BMVA News

The Newsletter of the British Machine Vision Association and Society for Pattern Recognition

Volume 16 Number 2 December 2005

Editor: Professor Roy Davies Department of Physics Royal Holloway, University of London Egham, Surrey, TW20 0EX Tel: +44(0)1784 443497 Fax: +44(0)1784 472794

email: e.r.davies@rhul.ac.uk

http://www.bmva.ac.uk/

BMVA News¹ is published every three months. Contributions on any activity related to machine vision or pattern recognition are eagerly sought. These could include reports on technical activities such as conferences, workshops or other meetings. Items of timely or topical interest are also particularly welcome; these might include details of funding initiatives, programmatic reports from ongoing projects and standards activities. Items for the next edition should reach the editor by 1 March 2006.

Contents

Editorial: Clubs, Associations, Learned Societies	l
News from the Chair	2
Sullivan Thesis Prize	2
BMVA Distinguished Fellow 2005	3
BMVC 2006	3
Free tickets for IPOT 2006	4
Report on ICIAR 2005	4
Report on SMC 2005	5
Report on CIVR 2005	5
Report on EWIMT 2005	6
VIE 2006 – Call for Papers	6
WIAMIS 2006	8
MX 2006 – Call for Papers	8
Machine Vision book website	9
RPS Awards, 2006	9
Contacts needed	10

¹The British Machine Vision Association and Society for Pattern Recognition is a Company limited by guarantee, No. 2543446, registered in England and Wales. Registered Office: Granta Lodge, 71 Graham Road, Malvern, WR14 2JS. The Association is a non-profit-making body and is registered as charity No. 1002307.

Editorial: Clubs, Associations, Learned Societies ...

Long ago, in the mists of time, visual pattern recognition was a young subject and there were few people working on it in the UK. However, in the mid-1970s, Mike Duff (who later became our first Distinguished Fellow) started up the British Pattern Recognition Association (BPRA). In the 1980s the Alvey Vision Club came into existence, basically as a set of workers funded under the Alvey umbrella. By 1990 the two societies had merged to form the BMVA, in the form we now know. Interestingly, it was Alvey that was called a 'club', but I always think of the BPRA as a club, because it had that sort of informal aura. It was a nice atmosphere because people came to meetings and conferences with curiosities, things they had tried out that seemed to be useful and helpful, and they also brought subtleties to the forum. People had time for trying things out. Nowadays it's different: we're much more professional, and indeed have to be, and much of the chat seems to have gone out of the window. Getting people who have time to referee journal papers is even a difficulty, and this is a sign of the times. So, in one way or another, we seem to have jumped from a club to an association atmosphere, both in feel and in fact.

Now we are in a scenario when the BMVA standards, and in particular those of our conference, have become very high. A great many papers are rejected – normally, well over 50% – and this is giving our own graduate students a hard time getting published. Yet we run technical meetings that are quite popular, and graduate students often give talks at these. However, in a very real sense, these are not 'counted', as they are not refereed, and can hardly be mentioned in the RAE context – and as we all know, the RAE is the ultimate

determiner of what we all (at least in universities) get up to. As a frequent PhD examiner, of course I don't disregard papers presented at BMVA technical meetings: all credit to students for them, but can we make such papers count in a more serious, weighted way? There is a mood in our Society to try to get these papers more formally published, so that this can be achieved, and not in the distant future either. But there are many questions: should these technical papers be printed and circulated? If so, who will pay, and who will go to all the effort? Should the papers merely be unceremoniously plonked on the web (where at least any examiner can quickly confirm that they exist)? Should they be vetted first? If so, by how many referees? And if referees are to be used, who will they be? How long will they take? Will we then merely be building a virtual paper mountain? Who will read them? Will the RAE recognise them? Will the BMVA thus upgrade itself from an Association to a Learned Society? Maybe there is a tendency for any club, association, or society to gradually climb to greater levels of sophistication and to higher standards, much as in the past the IEE (and the IEEE) has done. Though of course we should recognise that only part of the IEE is a Learned Society, as there are different wings to its activities.

But how to get going on all this. One might wonder whether the formal Digests that used to accompany the IEE's technical meetings, when organised by their now defunct Professional Groups, form a good starting model. These were produced to consistent standards, in a manner that befitted informal talks. Of course, while they could be a possible starting point, maybe we should consider also the longer term aims of where we want to be in the end – perhaps some sort of glossy printed proceedings that will sell around the world and compete with an existing barrage of excellent journals (well, *some* are excellent). On the other hand, will our aim of helping our graduate students to get respectably published die a death yet again because of overly high standards?

I guess my ramblings in this column are intended to stir people into action, to make people think what we really want and need (with due caution as to whether what we want may not be identical to what we need). Above all, I feel I am trying to get people to write in with serious suggestions of what we should and shouldn't be doing in this Learned Society (or do I mean Association?): act now, and influence the way the BMVA moves.

Professor Roy Davies Editor, BMVA News email: e.r.davies@rhul.ac.uk

News from the Chair

On behalf of the membership and the Executive Committee of the BMVA, a huge thankyou is due to the outgoing Chair, Dr Tim Cootes of Manchester University, the previous Secretary, Dr David Marshall of Cardiff University, and all the outgoing Executive Committee members, for all their efforts and endeavours in the running and promotion of the British Machine Vision Association over the last few years.

The officers of the new Committee are as follows:

Chair – Dr Majid Mirmehdi Secretary – Dr Andrew Fitzgibbon Treasurer – Dr Mike Chantler IAPR representative – Professor Maria Petrou Meetings coordinator – Dr Danny Alexander Newsletter editor – Professor Roy Davies Publicity officer – Dr Aphrodite Galata Company Secretary – Professor Chris Taylor

Other elected members are:

Dr Adrian Clark Dr Tim Cootes Professor Tim Ellis Dr Peter Hall Professor John Illingworth Dr Dave Marshall

Also co-opted are:

Professor Bob Fisher Dr John Gilby Dr Stephen Pollard Dr Neil Thacker

Sullivan Thesis Prize

The British Machine Vision Association annually awards a Best Thesis prize (to commemorate the contribution made by the late Professor Geoff Sullivan) to the best doctoral thesis submitted to a UK University, in the field of computer or natural vision.

Recommendations for the prize are considered by a Selection Panel appointed annually by the BMVA Executive Committee. The decision of the Selection Panel is announced at the end of the following July. When possible, the presentation will be made at the conference dinner of the British Machine Vision Conference, held annually during September.

The BMVA Executive Committee now seeks nominations for the Sullivan Prize for theses submitted and examined during the calendar year 2005. Please send any nominations to the BMVA Secretary, Dr Andrew Fitzgibbon (secretary@bmva.ac.uk) by the end of February 2006. The theses nominated should be made available through a web page.

The successful author is expected to make his/her thesis available as a PDF file for distribution via the BMVA website.

For previous winners, please see: http://www.bmva.ac.uk/admin/sullivan.html

BMVA Distinguished Fellow 2005

The BMVA Distinguished Fellow award is a special award in order to honour some of the most prominent members of our community in recognition of their services. The title of the BMVA Distinguished Fellow is awarded every year to one person, and only one person. The BMVA Executive Committee is very pleased to announce that this year's Distinguished Fellow is Professor Roy Davies from Royal Holloway, University of London. The award will take place at BMVC 2006 in Edinburgh.

Dr Majid Mirmehdi BMVA Chairman email: chair@bmva.ac.uk

BMVC 2006

British Machine Vision Conference 2006, Edinburgh FIRST CALL FOR PAPERS

The British Machine Vision Conference (BMVC) is the main UK conference on machine vision and related areas. Organised by the British Machine Vision Association, the 17th BMVC will be held during 4–7 September 2006 in Edinburgh, organised jointly by Heriot-Watt University and Edinburgh University.

Papers will be refereed on their originality, presentation, empirical results, and quality of evaluation. All papers will be blind-refereed, normally by three members of the International Programme Committee. The submissions web site is:

http://www2.wiau.man.ac.uk/bmvc2006/

Conference topics cover both theory and applications and include, but are not limited to:

- Statistics and machine learning for vision
- Model-based vision
- Stereo, calibration, and geometry
- Image processing techniques and methods
- Object recognition
- Texture, shape, and colour
- Motion, flow and tracking
- Video analysis
- Segmentation and feature extraction
- Vision for visualisation and graphics
- Person, face, and gesture recognition
- Document processing and recognition
- Biomedical applications.

BMVC 2006 will be a single-track meeting with oral and poster presentations. The proceedings will be available to delegates at the conference in hard copy and on CD and a selection of the best papers will be invited to be published separately in a special issue of the journal *Image and Vision Computing*.

In addition to the contributed papers, BMVC 2006 will include presentations by invited speakers (to be announced) and a pre-conference tutorial (to be announced). Delegates will be able to view poster presentations and see demonstrations by both industrial exhibitors and researchers.

IMPORTANT DATES

Deadline for paper submission: 12 April 2006 Notification of acceptance: 12 June 2006

Deadline for camera-ready electronic copy: 3 July 2006

WORKSHOPS

Proposals for one-day workshops to run on Friday 8 September are invited. Please send requests to Bob Fisher by 1 April 2006.

For further details please see the conference website at: http://www.macs.hw.ac.uk/bmvc2006/

You can obtain a PDF flyer of the CFP at: http://homepages.inf.ed.ac.uk/rbf/cfp1_BMVC2006_v4.pdf

Professor Bob Fisher Edinburgh University email: rbf@inf.ed.ac.uk

Free tickets for IPOT 2006

Every year, the Image Processing and Optical Technology (IPOT) exhibition takes place in the National Exhibition Centre in Birmingham. This exhibition brings together manufacturers, users and researchers in the fields of image processing and vision systems and highlights the latest technical developments and state-of-the-art products. In 2005 the event was attended by over 6000 visitors from industry and academia.

The next event will be on 15–16 February 2006 and, as usual BMVA will be supporting the event. There will also be a BMVA stand in the main exhibition hall to promote the community and provide live demonstrations of some of the exciting work being undertaken by our members.

To further support the event we are offering a free ticket for IPOT 2006 with every issue of the December BMVA newsletter. We would encourage you to visit IPOT and the BMVA stand to see the demonstrations and find more about recent BMVA activities.

For more details about the IPOT Exhibition visit the IPOT website: http://www.ipot.com/

Dr Aphrodite Galata BMVA publicity Officer email: agalata@cs.man.ac.uk

Report on ICIAR 2005

The second International Conference on Image Analysis and Recognition (ICIAR 2005) was held at the Grand Hotel in Toronto, Canada during 28–30 September 2005. ICIAR is an annual conference, alternating between Europe (Porto, Portugal) and North America (Toronto, Canada). It was originally meant to encourage collaboration between researchers of the two countries, but with the participation of experts from all around the world, it has grown into a truly international conference.

The conference lasted for 3 days with 24 parallel sessions, which included two invited talks, 80 reviewed papers presented orally in 21 sessions and 59 reviewed papers presented in 3 poster sessions. The sessions were organised in topical sections on image segmentation, image and video processing and analysis, image and video coding, shape and matching, image description and recognition, image retrieval and indexing, 3D imaging, morphology, colour analysis, texture analysis, motion analysis, tracking, biomedical applications, face

recognition and biometrics, image secret sharing (special session), single-sensor imaging, and real-time imaging. In addition, the conference included a very well-planned reception and banquet following the first two days' sessions.

The conference was opened jointly by Professor Mohamed Kamel (University of Waterloo, Canada) and Professor Aurélio Campino (University of Porto, Portugal). Following the welcoming speech, the baton was passed to Professor Anastasios Venetsanopoulos (University of Toronto, Canada) who presented the first invited talk on "Multimedia Signal Processing and Content-Based Image Retrieval (CBIR)". Professor Venetsanopoulos talked about the plethora of multimedia data available today, and the challenges they pose for CBIR and its applications, particularly MPEG-7.

The second invited talk was given by Professor Jelena Kovacevic (Carnegie Mellon University) on the final day of the conference, titled "Next-Generation Bioimaging Systems". Professor Kovacevic's talk was focused on the role of imaging (more specifically use of tools from signal processing, machine learning and scientific computing) in systems biology and how they can help achieve the goal of large, distributed bio-image databases which would allow researchers to upload, process and share their data using a single, common format.

My presentation was based on work (by myself and Professor Bernard Buxton) on affine-invariant model-based object recognition. We presented a Bayesian formulation of the object recognition problem by using informative prior distributions, tailored to specific model transformations. In addition, we have used a hybrid norm for our objective function that smoothly interpolates between L_2 and L_1 norms when the model is over foreground and background respectively. My paper was well received in a full conference room, with interesting questions at the end of my talk.

Overall, attending the conference was a unique opportunity for me to gain experience from other researchers (this having being my first international conference) and to communicate my work on an international platform. The materials presented were of a very high standard and combined with the relaxed yet professional atmosphere of the conference and the unsurpassed beauty of Toronto made for a truly memorable experience. I would recommend this conference to anyone doing research in the areas of image analysis and object recognition and would like to meet and exchange ideas with professionals from all over the world. I am looking forward to attending the 2006 ICIAR conference in Portugal.

The conference proceedings are available as Springer Lecture Notes in Computer Science (LNCS), vol. 3656, ISBN: 3-540-29069-9.

Finally, I would like to thank the BMVA who contributed to my conference fee and travelling costs.

Vasileios Zografos University College London email: vasileios@zografos.org

Report on SMC 2005

The 2005 International Conference on Systems, Man and Cybernetics was held at the Hilton Waikoloa Village Hotel on the Big Island of Hawaii during 10–12 October 2005. The theme of the conference was Systems of Systems Engineering, though there were many sessions devoted to the various disciplines within electrical and computer engineering. As such the conference began with a number of keynote addresses, panel sessions and tutorials on systems of systems.

The parallel sessions began later on the first morning of the conference; there were usually 15 sessions running in parallel at any one time, and some care and preplanning was needed in selecting which sessions to attend. Because of this the session chairs were instructed to stick rigidly to the timing of presentations within their sessions to allow individual presentations to be attended. The first two sets of parallel sessions contained sessions on pattern classification and data mining, amongst others.

The final set of parallel sessions on the first afternoon contained my talk in the video processing session. The topic of my talk was object detection in moving camera video sequences. Several questions were posed which suggested my talk was well received and understood. My presentation was followed by a talk on tracking deformable motion such as that of facial features under changing facial expressions, the principal contribution being in the energy function used in determining the match between a potential feature and the model used. Further presentations in the session covered tracking using edge-based segmentation to identify the objects to be tracked, and a scaleable feature extraction system which modifies the image resolution to minimise the computational resource used.

The second day of the conference began with further keynote talks and panel sessions, with the parallel sessions beginning in the afternoon. These included sessions on image processing for robotics, face recognition and neural networks for image processing.

The third day followed a similar pattern, this time with sessions on image segmentation, image processing, intelligent tools for image/data understanding, image processing applications and cognition, recognition and expression of faces. It is a testament to the skilled organisation of such a large conference that there were always sessions running on machine vision related areas, with very few clashes.

I found my attendance at this conference to be stimulating and worthwhile both in terms of my personal development in delivering a paper in such circles, and in terms of hearing about the work of others. I would certainly recommend this conference to anyone working in an appropriate sphere. I would like to take this opportunity to thank the British Machine Vision Association for their financial assistance on this occasion.

Michael Knowles University of Birmingham email: mjk802@bham.ac.uk

Report on CIVR 2005

The fourth International Conference on Image and Video retrieval was held between 20–22 July in Singapore. CIVR is a relatively small single track conference. This year the organizers received 128 submissions of which 20 papers were accepted for oral presentation and 42 papers were accepted for poster presentation.

The program of the conference is traditionally divided into two parts. The first two days were devoted to the main technical program and the third day focused on industrial presentations.

The technical session included four invited talks. On the first day, Alexander Hauptmann (CMU) surveyed the history and outlined the future directions of the Informedia Digital Video Library project, which has been running at Carnegie Mellon University since 1994. Alan Smeaton (Dublin City University) summarized results of the recent TRECVid conference - an annual large scale benchmarking competition of video retrieval systems. In 2004 there were 16 participating teams both from academia and industry searching through 70 hours of news footage for queries such as 'Find shots of one or more people and one or more dogs walking together' or 'Find shots zooming in on the US Capitol dome'. On the second day, Susanne Boll (University of Oldenburg) emphasized the role of user context (location, time, weather, ...) for mobile image and video retrieval applications, and John R. Smith (IBM) discussed current multimedia research challenges for industry such as a desktop search tool automatically organizing all digital content (including images and videos) on a personal PC or a (semi-)automatic labelling/annotation of videos for media enterprises such as TV broadcasters or video archives.

Highlights of the main technical program included a contribution by Eric Spellman and Baba C. Vemuri applying Kullback-Leibler divergence as a similarity measure for efficient indexing of shapes. Paola Virga and Pinar Duygulu presented their latest results of image and video annotation using statistical machine translation methods, and Alexander Hauptmann and Michael Christel presented an interesting evaluation paper investigating usefulness of concepts such as 'outdoor/indoor', 'car', 'animal', or 'aircraft', for video retrieval tasks, assuming perfect detectors of such concepts are available.

The author's contribution (written jointly with Mark Everingham and Andrew Zisserman) addressed the problem of retrieving humans in videos based on their facial features. The talk, including a live demo on two feature length movies, was very well received and initiated a series of interesting questions.

This year's CIVR conference was organized by the School of computing of the National University of Singapore in cooperation with ACM SIGIR, IEE and Singapore Computer. The conference proceedings were published by Springer as volume LNCS 3568. The next CIVR will be held in July 2006 in Tempe, Arizona, USA. The paper submission deadline is 2 March 2006.

Josef Sivic University of Oxford email: josef@robots.ox.ac.uk featured papers and posters of the latest research results in these areas, as well as invited presentations and panel sessions.

Keynote speakers were Professor Ed Delp of Purdue University and Roberto Cencioni of the European Commission. During the event, announcements were made of the new European Commission research funding FP6 Call 6 and the consultation process for the 7th Framework work programme.

In 2006, EWIMT will be renamed the 3rd International Conference on Semantic and Digital Media Technologies (SAMT 2006) and will be hosted by aceMedia partners in Athens.



The title of the poster is quite relevant for BMVA members, and would by no means be out of place at BMVC. It is "Text-based approaches for content-based image retrieval on large image collections". ²

Dr Paola Hobson Motorola Labs, UK email: paola.hobson@motorola.com

Report on EWIMT 2005

2nd European Workshop on the Integration of Knowledge Semantic and Digital Media Technologies (EWIMT)

30 November – 1 December 2005, IEE, London.

aceMedia organised the 2nd European Workshop on the Integration of Knowledge Semantic and Digital Media Technologies (http://www.acemedia.org/ewimt2005), at the IEE, Savoy Place, London, in collaboration with the Institution of Electrical Engineers.

EWIMT 2005 was attended by over 135 leading experts in multimedia and knowledge technologies, and

VIE 2006 – Call for Papers

Visual Information Engineering 2006: innovation and creativity in visual media processing and graphics

26-28 September 2006, Bangalore, India

Conference chair:

Dr P Anandan, Microsoft, Bangalore, India

Organising committee: Farzin Deravi, University of Kent, UK Paola Hobson, Motorola, UK

²Unfortunately, I was unable to retrieve the authors by eye! – Ed.

Shrikant Naidu, Motorola, India Professor K R Ramakrishnan, IISC, India P J Narayanan, IIIT Hyderabad, India Santosh Singh, Read-Ink Technologies, India

Special Sessions:

Yiannis Kompatsiaris, Informatics and Telematics Institute, Greece

Tutorials chair:

Sergio Velastin, Kingston University, UK

Regional chairs:

Mohan Kankanhalli, National University of Singapore Antonis Argyros, FORTH, Greece Roy Davies, Royal Holloway University of London, UK Philip Ogunbona, University of Wollongong, Australia Narendra Ahuja, University of Illinois, USA Tamer Shanableh, American University of Sharjah

The IEE Visual Information Engineering conference 2006 (VIE 2006) addresses the fundamental elements of image, video and graphics research and development. Key technical areas include the growing convergence of computer graphics and computer vision/image processing which is an increasingly important area in commercial multimedia applications development.

The conference provides an ideal opportunity for researchers, practitioners and educators in the VIE community to share results and advancements in a high quality, peer reviewed environment, and creates an important networking forum in which academic and industrial participants can discuss the future of VIE technologies and convergence of multimedia technologies with other domains.

Topics of interest include, but are not limited to:

- Image and video communication, coding and compression.
- Image and video interpretation, classification and motion tracking.
- Image and video analysis, segmentation, event-based surveillance, video indexing and retrieval.
- Graphics, visualisation, synthetic image generation and manipulation, animation, rendering, image and video-based model synthesis.
- Architectures and implementation, image acquisition, and hardware.
- Applications of VIE e.g. TV and video, mobile communications, robotics, medical, forensic, security and surveillance, industrial inspection, handwriting analysis/recognition, biometrics, virtual and augmented reality, advanced and immersive videoconferencing, and computer/video games.

- Tools for the content value chain, e.g. repurposing (e.g. transcoding), delivery mechanisms (networking), and consumer devices for visual media consumption.
- Visual media standards e.g. JPSearch, JPIP, MPEG-21, UMA (Universal multimedia access), and scalable video coding.
- Visual media management, multimedia database management, watermarking, privacy, and digital rights management.

Paper Submission and Publication

Prospective authors are invited to submit full papers of up to 6 pages using the on-line system at http://www.iee.org/Events/VIE2006.cfm. Accepted papers will be published in the Conference Proceedings published by the IEE. Exceptional papers will be invited for consideration for a Special Issue of the IEE Proceedings on Vision and Image Processing.

Important Dates

3 April 2006 Submission of full papers
30 May 2006 Notification of acceptance
27 June 2006 Submission of camera-ready papers

Call for workshops and special sessions

Proposals for tutorials of 1 hour duration on emerging fundamental topics of Visual Information Engineering are welcomed. A tutorial proposal of 4–6 pages describing the topic, expected benefits of the tutorial, and a short biography of the proposed tutor may be submitted using the on-line system at http://www.iee.org/Events/VIE2006.cfm. Prospective tutorial proposers may discuss their proposal in advance with Sergio Velastin, email sergio.velastin@iee.org.

Proposals for conference special sessions and workshops of half-day duration on new research areas related to Visual Information Engineering are also welcomed. A special session proposal of 4–6 pages describing the topic, objectives of the session, list of proposed contributors and past workshops organised by the proposer may be submitted using the on-line system at http://www.iee.org/Events/VIE2006.cfm. Prospective workshop or special session proposers may discuss their proposal in advance with Yiannis Kompatsiaris email: ikom@iti.gr.

Dr Farzin Deravi University of Kent email: f.deravi@kent.ac.uk

WIAMIS 2006

7th International Workshop on Image Analysis for Multimedia Interactive Services (www.wiamis.net), 19–21 April 2006, Hyatt Regency, Incheon International Airport, Korea

General Chair:

Professor Dong Yoon Kim, Ajou University

Program Committee Chairs:

Professor Hyoung Joong Kim, Kangwon National University

Professor Ebroul Izquierdo, Queen Mary, University of London

Conference Practitioner
Dr. Paola Hobson, Motorola Labs, UK

Panel Sessions Professor Munchul Kim, ICU, Korea

Special Sessions Professor Michael Strintzis, ITI, Greece Dr. Yiannis Kompatsiaris, ITI, Greece

The International Workshop on Image Analysis for Multimedia Interactive Services (WIAMIS) is one of the main international fora for the presentation and discussion of the latest technological advances in interactive multimedia services. The objective of the workshop is to bring together researchers and developers from academia and industry working in all areas of image, video and audio applications, with a special focus on analysis. After Louvain (1997), Berlin (1999), Tampere (2001), London (2003), Lisboa (2004), Montreux (2005), WIAMIS 2006 is held in Korea – the first time outside of European countries.

Topics of interest include:

- Multimedia content analysis and understanding
- Content generation and manipulation
- Content-based browsing, indexing and retrieval of images, video and audio
- 2D/3D feature extraction
- Advanced descriptors and similarity metrics for audio and video
- Relevance feedback and learning systems
- Segmentation of objects in 2D/3D image sequences
- Identification and tracking of regions in scenes
- Voice/audio assisted video segmentation
- Analysis for coding efficiency and increased error resilience
- Analysis and understanding tools for content adaptation

- Multimedia content adaptation tools, transcoding and transmoding
- Content summarization and personalization strategies
- Data hiding and copyright protection of multimedia content
- Semantic mapping and ontologies
- Multimedia analysis for advanced applications
- Multimedia analysis hardware and middleware

Submission and acceptance dates have now passed.

For further details of the conference, contact Ms. Jinyoung Kim at the address below.

Ms Jinyoung Kim CESCON

email: victoria@cescon.co.kr

MX 2006 – Call for Papers

MX2006: The 10th Mechatronics Forum Biennial International Conference

19-21 June 2006

Penn State Great Valley (near Philadelphia), Malvern, PA 19355, USA

Conference Theme and Scope:

Mechatronics systems are at the interface of the disciplines of electrical and electronics, computer science and information technology, mechanical engineering, and fundamental engineering design methodology. New products and systems based on mechatronic concepts demonstrate significantly reduced system complexity and cost, increased performance, and otherwise unattainable capability and flexibility. MX 2006 is a continuation of the IMechE Mechatronics Forum biennial international conferences. High quality papers are sought from the international Mechatronics community. Industrial contributions, particularly case studies describing state-of-the-art technology, are especially welcome. Preference will be given to papers that highlight synergistic aspects in application, analysis or simulation, and education. Selected papers will appear in special editions of the International Journal of Advanced Manufacturing Technology and Engineering Applications of Artificial Intelligence.

Papers are sought in areas such as:

 Aid to disability e.g. assisted living, tele-health devices and systems

- Automotive applications, including Formula-1 technologies new track
- Calibration, Measurement and Inspection
- Design methodology
- Mechatronics Education new track
- Embedded Control Systems
- Machine mobility, e.g. AGVs and UVs
- Manufacturing processes and machining
- Design for Sustainability.
- Bio-mechatronics, Medical and Biomedical Engineering and Applications
- MEMS (Micro-electronic and Micro-mechanical Systems)
- Nano- and Micro-Mechatronics
- Non-industrial Applications of Mechatronics
- Novel components for mechatronic systems, e.g. sensors and actuators
- Soft Computing e.g. evolutionary, FLC and GA
- Product and Consumer Applications
- Sensing and Control
- System Design and Modelling,
- System modelling: tools, analysis and simulation
- Textile manufacturing
- Vibration and noise control
- Novel components for mechatronic systems, e.g. sensors and actuators

Author Submission Guide and Deadlines

Abstracts are being accepted now. Please see www.gv.psu.edu/mx2006 for full details or contact the MX2006 Conference Chair, Professor David Russell.

Professor David Russell Penn State Great Valley, USA email: drussell@psu.edu

Machine Vision book website

Professor Roy Davies's recent book *Machine Vision: Theory, Algorithms, Practicalities* (3rd edition, Morgan Kaufmann) has a companion website: http://www.mkp.com/companions/0122060938/

A fuller instructors' website is accessible from the companion website. In particular, these sites feature solutions to the problems set at the ends of the various chapters in the book.

Professor Roy Davies Royal Holloway, University of London email: e.r.davies@rhul.ac.uk



Patron: Her Majesty The Queen. Incorporated by Royal Charter

RPS AWARDS, 2006

INVITATION TO NOMINATE

The Royal Photographic Society International Awards are offered annually to individuals who have made significant contributions to the art and science of photography. The Society has adopted a wide definition of photography which refers to the art or science of the recording of light or other radiation on any medium on which an image is produced or from which any image may by any means be produced.

All nominations for the 2006 Awards should be submitted on the appropriate RPS form: http://www.rps.org/NomForm2006.doc

This should be sent to The Royal Photographic Society, Fenton House, 122 Wells Road, Bath, BA2 3AH before 14 January 2006.

Where a team or group is put forward, the nomination should show the role of each person concerned and to what extent and in what way each contributed to the initiation, development and exploitation of the subject of the proposal.

Nominations will continue to be considered by the Awards Committee for three years after the first submission. Should further information relevant to a nomination where an Award has not been made become available during this period, the Awards Committee would like to be informed so that it can take it into consideration. Nominators should be aware that when an Award has not been made during this three-year period a fresh nomination may be made but should realise that a further significant contribution to photography during the intervening period needs to be shown.

Professor Ralph Jacobson President, Royal Photographical Society email: ralph@copse12.freeserve.co.uk

Contacts needed

I am regularly approached by people who would like contacts with machine vision experts with a commercial background, to help them with early stage businesses. Any BMVA members who are aware of or can act as mentors/advisors to help in this way, please contact me and I will make connections as the opportunities arise.

Professor Roy Davies Editor, BMVA News email: e.r.davies@rhul.ac.uk