Electronic Visualisation and the Arts (EVA 2013)

London, UK

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Editors

Benjamin R. Cowan

Chris P. Bowers

Russell Beale

Abstract

Over almost two decades, the EVA London conference on Electronic Visualisation and the Arts has established itself as one of the United Kingdom's most innovative and interdisciplinary conferences. It brings together a wide range of research domains to celebrate a diverse range of interests with a specialised focus on visualisation.

EVA London 2013 presents a wide spectrum of papers, presentations, demonstrations, an exhibition, and a research workshop. It is a forum where the sciences, arts, humanities and performance are equally at home. EVA London 2013 presents 66 papers and abstracts from 15 countries, by researchers inside and outside academia, from graduate artists, PhD students, seasoned industry professionals, established scholars and senior researchers, who value EVA London for its interdisciplinary community. This year, the conference features three keynote speakers: Prof. Steve DiPaola from Simon Fraser University (Canada); Prof. Linda Candy from the University of Technology (Australia); and Don McIntyre from the Glasgow School of Arts (United Kingdom).

The proceedings has resulted from a highly selective peer review process, fitting as many excellent submissions as possible into the limited timetable of the conference. The papers cover digital culture and creativity, museum studies, digital enhanced reality, computer arts, 3D modelling, emotion, haptic, mobile, cross-media, multimodal interactivities and performances, as well as many other interdisciplinary areas.

EVA London is part of a larger network of EVA international conferences. In the past twenty years, EVA events have been held in Athens, Beijing, Berlin, Brussels, California, Cambridge (both UK and USA), Dallas, Delhi, Edinburgh, Florence, Gifu (Japan), Glasgow, Harvard, Jerusalem, Kiev, Laval, London, Madrid, Montreal, Moscow, New York, Paris, Prague, Thessaloniki, and Warsaw. Further venues for EVA conferences are very much encouraged by the EVA community.

Editors

This conference was edited by:

Dr. Kia Ng, PhD, FBCS, FRSA, FIoD, CEng, CSci, is Director of the Interdisciplinary Centre for Scientific Research in Music (ICSRiM) at the University of Leeds. Kia is involved in several research domains including gestural interfaces, interactive multimedia, computer vision, document imaging and computer music, in collaboration with many European and international organisations and individuals in the field. Large-scale projects include i-Maestro on technology-enhanced learning (coordinator), CASPAR on digital preservation and AXMEDIS on cross-media with over 20M Euro research funding. Kia has over 200 publications and presented keynotes and invited lectures in over 33 countries. www.kcng.org

Prof. Jonathan P. Bowen, MA Oxon, FBCS, FRSA, is Chair of Museophile Limited, a museum and IT consultancy company that he founded in 2002, and Emeritus Professor of Computing at London South Bank University. In recent years, he has been a visiting professor at the Pratt Institute (New York, USA) where he taught a masters course on museum informatics, the University of Waikato (New Zealand), the University of Westminster, and King's College London. Previously he has held posts at the University of Reading, the Oxford University Computing Laboratory and Imperial College, London. He contributes to Wikipedia on museum and computing-related topics. www.jpbowen.com

Dr. Sarah McDaid, PhD, MBCS, is a freelance Usability Consultant and currently a Visiting Research Fellow/Sessional Lecturer at London South Bank University. She has taught at a variety of educational establishments both in the UK and Europe. Her teaching areas include systems analysis and design, business programming, human-computer interaction, usability, interactive multimedia and, personal and professional development. As a consultant she has worked for a number of museums and art centres including the British Museum and the Nerve Centre, Northern Ireland. Her research interests include interactive television, mobile usability and human-computer interaction in a social context. www.linkedin.com/in/sarahmcdaid

Papers:

Digital enhanced reality

Martha Henson, Alex Butterworth and Danny Birchall Creating Magic on Mobile
<http://dx.doi.org/10.14236/ewic/EVA2013.1>

Tula Giannini Visualizing Brooklyn: the Brooklyn Visual Heritage Website
<http://dx.doi.org/10.14236/ewic/EVA2013.2>

Oliver Gingrich, Eugenia Emets and Alain Renaud Enhancing Presence - Immersive Sound
Environments as Presence Generating Factor <http://dx.doi.org/10.14236/ewic/EVA2013.3>

Keynote

Steve DiPaola Future trends: Adding Computational Intelligence, Knowledge and Creativity to Interactive
Exhibits and Visualisation Systems <http://dx.doi.org/10.14236/ewic/EVA2013.4>

Computer arts

Steve DiPaola and Allison Smith Interactively Exploring Picasso's Multi-dimensional Creative Process in
Producing Guernica <http://dx.doi.org/10.14236/ewic/EVA2013.5>

Pattarawut Subyen, Thecia Schiphorst and Philippe Pasquier EMVIZ (flow): An Artistic Tool for
Visualising Movement Quality <http://dx.doi.org/10.14236/ewic/EVA2013.6>

Joanne Armitage and Kia Ng Multimodal Music Composition
<http://dx.doi.org/10.14236/ewic/EVA2013.7>

Tom Scholfield Neurotic Armageddon Indicator: A Data Sculpture
<http://dx.doi.org/10.14236/ewic/EVA2013.8>

Research workshop

- Atif Akin User Frames in Media Arts <http://dx.doi.org/10.14236/ewic/EVA2013.9>
- Rehan Zia Corfe Castle - In a Different Light <http://dx.doi.org/10.14236/ewic/EVA2013.10>
- Carl H Smith Experience Communication through Post Digital Design
<http://dx.doi.org/10.14236/ewic/EVA2013.11>
- Pierre-Francois Gerard ArchiMemory <http://dx.doi.org/10.14236/ewic/EVA2013.12>
- Min Zhang 'A is for Art' - Draw Paintings in You Mind
<http://dx.doi.org/10.14236/ewic/EVA2013.13>
- Ezwan M.Mokhtar and Marco Gillies How I Animate: An Hand Guesture-Centric Technique
<http://dx.doi.org/10.14236/ewic/EVA2013.14>
- Nanette Hoogslag (Reinventing) Editorial Illustration in Online News Media
<http://dx.doi.org/10.14236/ewic/EVA2013.15>

Data visualisation

- Florian Kräutli and Stephen Boyd Davis Known Unknowns: Representing Uncertainty in Historical Time
<http://dx.doi.org/10.14236/ewic/EVA2013.16>
- Carina E.I. Westling, Leon Barker, Aoife Healy, Robert Needham, Harry J. Witchel and Nachiappan Chockalingham Spatial Data Correlation: An interactive 3D visualisation tool for correlating the motion capture data streams from different devices
<http://dx.doi.org/10.14236/ewic/EVA2013.17>
- Jen Southern and Chris Speed Shared distance: The Poetry of Data in Collaborative GPS Visualisations
<http://dx.doi.org/10.14236/ewic/EVA2013.18>

Music and performance

- Gavin Wood and Aeron Buchanan Introducing the Music Access Platform
<http://dx.doi.org/10.14236/ewic/EVA2013.19>
- Rebecca Carter, Thomas McKenzie, Lawrence Sarker and Kia Ng From Seeing to Feeling Sound:
A Multimodal Interface for Trans-Domain Mapping of Sound

<http://dx.doi.org/10.14236/ewic/EVA2013.20>

Marco Gillies, Shakti Zapata Gomez and Sebastian Zimmer Suzie's Dance: Reliving Dance through Motion Capture Animation of Photographs <http://dx.doi.org/10.14236/ewic/EVA2013.21>

Elisa Sereno-Janzen FiddleLights: Kinetic Signatures of the Bow Hand - Visualising Fiddle Tunes and Contemporary Violin Performance <http://dx.doi.org/10.14236/ewic/EVA2013.22>

Workshop

Tara Daniel, Linsey Pollak and Michelle Williamson The Sound Playground
<http://dx.doi.org/10.14236/ewic/EVA2013.23>

Museums, libraries and archives

Tessa Morrison, Helen Giggins and Nicholas Foulcher Timeline Newcastle: Reconstructing Industrial Newcastle - Implementation and Exhibition <http://dx.doi.org/10.14236/ewic/EVA2013.24>

Eoin Kilfeather Visualising Museum stories <http://dx.doi.org/10.14236/ewic/EVA2013.25>

Katina Hazelden, Matthew Yee-King, Roberto Confalonieri, Fiammetta Ghedini, Carles Sierra and Mark d'Inverno WeCurate: Enriching the Sociocultural Practices of the Museum Experience
<http://dx.doi.org/10.14236/ewic/EVA2013.26>

Art and electronics

Frauke Zeller and David Harris Smith My kulturBOT 1.0
<http://dx.doi.org/10.14236/ewic/EVA2013.27>

Suk Kyoung Choi and Steve DiPaola How a Painter Paints: An Interdisciplinary Understanding of Embodied Creativity <http://dx.doi.org/10.14236/ewic/EVA2013.28>

Jerome J. Leary Development of Portable Painting Format for CNC Painting
<http://dx.doi.org/10.14236/ewic/EVA2013.29>

Keynote

Linda Candy Creativity and Evaluation: Supporting Practice and Research in the Interactive Arts
<http://dx.doi.org/10.14236/ewic/EVA2013.30>

Scientific visualisation

Diana Marques, Robert Costello and José Azevedo Augmented Reality Facilitating Visual Literacy
for Engagement with Science in Museums <http://dx.doi.org/10.14236/ewic/EVA2013.31>

Augoustinos Tsiros The Dimensions and Complexities of Audio-Visual Association
<http://dx.doi.org/10.14236/ewic/EVA2013.32>

Mieke Pfarr-Harfst Virtual Scientific Models <http://dx.doi.org/10.14236/ewic/EVA2013.33>

Ed Cookson and Will Case London 2012 Olympic and Paralympic Opening and Closing
Ceremonies: Audience Pixel Content <http://dx.doi.org/10.14236/ewic/EVA2013.34>

Built and natural environment

Simone Helena Tanoue Vizioli, Joubert José Lancha and Paulo César Castral Drawing and Surface:
Freehand Architectural Drawing Mediated by Digital <http://dx.doi.org/10.14236/ewic/EVA2013.35>

Vajira Premadasa and Michael Pearce Digital Visualisation and Design Development in Historic Building
Projects <http://dx.doi.org/10.14236/ewic/EVA2013.36>

Tessa Morrison Utopian Cities from 15th to 19th Century Literature: A Philosophical Investigation through
3-D Visualisation <http://dx.doi.org/10.14236/ewic/EVA2013.37>

Demonstration

Mel Woods, Hadi Mehrpouya and Jamie Forth Booksight: Visualising the Library of Ideas
<http://dx.doi.org/10.14236/ewic/EVA2013.38>

Rebecca Holderness and Matthew Russell Learning to Think and Create Outside the Box: Using

Digital Media in a Blended Theatre Course <http://dx.doi.org/10.14236/ewic/EVA2013.39>

Marianne Markowski and Dominique Rivoal Teletalker - Making Online Face-to-Face Interaction Easier for Older People <http://dx.doi.org/10.14236/ewic/EVA2013.40>

Demonstration

Carol MacGillivray, Bruno Mathez and Frederic Fol Leymarie The Diasynchronoscope Project: Investigations in Screen-less Apparant Motion <http://dx.doi.org/10.14236/ewic/EVA2013.41>

Museums, Libraries and Archives

Eva Van Passel and Olga Van Oost On Convergence and Open Data: Challenges for Libraries, Archives and Museums <http://dx.doi.org/10.14236/ewic/EVA2013.42>

Irida Ntailla Haptic Interactions through Touch-Screen Interfaces <http://dx.doi.org/10.14236/ewic/EVA2013.43>

Demonstration

Jazz Rasool Advancing Traditional Relevance Based Social Networking to Resonance Driven Social Fieldworking using Mindfulness Visualisation <http://dx.doi.org/10.14236/ewic/EVA2013.44>

Lucie Hernandez Exploring the Infographic: Designing our Digital Selves <http://dx.doi.org/10.14236/ewic/EVA2013.45>

Motion and Performance

Ian Grant Surfaces and Shadows: Digital Shadow Puppetry and Augmented Silhouette Performance <http://dx.doi.org/10.14236/ewic/EVA2013.46>

Paula Varanda Body and Movement Visualisations in New Media Dance <http://dx.doi.org/10.14236/ewic/EVA2013.47>

Kelly Hamilton Mapping Motion: The Principles of Motion Capture and the Law of Projection

<http://dx.doi.org/10.14236/ewic/EVA2013.48>

Keynote

Don McIntyre Open Locast: How MIT's evolving media platform is being used to improve connections between people and their social, cultural, and physical spaces

<http://dx.doi.org/10.14236/ewic/EVA2013.49>

Workshop

Derek J. Smith The Cognitive Science of Aesthetic Interaction

<http://dx.doi.org/10.14236/ewic/EVA2013.50>

Imaging

Gareth Beale, Nicole Beale, Ian Dawson and Louisa Minkin Making Digital: Visual Approaches to the Digital Humanities <http://dx.doi.org/10.14236/ewic/EVA2013.51>

W. Ryan Dodge and Laura Haapio-Kirk The Sharypic PhotoWall at the Royal Ontario Museum: An experiment in real-time crowdsourcing <http://dx.doi.org/10.14236/ewic/EVA2013.52>

Ileana Maris, Ard Huizing, Wim Bouman and Marijke Ooserbroek The Curious Case of Design Thinking in Museums <http://dx.doi.org/10.14236/ewic/EVA2013.53>

Demonstration

Brian Wichmann and Tony Lee Analysis and Synthesis of Islamic Geometric Designs

<http://dx.doi.org/10.14236/ewic/EVA2013.54>

Computer Arts

John Hillman Ten Things to Take: A community education project to re-image space place & memory using digital photography <http://dx.doi.org/10.14236/ewic/EVA2013.55>

Karl Harrison, Jonathan P. Bowen and Alice M. Bowen Electronic Visualisation in Chemistry: from Alchemy to Art <http://dx.doi.org/10.14236/ewic/EVA2013.56>

Valerie Mace Re-imaging the Environment <http://dx.doi.org/10.14236/ewic/EVA2013.57>

Hans-Peter Gasselseder Re-orchestrating Game Drama: The Immersive Experience of Dynamic Music in Video Games <http://dx.doi.org/10.14236/ewic/EVA2013.58>

Seeing music and performance

Camille Baker Open-source, Custom Interfaces and Devices with Live Coding in Participatory Performance <http://dx.doi.org/10.14236/ewic/EVA2013.59>

Camille Baker and Kate Sicchio Hacking the Body <http://dx.doi.org/10.14236/ewic/EVA2013.60>

Anna Shvets Interactive Application for Visualisation of the Form of Written Postmodern Music <http://dx.doi.org/10.14236/ewic/EVA2013.61>

Exhibition

Flavia Caviezel RhyCycling - Fluid Borderland <http://dx.doi.org/10.14236/ewic/EVA2013.62>

Amy Cunningham Oracle: The Articulation of Promise <http://dx.doi.org/10.14236/ewic/EVA2013.63>

Ernest Edmonds Shaping Form Sussex (the movie) <http://dx.doi.org/10.14236/ewic/EVA2013.64>

Jing Zhou Interactive Book of Changes - 'I Ching' <http://dx.doi.org/10.14236/ewic/EVA2013.65>

Jing Zhou Living Mandala {interactive art project} <http://dx.doi.org/10.14236/ewic/EVA2013.66>