

Digital Futures 2007: Visual Aspects of Imaging

Royal Institute of British Architects, 66 Portland Place, London W1B 1AD

Tuesday 30th October

A Symposium organised by the Imaging Science Group
of The Royal Photographic Society

Co-Chairs: Prof. G.G. Attridge, Dr S. Triantaphillidou (University of Westminster, UK)
Dr R. Stevens (National Physical Laboratory, UK)

Programme

09.00-09.40	Tea/Coffee & Registration	
09.40-09.45	Welcome & Introduction	S.Triantaphillidou
09.45-10.10	Digital and analogue photographic parallels	G. G. Attridge, S. Triantaphillidou <i>University of Westminster, UK</i>
10.10-10.35	The accuracy of sRGB colour reproduction of a digital camera and a LCD imaging chain	H. Oh, S.Triantaphillidou, R. E Jacobson, <i>University of Westminster, UK</i>
10.35-11.00	Colour gamuts for image reproduction analysis	M. Pointer, R. Luo, C. Li, X. Li <i>University of Leeds, UK</i>
11.00-11.20	Coffee	
11:20-11:45	Colour analysis and verification of CCTV images under different lighting conditions	R. Smith, K. MacLennan Brown, J. Tighe, N. Cohen, <i>HOSDB, UK</i>
11.45-12.10	Colour emotion and harmony	L. Ou, R. Luo, <i>University of Leeds, UK</i>
12:10-12.35	Visual comfort and task performance using a stereoscopic display – effects of image crosstalk	S.Pala, R. Stevens, <i>NPL, UK</i>
12.35-13.00	Don't forget the <i>Visual</i> Aspect!	A. Hodgson, <i>Independent Consultant, UK</i>
13.00-14.00	Lunch	
14.00-14:25	The recording and processing of radiographic images for projection and print publication	H. Ebrahim, <i>University of Limpopo, SA</i>
14.25-14:50	Aliasing in two dimensions	A.Saunders, <i>Bournemouth University, UK</i>
14.50-15.15	Reproduction of stained glass on transparent substrate using a wide format inkjet printer	K. Deshpande, L. MacDonald, <i>London College of Communication. UK</i>
15.15-15:30	Coffee	
15:45-16:10	Evaluation of colour appearance models under high luminance level using transmissive media	K. Deshpande, L. MacDonald, <i>London College of Communication. UK</i>
16:10-16:35	Spatial calibration of an illumination dome	L. MacDonald, <i>London College of Communication. UK</i>
16:35-16:45	Closing speech by the Immediate Past President of the RPS	R. E. Jacobson
17.00	RIBA Conference facilities close	

There will also be a second day to the symposium. A half-day **short course** will be run entitled: '**Evaluating Digital Scanner and Cameras Imaging Performance**' by Dr Peter Burns, Carestream Health Inc., USA, at the Royal Institute of British Architects, **Wednesday 31st October 2007.**

DF2007 booking form and further details of the half-day short course are overleaf

Digital Futures 2007: Visual Aspects of Imaging
Royal Institute of British Architects
Tuesday 30th and 31st October 2007

**Please complete the booking form below or book online at:
<http://www.rps-isg.org/DF2007regform.php>**

Please make reservations for:

Name: _____

Company/University: _____

Address: _____

Post Code: _____

Telephone: _____ Fax: _____ email: _____

Payment Information

Symposium, Tuesday 30th October

tick if attending

Price: £90, RPS members: £65, Speakers, Concessions (Students, Retired, Unemployed): £35
Refreshments and lunch will be provided for each attendee whose registration form and payment has been received by 19 October 2007.

Half-day short course, Wednesday 31st October

tick if attending

Price: £90, Concessions (Students, Retired, Unemployed): £50
Refreshments will be provided for each attendee whose registration form and payment has been received by 19 October 2007.

Total Payment: £

Payment method: please circle method used

Cheque

Make cheques available to:
Royal Photographic Society.
Write DF2007 on the back

BACS

Account name: **Imaging
Science Group, The Royal
Photographic Society**
Sort code: 20-05-06
Account name: 20940453

Please send forms and payments to: **DF2007, 18 The Avenue, St. Margarets, Middlesex, TW1 1RY, UK**
Email: GAtridge@compuserve.com (Please use DF2007 in subject header).

Half-day short course, Wednesday 31st October, 09.30 - 13.00

Evaluating Digital Scanner and Cameras Imaging Performance

Dr Peter Burns, Carestream Health Inc., USA

Many of today's standards for characterising imaging performance are based on an image-science architecture. We begin by introducing this perspective and then describe its application to scanners and digital cameras. These standards and accompanying methods are useful for control of tone reproduction, and evaluating manufacturer's claims of resolution, dynamic range, and noise. The measured performance of several digital image capture systems will then be addressed by example. We will finish by discussing how imaging performance can be monitored using summary measures as part of an automated quality assurance process. Greyscale and colour imaging will be addressed for consumer and technical applications.

This course will enable attendees to:

Understand image science principles for digital image acquisition. Describe how existing standards characterise scanner and camera capability and performance. Connect several vernacular terms (e.g., dpi, bit depth, gamma) to science based performance metrics. Benchmark or audit manufacturer's scanner performance with the above methods.