, to an art grounded in codes rather than images has arrived1. The research work described in this paper contributes towards supporting, through the use of Ambient Intelligence technologies, traditional painters' creativity, as well as methods and techniques of art masters. The paper presents the design and implementation of an intelligent environment and its software infrastructure, to form a digitally augmented Art Workshop. Its practical exploitation was conducted in an Ambient Intelligence (AmI) simulation space and four feasibility studies were conducted. In each of these studies an oil painting was created following an alternative, yet accredited by artists, approach.

**KEYWORDS** Ambient Intelligence | Painting, Creativity | Art | Art Creation

#### NOVEMBER 11, TUESDAY, 11:00

# When Technology Collaborates: Politics and the Aesthetic of "We" Human-and-Technology

#### Hyunkyoung cho | Timothy W. Luke Joonsung Yoon

Virginia Tech, USA Global School of M

Global School of Media, Soongsil University, Korea

This essay proposes "We" human-and-technology as the new human identity performed by the collaborative action of human and technology. Its aim is to open a new way for intersections of art, technology and humanities, through the political and aesthetic intimacy of human and technology in the collaborative action based interdependent perspective. "We" human-and-technology emphasizes the process of when the collaborative action of human and technology is performed. It shows that technology as power and knowledge relations intervenes on the knowledge system, in particular, the binary frame reinforcing a mutual degradation between human and technology, thought and action. In the collaboration of "We" human-and-technology, technology's interventions focuses on two ideas: Enframing and the fetish. The former presents that the binary frame is an inversion. It uses an instrument for ideology subordinating both humans and technology into the instrument. The latter reveals that the binary frame of "Us" versus "Them" governs our senses through the fetish as blinded practices and beliefs. It implies that how the instrumental understanding of technology conducts the fetishism distorting relations between human and technology.

**KEYWORDS** "We" Human-And-Technology | Collaborative Action | Politics And The Aesthetic Enframing | The Fetish

#### NOVEMBER 11, TUESDAY, 11:30

# Poetry of Separation: The Aesthetics of Spatial Montage and Generative Editing for Multi-Layered Screens

#### Bahng So Jung | Yoo Doo Won,Hutchings Patrick | Shi Chung Kon | Wakefield Graham Graduate School of Innovation and Technology Management, Korea

'Poetry of Separation' is a media artworkthat utilizes an algorithmic generative editing system, selecting shots in real-timeto be renderedoverfour screens arranged in layers. Editing in cinema reconstructs images by montage, deriving meaning from the juxtaposition of multiple shots. Although multi-screen projections have been used to present sectional montages that stress the simultaneity of events, spatially separated screens can disrupt attentiveness and affective involvement; the layered architecture avoids disruptive fragmentation. The generative editing system selects shots for the layered screens stochastically, with authorial constraints and probabilities using pre-determined shot criteria. Narrative flow and authorial intents are not damaged due to these criteria, but nevertheless unexpected effects arose from the stochastic system. The authorial intentions of improvisation and separation in the film content of 'Poetry of Se-parations'find resonance with the automatism of the generative editing system and multi-dimensionality of the screens.

**KEYWORDS** Generative Montage | Generative Cinema | Spatial Montage | Complexity Editing Multi-Layered Screens | Database Cinema | New Media Art

#### NOVEMBER 11, TUESDAY, 15:30

# Technologies Expand Aesthetic Dimensions: Visualization and Sonification of Embodied Penwald Drawings

#### **Myounghoon Jeon | Steven Landry | Joseph D. Ryan | James W. Walker** Michigan Technological University, USA

Even though defining art gets more and more difficult, reintegrating art and technology seems to be a clear trend. The present paper aims to show how technologies can expand aesthetic dimensions of art works. Michigan Tech researchers collaborated with a world-renowned artist, Tony Orrico in the immersive virtual environment. While he performed, multiple cameras tracked his body movements and physiological devices logged his biosignals (respiration, heart rate, etc.). Then, the system translated the data into visualization and sonification. Incremental aesthetic dimensions (representation-performance, 2d-3d, outside-inside) obtained based on this art-technology collaboration are discussed with research in progress.

**KEYWORDS** Aesthetic Computing | Digital Aesthetics | Embodied Drawing | Visualization Interactive Sonification | Performing Arts

#### NOVEMBER 11, TUESDAY, 16:00

# Exploring Felt Qualities of Embodied Interaction with Movement and Sound

Cumhur Erkut | Sofia DahlAnuRajala ErkutAalborg University, DenmarkIndependent Dance Artist/Choreographer, Denmark

We present approaches for teaching and designing embodied interaction in collaboration with a contemporary dance choreographer. Our approaches are based on the felt qualities of movement, providing a shared experience, vocabulary for self-expression, and appreciation for movement as a design material for interaction design practitioners. In parallel, such activities provide art professionals competencies for new contexts. We present two workshops conducted at different times. The first workshop, back in 2009, brought about novel sonic interaction paradigms, technologies, and artifacts. The second workshop was carried out in March 2014, and we are in the process of developing interactive sketches by pairing our observations with motion tracking. In this paper, the activities in these workshops are presented, and reflected upon. In particular, we are investigating whether or not these activities guided the participants from the prevailing notion of command/ control in embodied interaction towards experiences related to the felt qualities of movement.

**KEYWORDS** Embodied Human-Computer Interaction | Design Pedagogy

### NOVEMBER 12, WEDNESDAY, 09:00 A Proposal for the Creation of a Dance Ontology

# Annabel Clarance

Mills College, USA

In this paper will propose to outline the collective dance consciousness into a dance ontology. The creation of a dance ontology would allow for a more informed and productive academic discourse, as well as the opportunity to expand ideas to an international stage. This concretization of knowledge will elevate the study of dance history, theory and performance to a higher level of discourse, allowing comparison and conceptual synthesis with more frequency and ease.By utilizing the sophisticated structure of semantic web based ontologies, the dance world can maintain minutia while simultaneously expediting its discussion.Through the following exploration of the construction of an open-access dance ontology, the similarities between dance, which utilizes people as its medium, and information science, which utilizes binary as its medium, will come to the surface and subsequently shed light on how data-based discussion can help advance dance as an academic discipline.

**KEYWORDS** Dance, Ontology | Open Source | Dynamic Archive

# NOVEMBER 12, WEDNESDAY, 09:30

# Interactive Internet theatre (Interactive multimedia solutions at the New Aleksandrinsky Theatre Stage)

PRESENTATIONS

#### NikolayBorisov | ArtemSmolin | Denis Stolyarov | Pavel Shcherbakov

St. Petersburg National Research University of Information Technologies, Mechanics and Optics, Saint Petersburg State University

On May 15, 2013, in St. Petersburg, Russia, a new cultural venue, New Stage of Alexandrinsky Theatre, was inaugurated; the hi-tech show com-plex comprises three separate buildings united by one lobby. The main purpose of Alexandrinsky complex is to introduce experimental stage solution that re-quire intense usage of modern multimedia technologies. One of the Center's key activities is the use of interactive Internet Theatre technologies. The term interactive internet theatre is explored in this paper, as well as the experience of introducing various IT solutions into stage work, based on the cooperation be-tween the University of Information Technologies, Mechanics and Optics, Al-exandrinsky Theatre, and St. Petersburg State Academy of Performing Arts.

 $\textbf{Keywords} \ \textbf{Multimediatechnologies} \ | \ \textbf{Theatre} \ | \ \textbf{Information} \ | \ \textbf{Nru Itmo} \ | \ \textbf{Spbgu}$ 

#### NOVEMBER 12, WEDNESDAY, 10:00

## Design of a non-intrusive augmented trumpet

Claudia Rinaldi   Luigi Pomante	Federica Battisti   Marco Carli
Center of Excellence DEWS, University of L'Aquila, Italy	University of Roma Tre, Italy

This paper describes the design and first prototype implementation of an innovative concept of augmented instruments. The main idea is given by the opportunity offered by cameras and image recognition algorithms, to avoid the use of intrusive and often wired sensors. This latter aspect is indeed one of the main limitations to augmentation since also interested players usually try to avoid "external elements" on their priceless instruments.

**KEYWORDS** Augmented Instruments | Image Recognition | User Interface | Kinect

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#### NOVEMBER 12, WEDNESDAY, 11:00

# Digital Creativity: Children's Playful Mastery of Technology

#### Eva Petersson Brooks | Anthony Lewis Brooks

Aalborg University, Denmark

This paper reports on a study exploring the outcomes from children's play with technology in early childhood learning practices. The paper addresses questions related to how digital technology can foster creativity in early childhood learning environments. It consists of an analysis of children's interaction with the KidSmart furniture focusing on digital creativity potentials and play values suggested by the technology. The study applied a qualitative approach and included125 children (aged three to five), 10 pedagogues, and two librarians. The results suggests that educators should sensitively consider intervening when children are interacting with technology, and rather put emphasize into the integration of the technology into the environment and to the curriculum in order to shape playful structures for children's digital creativity.

**KEYWORDS** Early Childhood Learning | Playful Learning | Interaction | Technology | Affordances

#### NOVEMBER 12, WEDNESDAY, 11:30

# Authoring of digital games via card games: make playful play happen

#### Andrea Valente

Maersk Mc-Kinney Moller Institute, University of Southern, Denmark **Emanuela Marchetti** Aalborg University, Denmark

Literature and previous studies show that creative play is easy to emerge when children interact with tangible, low-tech toys and games than with digital games. This paradoxical situation is linked to the long-standing problem of end-users (or players) authoring of digital contents and systems. We propose a new scenario in which trading card games help making sense and re-de-sign computer games, to support players express themselves aesthetically and in a highly creative way. Our aim is to look for a middle ground between players becoming programmers and simply editing levels. The main contributions are to show how card games can represent digital games, how playful play can emerge in card games and digital games, and to begin defining a new way to express game behavior without the use of universal programming languages.

**KEYWORDS** Creativity | Playful Play | Authoring | Digital Games

#### NOVEMBER 12, WEDNESDAY, 14:00

## Large-Scale Analysis of Art Proportions

#### Kristoffer Jensen

Aalborg University, Denmark

While literature often tries to impute mathematical constants into art, this large-scale study (11 databases of paintings and photos, around 200.000 items) shows a different truth. The analysis,

consisting of the width/ height proportions, shows a value of rarely if ever one (square) and with majority of images having a proportion larger than one, but less than e.g. the golden ratio. Furthermore, more images have the inversed proportion, meaning that portrait paintings are more common than landscape paintings. The inverse is true for photographs, i.e. more landscape than portrait format photographs has been found in the databases.

PRESENTATIONS

**KEYWORDS** Art | Proportions | Preference | Golden Ratio

#### NOVEMBER 12, WEDNESDAY, 14:30

### Augmented Sculptures: What You See is not What You See

**Selçuk Artut** Sabancı University, Turkey

The idea of Augmented Reality Technologies enhances our ability to perceive a location with additional 3D visual elements. A point of interest becomes meta-constructed with addition of extended layers via augmented space elements. Augmented Reality presents us a virtually enriched version of a visually noticeable reality world which already exists and can easily be seen. In this article, in addition to questioning the representative existence of the art object in the work of art called "What You See is not What You See" which is created by Augmented Reality technique, the methods being followed for Augmented Reality production technique are examined in details.

**KEYWORDS** Augmented Reality | Art | Sculpture | Perlin Noise

#### NOVEMBER 12, WEDNESDAY, 15:30

# ICTARTCONNECT.study @ ArtsIT Roundtable Discussion

There is a growing consensus that for innovation to happen the critical skills needed - in addition to strong technical and scientific skills - are creative skills - out-of-box thinking and capacity for communication and collaboration. In this context, following a trend towards convergence of all domains of knowledge, the Arts are gaining prominence as a catalyst for radical transformations of R&D&I practices. Integrating artists to trigger disruptive innovation is becoming common practice, world-wide, in many innovative institutions and high-tech companies in order to convert technical skill and scientific knowledge into innovative products, make technologies more human-centered and to immerse better technology into society and culture and most importantly into human experience. For example, projects like ARDUINO (open hardware platform) are rooted in artistic practice but have led to radically different approaches (ARDUINO has become a de facto industrial standard in open hardware). One might argue that artistic processes deliver prototypes, as they are practice-based focused on making things and not purely theory-driven. More generally, making art - working creatively - is a way to connect debates about values with (physical) forms and (social) processes. It is timely to analyse how these developments can be best taken up in research funded by the European Commission. The round table will bring together artists and eminent experts in ICT to discuss how ICT and the Arts can best interact and what the outcomes of such collaboration could be. keywords Augmented Reality | Art | Sculpture | Perlin Noise



# Amber Festival $\rightarrow$

amberFestival is the first and the only festival in the field of Art and Technology organized in Istanbul, since its inception in 2007.

amberFestival promotes new technologies in art and aims at fostering new forms of artistic expression through the possibilities of new technologies.

amberFestival consists of exhibitions of interactive installations, stage performances, artists presentations, seminars and workshops, through out which amberFestival creates a platform for artistic exchange and collaborations. It is an annual festival takes places in the second week of November in Istanbul.

As a thematic event, **amberFestival** brings questions in the junction of technology art and life to the attention of the public. This year's theme is "Decentralisation" to discuss around the other possibilities and other forms of centre in the ongoing tension between centers and the peripheries of any kind.

Sanat ve teknoloji festivali art and technology festival



#### **NOVEMBER 6**

**Dance with Different Bodies and MetaBodyBox** workshop in the frame of "Interfaces for Body and Space"

**SALT Galata** Bankalar Caddesi 11 Karaköy 34420 İstanbul Türkiye

**Christal Bodies** workshop in the frame of "Interfaces for Body and Space"

İstanbul Teknik Üniversitesi Mimarlik Fakültesi, Taşkışla Kampüsü 34743, Beyoğlu İstanbul

**Dancing with Sheldon** workshop in the frame of "Interfaces for Body and Space"

**Çıplak Ayaklar Stüdyosu** Firuzağa mah. Çukurcuma caddesi No: 6/3 Beyoğlu, İstanbul

#### **NOVEMBER 7**

Standards of and Experiences with Citizen Participation in Urban Transformation Processes Talk: 19:00-21:00

TAK Kadıköy Rasimpaşa Mah. Duatepe Sk. No: 61 Yeldeğirmeni Kadıköy, İstanbul

#### **NOVEMBER 7**

**Dance with Different Bodies and MetaBodyBox** workshop in the frame of "Interfaces for Body and Space"

**SALT Galata** Bankalar Caddesi 11 Karaköy 34420 İstanbul Türkiye

**Christal Bodies** workshop in the frame of "Interfaces for Body and Space"

**İstanbul Teknik Üniversitesi** Mimarlik Fakültesi, Taşkışla Kampüsü 34743, Beyoğlu İstanbul

**Dancing with Sheldon** workshop in the frame of "Interfaces for Body and Space"

**Çıplak Ayaklar Stüdyosu** Firuzağa mah. Çukurcuma caddesi No: 6/3 Beyoğlu, İstanbul

**live.code** Live Coding Performance at 22:00

**Cosmique Room** Küçük Bayram Sokak 5A Beyoğlu, İstanbul

Not an Obstacle workshop in the frame of "Interfaces for Body and Space"

**DEPO / Tütün Deposu** Lüleci Hendek Caddesi No.12 Tophane 34425 İstanbul

#### **NOVEMBER 8**

In the Context of New Technologies, Decentralization in Art, Design and Production Theory Workshop | 14:00-16:30

**StudioX** Meclis-i Mebusan Caddesi 35A 34433 Salıpazarı, İstanbul

#### Dance with Different Bodies and MetaBodyBox

workshop in the frame of "Interfaces for Body and Space"

**SALT Galata** Bankalar Caddesi 11 Karaköy 34420 İstanbul Türkiye

**Christal Bodies** workshop in the frame of "Interfaces for Body and Space"

İstanbul Teknik Üniversit Mimarlik Fakültesi, Taşkışla Kampüsü 34743, Beyoğlu İstanbul

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**DEPO / Tütün Deposu** Lüleci Hendek Caddesi No.12 Tophane 34425 İstanbul

#### **NOVEMBER 9**

Interfaces for Body and Space Performances–Exhibit–Talks | 12:00-18:00

**SALT Beyoğlu** İstiklal Caddesi 136 Beyoğlu 34430 İstanbul

#### **NOVEMBER 10**

**DE'03:Dekonstract.01:Knit** Audio Visual Performance | 21:00

RAW ISTANBUL Necatibey cad. No 66 Karaköy, İstanbul

#### NOVEMBER 11–14

**Open School** 16:00-20:00

TAK Kadıköy Rasimpaşa Mah. Duatepe Sk. No: 61 Yeldeğirmeni Kadıköy, İstanbul

#### **NOVEMBER 13**

**Art Making** Panel in the frame of "Mini Maker Fair İstanbul" 14:00-14:30

Haliç Kongre Merkezi Sütlüce Mah. Karaağaç Cad. No.19 34445 Beyoğlu, İstanbul

### **NOVEMBER 15**

In the Context of New Technologies, Decentralization in Society, Policy and Communication Theory Workshop | 14:00-16:30

**StudioX** Meclis-i Mebusan Caddesi 35A 34433 Salıpazarı, İstanbul

Blinking Postcards yap! Workshop for Children | 11:30-13:30

TAK Kadıköy Rasimpaşa Mah. Duatepe Sk. No: 61 Yeldeğirmeni Kadıköy, İstanbul Sponsors  $\rightarrow$ 











#### COLOPHON

DESIGN Onur Yazıcıgil	onuryazicigil.com
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