Electronic Visualisation and the Arts (EVA 2012)

London, UK

10 - 12 July 2012

Editors

Dr Stuart Dunn

Prof. Jonathan P. Bowen

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Abstract

Electronic Visualisation and the Arts London 2012 (EVA London 2012) is co-sponsored by the Computer Arts Society and BCS, The Chartered Institute for IT, of which the CAS is a specialist group. Over almost two decades, the EVA conference has established itself as one of London's most innovative and interdisciplinary conferences in the field of digital visualisation. The papers in this volume touch on museum studies, digital performance, augmented reality, simulation, 3D scanning, digital archaeology and many others. The latest research by established scholars, early career researchers and students may be found here.

For more information about EVA 2012 visit www.eva-london.org or search on Twitter for EVALondonconf.

Full Synopsis

EVA London has established itself as one of London's most innovative and interdisciplinary conferences in the field of digital visualisation. It is a unique mix of papers, presentations, demonstrations, an exhibition and a research workshop aimed at early career researchers. Both its format and its themes reflect the great diversity of research in the theory, methods and practice of digital visualisation: it is a forum where the sciences, arts, humanities and performance are equally at home.

This volume of EVA London 2012 presents over sixty papers from researchers inside and outside the academy, and at all career stages. This year, EVA London has delegates from 12 countries in four continents, coming together at the BCS' premises in Covent Garden both to explore well-established links between visualisation disciplines and to forge new ones. Areas touched on include museum studies, digital performance, augmented reality, simulation, 3D scanning and digital archaeology, among many others.

EVA London is part of a larger network of EVA international conferences. In the past twenty years, EVA meetings 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.

Editors

This conference was edited by:

Dr Stuart Dunn is a lecturer in Digital Humanities at King's College London. He has broad interests in the use of digital methods in landscape history, spanning digital archaeology, visualisation in cultural heritage and GIS. He has published in all these areas; is a co-organiser of the London Digital Classicist group and a member of the JISC Geospatial Data workgroup. He has worked on the digital reconstruction of Iron Age round houses, on English place names and on various web 2.0 digital community projects. www.stuardunn.wordpress.com

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. Recently 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 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 30 countries. www.kcng.org

Sponsors

EVA London 2012 is co-sponsored by the Computer Arts Society and BCS, The Chartered Institute for IT, of which the CAS is a specialist group. It has collaborative relationships with [Imperica](#) and [Ashgate Publishing](#), who are kindly sponsoring a Best Paper prize in 2012.

Papers:

Plenary Session: Culture in the new world

Andrew Richardson An overview of the pixel ware project at the Oriental Museum, Durham
<http://dx.doi.org/10.14236/ewic/EVA2012.1>

Caryl Mann A study of the iPhone app at Kew: Improving visitor experience
<http://dx.doi.org/10.14236/ewic/EVA2012.2>

Murat Germen Subjectivity in contemporary visualization of reality: re-visiting Ottoman miniatures
<http://dx.doi.org/10.14236/ewic/EVA2012.3>

Keynote speaker

Ian Hughes, Metaverse evangelist Maker Culture FTW
<http://dx.doi.org/10.14236/ewic/EVA2012.4>

Plenary Session: Seeing data

Leigh Garrett and Amy Robinson Spot the difference! Plagiarism identification in the visual arts
<http://dx.doi.org/10.14236/ewic/EVA2012.5>

Nick Bryan-Kinns and Jennifer G Sheridan Visualising mutual engagement
<http://dx.doi.org/10.14236/ewic/EVA2012.6>

Slavko Milekic Using eye- and gaze-tracking to interact with a visual display
<http://dx.doi.org/10.14236/ewic/EVA2012.7>

Erica Seccombe Grow: visualising nature at nanoscale
<http://dx.doi.org/10.14236/ewic/EVA2012.8>

Parallel Session: The place and the digital

Stefan Zedlacher QRchitecture <http://dx.doi.org/10.14236/ewic/EVA2012.9>

Stefania Boiano et al. Usability, design and content issues of mobile apps for cultural heritage promotion: the Malta Culture Guide experience <http://dx.doi.org/10.14236/ewic/EVA2012.10>

Jeanie Sinclair and Philip Reeder The Intangible Archive
<http://dx.doi.org/10.14236/ewic/EVA2012.11>

Anthony Head Exploring the issues of digital outdoor architectural projections
<http://dx.doi.org/10.14236/ewic/EVA2012.12>

Parallel Session: Demonstrations

Michael Peters and Mike Parsons The virtual metropolis
<http://dx.doi.org/10.14236/ewic/EVA2012.13>

Parallel Session: Digital art and research

Leigh Garrett and Marie-Therese Gramstadt KAPTUR: exploring the nature of visual arts research data and its effective management <http://dx.doi.org/10.14236/ewic/EVA2012.14>

Melanie Rozencajg and Jhava Chikli Unlocking the archive document
<http://dx.doi.org/10.14236/ewic/EVA2012.15>

Kyle Johnson et al. Virtual tours for museum exhibits
<http://dx.doi.org/10.14236/ewic/EVA2012.16>

Kelly Hamilton Wittgenstein and Tufte on Thinking in 3D: 'Escaping Flatland'
<http://dx.doi.org/10.14236/ewic/EVA2012.17>

Plenary Session: Sound and life

John V H Bonner et al. Making audience experiences more meaningful and emotionally engaging through mixed visual and audio media <http://dx.doi.org/10.14236/ewic/EVA2012.18>

Camille Baker et al. The Life Project <http://dx.doi.org/10.14236/ewic/EVA2012.19>

Jack Armitage et al. Visualising sound: Localisation, feature analysis and visualisation

<http://dx.doi.org/10.14236/ewic/EVA2012.20>

Keynote speaker

William Dudley, RDI Theatre design and digitisation <http://dx.doi.org/10.14236/ewic/EVA2012.21>

Plenary Session: Building the virtual

Danny Birchall and Martha Henson The brain as game
<http://dx.doi.org/10.14236/ewic/EVA2012.22>

Aylish Wood Visualizing Maya <http://dx.doi.org/10.14236/ewic/EVA2012.23>

Damian Schofield et al. Roman Portraiture and biometric identification
<http://dx.doi.org/10.14236/ewic/EVA2012.24>

Stuart Dunn and Kirk Woolford Reconfiguring experimental archaeology using 3D reconstruction
<http://dx.doi.org/10.14236/ewic/EVA2012.25>

Workshop

Michael Twidale Usability Lab <http://dx.doi.org/10.14236/ewic/EVA2012.26>

Parallel Session: Visualisation, maps and structures

Gary Priestnall et al. Projection Augmented Relief Models (PARM): tangible displays for geographic information
<http://dx.doi.org/10.14236/ewic/EVA2012.27>

Visualizing the main monuments of Crete through an
abstract interactive 3D

Panagiotis Parthenios model <http://dx.doi.org/10.14236/ewic/EVA2012.28>

Tessa Morrison et al. Applying augmented reality to preserving industrial heritage
<http://dx.doi.org/10.14236/ewic/EVA2012.29>

Sotiris Konstas Audiovisual installation: interactive imprinting of sound in water
<http://dx.doi.org/10.14236/ewic/EVA2012.30>

Parallel Session: Demonstrations

Peter Hobson et al. Visualising Breath <http://dx.doi.org/10.14236/ewic/EVA2012.31>

Simon Finn Synthetic animated realities <http://dx.doi.org/10.14236/ewic/EVA2012.32>

Parallel Session: Digital art and networked culture

Eric T. Meyer and Isis Amelie Hjorth Connecting performance artists with digital audiences: A case study of Scratch Online <http://dx.doi.org/10.14236/ewic/EVA2012.33>

Parallel Session: Demonstrations

Oluwatoyin Sogbesan Experiencing culture through the use of interactive digital board
<http://dx.doi.org/10.14236/ewic/EVA2012.34>

Sara Heitlinger et al. The Talking Quilt - Augmenting domestic objects for communal meaning-making
<http://dx.doi.org/10.14236/ewic/EVA2012.35>

Plenary Session: Art and performance

Roman Miletitch et al. Eliciting writing-like behaviour in sign language through photographic representation of movement <http://dx.doi.org/10.14236/ewic/EVA2012.36>

Hetty Blades Creative computing and the re-configuration of dance ontology
<http://dx.doi.org/10.14236/ewic/EVA2012.37>

Joanne Armitage et al. mConduct: a multi-sensor interface for the capture and analysis of conducting

gesture <http://dx.doi.org/10.14236/ewic/EVA2012.38>

Keynote speaker

Costas Karageorghis Tapping the power of music in sport and exercise
<http://dx.doi.org/10.14236/ewic/EVA2012.39>

Plenary Session: Communities and research

Jonathan P. Bowen and Robin J. Wilson Visualising virtual communities: From Erdős to the arts
<http://dx.doi.org/10.14236/ewic/EVA2012.40>

Christina Kamposiori Digital infrastructure for art historical research: thinking about user needs
<http://dx.doi.org/10.14236/ewic/EVA2012.41>

Chris Alen Sula Quantifying Culture: The value of visualization inside (and outside) libraries, museums, and the academy
<http://dx.doi.org/10.14236/ewic/EVA2012.42>

Parallel Session: Imaging

Leila Maani and Nina Reeves Encouraging the acquisition of drawing skills in game design: A case study
<http://dx.doi.org/10.14236/ewic/EVA2012.43>

Carl Smith Enhancing spatial cognition to improve pattern recognition within mixed reality environments
<http://dx.doi.org/10.14236/ewic/EVA2012.44>

Hsin Hsin Lin Paradigm Shift: an eco-friendly approach to create and display stereoscopic geometric designs
<http://dx.doi.org/10.14236/ewic/EVA2012.45>

Roman Miletitch et al. Real-time 3D gesture visualisation for the study of Sign Language
<http://dx.doi.org/10.14236/ewic/EVA2012.46>

Parallel Session: Demonstrations

Eunice Gonçalves Duarte Inside Out: blessed are the machines that allow us to see
<http://dx.doi.org/10.14236/ewic/EVA2012.47>

Olga Pombo et al. Body-image: crossing science and art
<http://dx.doi.org/10.14236/ewic/EVA2012.48>

Christin Bolewski Viewers' engagement in nonlinear storytelling: 'Journeys in Travel'
<http://dx.doi.org/10.14236/ewic/EVA2012.49>

Christoph Klemmt Anisotropia: movements towards a lyrical design
<http://dx.doi.org/10.14236/ewic/EVA2012.50>

Plenary Session: Digital imaging

Nola Semczyszyn What we see when we look at medical images
<http://dx.doi.org/10.14236/ewic/EVA2012.51>

Alejandro Giacometti et al. Cultural heritage destruction: Documenting parchment degradation via multispectral imaging
<http://dx.doi.org/10.14236/ewic/EVA2012.52>

Lindsay MacDonald et al. High Art: Visualising damage on a heritage ceiling
<http://dx.doi.org/10.14236/ewic/EVA2012.53>

Conference Exhibition

Kingsley Ash and Nikos Stavropoulos Livecell <http://dx.doi.org/10.14236/ewic/EVA2012.54>

Justine Flynn Imponderable Music: Using infrasonic frequencies as a stimulus for haptic perception within installation based work
<http://dx.doi.org/10.14236/ewic/EVA2012.55>

Jorge Luis Dieguez Salaza and Jose Carlos Flores The Building Project
<http://dx.doi.org/10.14236/ewic/EVA2012.56>

Jie Wu Boeing Man(1964):the Origin of Realistic Algorithmic Human Figures
<http://dx.doi.org/10.14236/ewic/EVA2012.57>