

BMVA News

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

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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 June 2005.

Contents

Editorial: <i>A Cornucopia of Conferences</i>	1
Call for Expression of Interest to host BMVC 2007.....	2
BMVC 2005	3
Report on IPOT Exhibition 2005.....	4
VIE 2005 – a Pictorial Record.....	5
Report on ISSNIP 2004	6
Report on PR and Machine Learning in Vision.....	7
Report on IASTED BioMed 2005	8
Wanted: Your Vision syllabus.....	9
Travel Bursaries for International Conferences.....	9
Funding from the VVG Network of Excellence!.....	9
BMVA Distinguished Fellow 2005	10
Neural Computation: Advances in State of the Art	10
Astronomical and Medical Imaging 2005 – CFP.....	10

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MIUA 2005 – CFP	11
ICDP 2005.....	11
3 rd European Machine Vision Conference.....	12
The Interplay of Games, Broadcasting, Film.....	12
Multimedia and the Semantic Web	12

Editorial: *A Cornucopia² of Conferences*

Only a year ago I was induced to write an editorial headed “A Cacophony of Conferences”, and now I have been enticed (or even goaded?) to revisit this general topic. True to the function of *BMVA News*, my duty is to exhort, observe, moan, remark or even warn – sometimes in a “Beware the Ides of March” sort of way – whatever seems to be a sign of the times. My function, not to direct but to notice, and leave readers to decide for themselves; and not to deride but to make committees think up appropriate policies.

But what has triggered these remarks on this occasion? Well, the evidence is there for all to see, and nowhere more clearly than on these pages, with the voluminous reports of conferences that have been and calls for conferences yet to come. In fact, the BMVA has reached a relatively static state in these matters: a national conference (BMVC) – of by now world-attested quality and utter regularity and efficiency; an offshoot and now autonomous annual medical imaging conference (MIUA) of undoubted success; and a good sprinkling of well-run one-day technical meetings. Added to which, the IEE (via its VIE Professional

²Literally, from the Latin, a horn of plenty, though it has also come to mean a barrow filled to overflowing

Network) has just run its new-style VIE conference, but equally important, this is accompanied by a fair number of other 2- and 3-day events, such as WIAMIS, EWIMT, CBMI, CIVR, and (closer to home for us) ICDP. A number of these are quite likely to become annual events, and clearly the IEE is thinking seriously about the whole area. Added to which, SIGGRAPH, ICPR, CVPR, and many other venues are still with us and certain to remain so. So should the BMVA regard all this as competition, and take some action? Or is the competition actually non-existent, as each conference and meeting has its own clientele and devotees, so there is enough room for all of us? Especially as medical image processing, graphics, crime (a recent important arrival as a conference topic in its own right) are rather separate entities. Indeed, a healthy view of the subject of image processing and its applications is that it is expanding at an ever-increasing and possibly exponential rate, so we should only be worried if the growth in the number of conferences doesn't match this.

There are of course other worries, such as quality, but I will duck that one here. However, I do see the increasing cost and number of conferences one has to attend as being a problem. Can one get funds for attending them? Are the sources of funding able to match the demand? And are the numbers of conferences now envisaged able to attract enough papers and delegates to keep going (sorry, the quality issue is rearing its head after all)? And maybe the bottom line is, is there a *real* competition between venues, and does this matter? One can argue that market forces will sort it out in the end, so we shouldn't worry. But I do wonder: if two near-simultaneous conferences get reduced attendance, both will become non-viable, and worse, one or other may cancel at a late date, and people's academic aspirations may be damaged: for example, the March–April period has a plethora of calls for papers, and one has to peg one's papers on one or another, and a conference cancellation might mean that one misses the boat. (This needn't be a disaster, as one can also resort to publishing in a journal – not nowadays a silly thing to do, but not the same thing, as conferences are places where one meets people, as much as being places where one gives and listens to papers.)

Yet another worry is the funding of students to attend conferences: a proliferation of conferences is less tidy and more cost-intensive than the old model of a single national quality conference plus a small number of technical meetings. Untidy numbers of meetings, sometimes held in other countries, are not the best plan for student participation. Overseas venues are very nice for lecturers with sizeable grants, but maybe the casualty will be a lack of students who after all do a good proportion of the actual work, and should thus be the ones presenting. But if the world has moved on, and

exponential growth of the subject area is a fact, this will have been a necessary casualty – albeit, it's good to see two articles on student funding possibilities in this issue.

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Call for Expression of Interest to host BMVC 2007

The BMVA Executive Committee would like any interested parties to inform them of their interest in hosting BMVC 2007. At this stage only an expression of interest is required: pending discussion by the Executive Committee, successful expressions of interest will be asked to supply an official bid to hold the conference.

For the expression of interest please supply the following details:

- Main contact for the conference – full postal address, telephone and email
- Prospective members of the conference organising committee
- Provisional dates for the conference, with a confirmation of provisional booking, details of accommodation, rooms bookings for conference venue and meals.

BMVC is traditionally held in the first two weeks of September and runs from Monday afternoon with a tutorial session and full conference single track podium and poster sessions Tuesday through to Thursday lunchtime.

The main conference auditorium must be large enough to accommodate 150+ delegates and must be a tiered auditorium with adequate A/V facilities.

For further information on preparing a proposal to run BMVC please refer to:

http://www.bmva.ac.uk/admin/bmvc_proposals.html

Please send expressions of interest to the BMVA Secretary, Dr David Marshall by 1 October 2005.

Dr Dave Marshall
Cardiff University
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BMVC 2005

The British Machine Vision Conference (BMVC 2005) will take place at Oxford Brookes University on 5–8 September. This three-day single-track conference includes poster sessions and an industrial day.

The conference will be opened by Mike Brady of the University of Oxford, who organised the first BMVC in Oxford 15 years ago. The conference begins with a tutorial on 5 September by Chris Bishop of Microsoft Research. Invited speakers include William Freeman of MIT and Michal Irani of the Weizmann Institute.

We invite authors to submit full-length high-quality papers in image processing and machine vision. Topics include – and are not limited to – the following:

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



All papers will be blind-refereed by at least three members of the international editorial committee. As usual, the proceedings will be published and will be distributed at the conference. The proceedings will be available to delegates at the conference on paper and CD.

The residential and conference accommodation will be at the Headington Campus of Oxford Brookes University, about one mile from Oxford city centre. The Conference Banquet will be held in the Hall of New College, founded in 1379.

The important dates are:

- 17 April: Paper submission deadline
- 19 June: Acceptances announced
- 8 July: Camera-ready copy submission deadline

For further details see the conference website:

<http://cms.brookes.ac.uk/computing/bmvc2005>

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Report on IPOT Exhibition 2005

The annual Image Processing and Optical Technology (IPOT) and Machine Vision exhibition provides visitors with an opportunity to see the latest technologies in optical, photonic and machine vision. This year's event was held on 16 and 17 February at the National Exhibition Centre in Birmingham and was, by all accounts, the biggest and most successful so far with over 240 exhibitors and attracting more than 3600 attendees. Of particular interest to the BMVA community were stands of Sony who provided the first demonstrations of their new colour raw (CR) IEEE1394b cameras, and DVT Corp who were demonstrating their new range of Vision Enabled Robots with fully integrated internal vision systems that means they no longer required a separate smart camera.

As in previous years, the IPOT organisers provided BMVA with a complimentary stand in the main exhibition hall for us to promote the Association and some of the ground-breaking research work of our members. The stand attracted a lot of interest with attendees from both the commercial and academic communities and we were all kept very busy over the course of the two days. There was also a noticeable increase in the number of engineering students enquiring about membership this year, indicating that our efforts to improve awareness of BMVA within the engineering community has started to produce results.

This year the BMVA stand provided a platform for six state-of-the-art research systems developed by members of the Association.

Dr James Black from Kingston University presented an online framework for event detection and video content analysis for visual surveillance applications. The system is able to coordinate the tracking of objects between multiple camera views, which can be overlapping or non-overlapping.

Dr Christos Bouganis, of Imperial College London, presented a live demonstration of a system that emulates the human eye, developed as part of the "Reverse Engineering the Human Visual System" basic technology project (GR/R87642/02). The demonstration proved to be extremely popular with visitors to the stand and featured real time face detection and tracking.

Professor Roy Davies from Royal Holloway, University of London demonstrated a real-time PC-based inspection system that successfully identifies contaminants in wheat grains in accordance with DEFRA specifications. In a second demonstration he presented a system developed as part of the "Reverse Engineering the Human Visual System" project for

locating pedestrians from a moving vehicle and showed how the performance of the software could be improved using a saccade-type technique related to that employed by the eye.

Dr Hammadi Nait-Charif from the Division of Applied Computing at the University of Dundee presented the results from the EPSRC EQUAL project that is developing supportive home environments. The results demonstrated a vision system that used overhead cameras to monitor the activity of an older person and automatically detect if urgent assistance is required. He also presented a system for reliably tracking multiple participants in a 'smart' meeting room scenario.

Professor Maria Petrou from the University of Surrey demonstrated a system for automatically delineating gliomas in 3D MRI data. She also presented a system for accurately reconstructing complex images and textures from only a small set of pixels randomly sampled from the original image. This demonstration is part of the work on the "Reverse Engineering the human vision system" basic technology project funded by RCUK.

Dr Andy Spence from the Texture Lab at Heriot-Watt University demonstrated a method that integrates photometric stereo techniques to automatically produce bump and colour texture maps which can then be used on the latest graphics hardware to interactively render textured surfaces that react to light in a photorealistic manner.

On behalf of the BMVA Executive Committee, I would like to thank each of these members and the research groups they represent for their contributions and for their help and support in promoting the activities of the BMVA.

We are currently looking for members who would like to present a demonstration on the BMVA stand at IPOT 2006. This is a great opportunity to disseminate and promote your work to both an academic and commercial audience. We will be able to accommodate up to four demonstrations on the stand during the course of the event next year and BMVA will reimburse reasonable travel expenses to and from the NEC. If you are interested in contributing please contact the publicity officer of BMVA, Dr Aphrodite Galata, School of Computer Science, The University of Manchester.

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VIE 2005 – a Pictorial Record

IEE International Conference on Visual Information Engineering – *Convergence in Graphics and Vision*

This conference took place over 4–6 April 2005, at the University of Glasgow, Glasgow, UK. I attended the conference and amid having a good time found many excellent papers that were really worth listening to and represented real progress in the field. While I also had on my hat as a member of the IEE VIE Professional Network Committee (not by the way the same as the VIE 2005 Organising Committee), I managed to take some pictures in my role as Editor of BMVA News, which you will see below.³



An animated conversation with the Lord Mayor.



Dr Farzin Deravi replies to the welcome from the Lord Mayor of Glasgow, on behalf of VIE participants.



Earlier Lord Mayors look down on some keen participants!



Memorable repartee at the drinks reception: this picture shows something of the splendour in the City Chambers.



Farzin Deravi and the Editor discuss Glasgow's IT problems with the Lord Mayor.

³Currently, I seem to be providing most of the pictures in *BMVA News* myself. This has been necessity rather than policy, and I would welcome any offerings for events that members have attended. (This also applies to the BMVA Executive Committee!) I can also offer to consider including pictures provided by other bodies such as the IEE or BCS, if they seem relevant to members' interests. – Ed.



An outside view of the City Chambers.



Professor Maria Petrou, who presented an invited paper, makes a dramatic point.



Two recipients of Certificates of Appreciation, after their presentation by Lorraine Breen (IEE). Sion Hannuna received the student paper prize, sponsored by the BMVA; Graham Finlayson received the VIE best paper prize.

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Report on ISSNIP 2004

I attended the International Conference on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP) held in Melbourne on 14–17 December 2004. The conference was technically co-sponsored by IEEE. The key theme of the conference was on Sensor Network technologies. Of the papers submitted, 56% were accepted for publication in the conference proceedings, of which 85 were oral and 20 poster presentations.

The conference was composed of four tracks: Intelligent Sensors; Sensor Fusion and Tracking; Sensor Networks and Information Processing. I presented a paper entitled “Interval-Based Time Synchronisation of Sensor Data in a Mobile Robot”. This was presented at the workshop on Unmanned Vehicle Systems, which was one of a number of workshops held on the last day of the conference.

The paper presented a novel method to the problem of data synchronisation from two different data streams, where the data are time-stamped with different clocks and may be of different frequencies, and where the data streams are not closely networked. In this instance the problem was to synchronise the odometry data from the robot with the image data captured externally. The odometry data stream provided readings at 10 Hz, whilst the image data stream provided images at 25 Hz. The method relied on the ability to identify an independent random ‘event’ from the data values alone. The ‘event’ in this instance was the detection of motion from stationary to motion. The method, can in principle be applied in other areas, for example, to synchronise the time-stamped image data streams from different cameras where they are not closely networked. The ‘event’ could be a random flashing light detectable by the images from the individual cameras.

A notable part of the conference were the very interesting presentations given by the plenary speakers, which included Professor Graeme Clark the inventor of the cochlear implant which simulates the way the brain perceives sound, and Professor Hugh Durrant-Whyte (formerly of the Oxford Robotics Lab) who described a fully modular navigation and control system for mobile robots based on a de-centralised sensor network. During the breaks, I took advantage of the opportunity to discuss my research and exchange ideas and made a number of useful contacts.

There were a number of papers of interest to the machine vision community. These included papers which combine multi-source images or data for sensor fusion, tracking and image registration. Other papers presented novel approaches to known image processing

techniques, for example a novel approach for active contour modelling, optical 3D sensing and the use of fibre-optics for electrograms of the heart.

I kept an eye out for the unique Australian wildlife but other than the ubiquitous Gum Tree (*Eucalyptus*) the kangaroos and koalas kept well away from Melbourne city. What surprised me was the sheer expanse of the country – if overlaid on Europe, Australia would reach from Dublin to Moscow. Overall, it was an enjoyable and informative visit in a pleasant part of the world for that time of the year.

I would like to convey my thanks to the BMVA Committee for accepting my application for the travel bursary, making this visit possible.

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Report on Pattern Recognition and Machine Learning in Machine Vision

This BMVA Symposium was held at the Royal Statistical Society, London, on 26 January 2005.

Chairs: Richard Harvey and Charles Taylor

Pattern Recognition is taking on an ever increasing variety of tasks, and in combination with machine learning techniques is allowing larger and more challenging problems to be tackled. This one-day event at the RSS covered a wide range of topics. A review of the talks follows.

Hongying Meng presented work in which a support vector machine (SVM) was used for foreground extraction. A tri-map for an image was defined: regions manually identified as foreground, background, or unknown. A linear SVM was trained (taking 2–3 min) on the foreground and background in RGB colour space and used with region growing and an ‘interactive’ threshold to determine whether the unknown pixels were foreground or background, in order to clearly segment the image. This talk was followed by a theoretical talk from Sendor Szedmak on optimisation methods to use linear programming in place of Adaboost on large scale problems which are too large for traditional methods.

The topic of the next two talks turned to Genetic Programming (GP). Mark Roberts presented a

cooperative co-evolution approach – evolving both features and classifiers at the same time. This GP method was used on aerial photographs containing a large number of small cars. Features used were mean and standard deviation of intensities in rectangular image patches near to the pixel of interest. The size and position of these boxes were allowed to evolve, along with the functions to combine these responses to form classifiers. These appeared to form small compact classifiers, and would be well suited to applications in the medical domain where a (small) number of images have ‘interesting’ regions identified by an expert clinician and these regions can subsequently be identified automatically in a large number of images. Peter Rockett concentrated on using GP to improve feature extraction by minimising a multi-objective function (Pareto Optimality) to minimise misclassification error, Bayes error and tree size (bloat). Experimentation of this was demonstrated on synthetic data to evolve an edge detector.

After lunch, Daniel Rueckert presented a medical image analysis project in which PCA and LDA were used on the intensity of volumetric data from MRI of a whole brain following deformable 3D registration. The aim was to identify differences in brain development/structure between babies born pre-term and at the normal time.

Next, the focus moved to animals. Tilo Burghardt tracked animals (lions) in wildlife videos, based on face detection (using a combination of different sized and positioned simple textural features). Optical flow was used to help track through sections where faces were not detected for a short period, for example when the lion roared. Interestingly the variation of the y -value (vertical position) of a lion’s face with respect to time could be used to identify the behaviour of the animal – sitting, walking, running, etc. Pawan Kumar continued the animal theme, to learn object models unsupervised from video data. A generative model is formed, built with mattes from a reference frame, and object parts are identified from rigid motion patches over a series of frames. The ‘Layer Pictorial Structures’ are transformed, altered for lighting effects and motion. These generated images are compared to see if they are consistent with the image sequence. The object models can be used for motion segmentation, object recognition and object class recognition. The example object model for a running zebra was particularly impressive.

The final two talks focused more on higher-level pattern recognition (on the task level) than the low-level pixel based pattern recognition methods of the earlier talks. I (Chris Needham) talked about learning to play games from examples. Can a computer learn to interact with the world by observing it through a web cam? A

symbolic data description of the world is formed, and inductive logic programming is used to learn a set of human interpretable logical rules governing the protocol of the game. These models are then used by a synthetic agent to play the game. Kingsley Sage gave a background to variable length Markov models (VLMMs) and their advantages over the more well-known HMMs. He showed how continuous valued VLMMs work in addition to discrete VLMMs, and demonstrated the use of a VLMM in a hand tracking application. Using a variable length history, the VLMM can encode temporal motion patterns and be a good predictor of hand location during occlusion.

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Report on IASTED BioMed 2005

The IASTED International Conference on Biomedical Engineering (BioMed 2005) was held at Innsbruck, Austria, 16–18 February 2005. This conference was organised by the International Association of Science and Technology for Development. It covered a wide range of topics on Biomedical engineering.

The presentation of my paper entitled “A Novel Approach to Mass Abnormality Detection in Mammographic Images” took place in the early morning on the first day of the conference. My talk which was allocated in the “Imaging and Classification of Breast Masses” session went very well. I did quite a few rehearsals beforehand, so I didn’t really feel nervous and my presentation was very successful. I also received some interesting questions from the audience. Meanwhile, I had the opportunity to discuss my work with other leading researchers in my field as well as related fields, which I found particularly useful.

The second day of the conference started with a 4-hour tutorial presentation on Computer-aided Detection of Early Signs of Breast Cancer by Prof. R. M. Rangayyan, one of the leading experts in my field. He presented an overview of image processing techniques having been developed over the past 20 years for the mammographic image analysis applications such as: contrast enhancement, detection of calcifications, analysis of calcifications, detection of masses and tumours, shape analysis of tumours, texture flow-field analysis of masses, texture analysis of tumours, detection of the skin-air boundary, pectoral muscle and the fibro-glanular disc, analysis of bilateral asymmetry, detection of architectural distortion, and pattern classification and

computer-aided diagnosis. His talk gave me a general review of the recent research development on the breast tumour image analysis as well as emphasis on some specific points, thus I found it very useful for my research. It saved me a lot of time and helped me to clarify a few problems I had before.

In the second day afternoon, Prof. P. Boesiger from Swiss Federal Institute of Technology (ETH) in Zurich, gave an interesting plenary address on Magnetic Resonance Imaging (MRI) for the Assessment of Organ Functions. He reviewed the development history of MRI, obstacles and future development direction. His talk broadened my horizons on medical image processing and will be useful for my future research.

There were total of 17 sessions running on the topics, grouped as follows:

1. Biomechanics
2. Imaging and classification of breast masses
3. Medical imaging and processing 1
4. Signal processing, medical devices, and education
5. Biomaterials and sensors
6. Signals and systems in Human motion
7. Control applications in biomedical engineering
8. Tissue modelling and mapping
9. Sleep research
10. Hemodynamics 1
11. Medical imaging and processing 2
12. Ultrasound imaging
13. Surgery simulations and robotics
14. Bioinformatics
15. Signal processing
16. Hemodynamics 2
17. Healthcare systems and telemedicine

The conference was very satisfying, well organised and the technical quality of the papers was high. As this was the first international conference that I have attended since starting my PhD study, it gave me a lot of valuable experience.

I would like to thank the British Machine Vision Association and Society for Pattern Recognition for supporting me with a Travel Bursary to participate in the IASTED International conference BioMed 2005 at Innsbruck, Austria. My attendance at this conference proved to be a very valuable experience and excellent networking opportunity.

Qi Guo
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Wanted: Your Vision syllabus

We are interested in finding out what people teach in 'vision', 'image analysis' and 'image processing' courses, with a view to seeing what material can be shared amongst institutions. If you teach a course that falls into this general area, we'd be grateful if you would download the short form at:

<http://vase.essex.ac.uk/vision-teaching/>

then complete it and email it, along with a copy of your syllabus, to Adrian Clark; the email address is on the form. If your institution provides such a course but it is not delivered by a BMVA member, we'd be grateful if you'd tell them about the above URL.

The form should take only a few minutes to complete. We'll keep all contributors informed as to what we find.

Dr Adrian F. Clark, University of Essex

email: alien@essex.ac.uk

Dr Ela Claridge, University of Birmingham

email: e.claridge@cs.bham.ac.uk

Travel Bursaries for International Conferences

In order to encourage impoverished students to present work at national and international conferences, the BMVA issues bursaries to help cover the travel and conference costs. A small number (4) of such bursaries, of up to £300 each, are issued annually. In return for this magnanimity, the recipient is expected to write a report on the conference for inclusion in the newsletter.

To be eligible, you must be:

- a student
- presenting work at an important conference
- having a hard time raising funds to go.

To apply for such a Student Bursary, write to the Secretary of the BMVA enclosing:

- a copy of the paper you are to present
- a breakdown of anticipated costs and details of your request (up to £300).

Applications will be reviewed by the Committee.

Successful applicants will be sent the agreed funds upon receipt by the Committee of:

- proof that the conference was attended
- a review for *BMVA News*.

BMVC Bursaries

Special provision for student bursaries for BMVC (usually covering the cost of the conference itself) are arranged each year by the BMVC organisers. For details, contact the conference organiser or look at the BMVC web pages.

Dr Dave Marshall

Cardiff University

email: dave.marshall@cs.cardiff.ac.uk

Funding from the VVG Network of Excellence!

The Vision, Video and Graphics Network of Excellence (VVG NoE) exists to assist promote UK research into the convergence of Vision, Video and Graphics. This NoE is community owned and is able to fund secondments of research staff.

It can help facilitate contact between labs of various kinds, because it has representation in all three areas.

There are no restrictions: researchers can be seconded from or to industry and from or to foreign labs.

The NoE will fund travel and accommodation as well as any loss of earnings incurred (e.g. by a PhD student who misses supervision duties). It will also help pay for a subsequent presentation at a VVG conference. VVG05 is to be held at Heriot Watt, 7–8 July, and has Andre Gagalowicz, Joern Oestermann, Hans-Peter Seidel and Demetri Terzopoulos as invited speakers; see:

www.ece.eps.hw.ac.uk/~mtc/vvg05

Everyone is welcome, indeed encouraged, to apply for VVG NoE funding by submitting an application of about 2 sides A4. The NoE will review the applications and reach a decision as soon as possible. For more details contact Peter Hall pmh@cs.bath.ac.uk or see:

www.bath.ac.uk/~maspmh/VVGwebsite/index.html

Dr Peter Hall

University of Bath

email: pmh@cs.bath.ac.uk

BMVA Distinguished Fellow 2005

The BMVA Executive Committee seeks nominations for the Distinguished Fellow 2005 award. This prestigious award is given to one person only each year in recognition to his/her services to the British Machine Vision community. The nominees must be distinguished researchers, based in the UK, who have contributed significantly to the field of research and the reputation of the British Machine Vision Community both nationally and internationally. Nominations, with a few lines of rationale, should be sent to Dr Tim Cootes by 30 April 2005.

Dr Tim Cootes
Manchester University
t.cootes@man.ac.uk

Neural Computation: Advances in the State of the Art in Methods and Tools – Call for Participation

This one-day BMVA symposium will be held at the Royal Statistical Society, 12 Errol Street, London, UK on 20 April 2005.

Chairs: Maria Petrou (Surrey University) and Erol Gelembé (Imperial College)

www.bmva.ac.uk/meetings

- 10.00 Registration and coffee
- 10.25 Welcome and Introduction
- 10.30 The AURA neural network technology Jim Austin (York University)
- 11.00 Artificial Neural Networks and Support Vector Machine Classification of Multichannel Images with Communication Impairments Andriy Kurekin, David Marshall, Darren Radford, Kenneth Lever (University of Cardiff) and Alexander Dolia (University of Southampton)
- 11.30 The random neural network: the model and some of its applications Varol Kaptan (Imperial College London)
- 12.00 Ensemble MLP Classifier Design T Windeatt (University of Surrey)
- 12.30 Lunch
- 13.30 The Perspex Machine tutorial J Anderson (University of Reading)
- 14.00 The use of random neural networks to control routing in networks: the CPN experience R Lent (Imperial College London)

- 14.30 Saliency in vision: neural modelling of V1 region of the visual cortex Z Li (UCL)
- 15.00 A biologically inspired self-organising neural network for modelling market dynamics M Petrou and D Thilakawardana (University of Surrey)
- 15.30 Tea and Close

Registration

Please register with Leanne Pring, Royston Parkin, 95 Queen Street, Sheffield, S1 1WG, Tel 0114 272 0306, Fax 0114 272 6158 or via email to BMVA@roystonparkin.co.uk. The meeting is free to members of the BMVA but a charge of £20 is payable by non-members. A sandwich lunch is available at a cost of £5 and should be booked in advance. When registering please enclose a cheque for the appropriate amount made payable to “The British Machine Vision Association”, and attach the following information:

NAME:
ADDRESS:
TEL:
BMVA MEMBER: YES/NO
email:
LUNCH: YES/NO
VEGETARIAN: YES/NO

Dr Daniel Alexander
UCL
email: d.alexander@cs.ucl.ac.uk

Astronomical and Medical Imaging 2005 – Call for Papers

This one-day BMVA symposium will be held at the Royal Statistical Society, London, UK on Wednesday 6 July 2005

Chairs: Lewis Griffin (UCL) & Seb Oliver (University of Sussex)

www.bmva.ac.uk/meetings

The aim of this one-day meeting will be to explore common areas in Medical Imaging and Astronomy and foster transfer of algorithms and technologies between the fields. The meeting follows on from the previous successful meeting in 2001. For details, see:

<http://www.bmva.ac.uk/meetings/meetings/01/18april01/index.html>

Despite the extreme difference in subject matter, it is clear that there are methodological issues common to these two disciplines. In both there is a need to acquire, process, interpret and store images of 2, 3 or more dimensions. In addition both are interested in temporally and spectrally resolved data that may be of a scalar, vectorial or tensorial nature.

Possible areas of common interest are listed below, with examples from Medical Imaging and Astronomy. Other topics will be considered.

- Data mining – Functional Neuro-imaging Data; galaxy catalogues, bioinformatics and Virtual Observatories; Grid technology; multi-variate analysis
- Image acquisition – online MR parameter refinement, motion compensation, imaging through turbid media.
- 3D from 2D – The Radon Transform in X-ray CT; Attenuation/Emission estimation in PET Emission and absorption of galactic dust; Echo- mapping of active galactic nuclei
- Temporal Data – Periodic tasks in fMRI; cardiac induced movement artefacts; variation of astrophysical objects; gravitational lensing/supernovae searches
- Image Processing – Registration of data from multiple modalities; de-convolution/de-blurring/reconstruction; instrument signal removal/calibration
- Object detection – signal detection in very high noise; model fitting; galaxies, scan anomalies
- Statistics of Shape and Texture – Mammogram appearance; Statistics of rotations and tensors Morphology of galaxies; Large scale clustering of galaxies

Please submit an extended summary of ½ to 1 page A4 (PDF preferred). Send contributions by email attachment to Lewis Griffin by Friday 6 May.

Dr Lewis Griffin
UCL
email: l.griffin@cs.ucl.ac.uk

Medical Image Understanding and Analysis 2005 – Call for Papers

University of Bristol, 19–20 July, 2005

Chair: Dr Majid Mirmehdi, University of Bristol.

NEW SUBMISSION DEADLINE: 15 APRIL

Invited Speakers: Dr John Waterton, AstraZeneca, UK
Prof. Nicholas Ayache, INRIA, France
Prof. Francis Duck, RUH-Bath, UK
Prof. Max Viergever, Utrecht University, The Netherlands

This is the 9th annual technical meeting which follows the successful series begun in Oxford in 1997. The meetings are designed to provide a UK forum for the dissemination and discussion of research in medical image understanding and analysis, an expanding area in which significant advances are currently being made. It is an area notable for the range of research communities involved, and the meeting aims to encourage the growth and raise the profile of this multi-disciplinary field by bringing together the various communities.

Important dates

- Deadline for receipt of submissions: Friday 15 April 2005
- Notification of acceptance: Monday 16 May 2005
- Deadline for final camera-ready copy: Monday 30 May 2005
- Meeting: 18 and 20 July 2005

For full details of the conference, including its committees and sponsorships, see the conference website: <http://www.miaa.org.uk>

Dr R Bowden
University of Surrey
email: r.bowden@surrey.ac.uk

ICDP-05

The International Symposium on Imaging for Crime Detection and Prevention will be held at the IEE, Savoy Place, London, UK, 7–8 June 2005. It is organised by the IEE Visual Information Engineering Professional Network. The programme will shortly be placed on the conference website:

<http://conferences.iee.org/icdp/>

For further information, please contact:

IEE Event Services
email: events1a@iee.org.uk

3rd European Machine Vision Conference

The 3rd European Machine Vision Conference is due to take place on 29–30 April, 2005, at Palermo in Italy. For full information about the conference, including registration details, see the conference website: <http://www.emva.org/palermo>

Contact: Regarding questions about EMVA (European Machine Vision Association) Patrick Schwarzkopf / Dorothee Lüttmann, Lyoner Strasse 18 60528 Frankfurt am Main, Germany Phone: +49 (0)69-6603-1466 / -1470 Fax: +49 (0)69-6603-1689 <mailto:info@emva.org>

Regarding questions about registration and accommodation Stuttgart Convention Bureau (Division of Stuttgarter Messe- und Kongress GmbH) Ellen Schmid, Berliner Platz 1 70174 Stuttgart, Germany Fax: +49 (0)711-2027-766

Ellen Schmid
EMVA
email: ellen.schmid@congress-stuttgart.de

The Interplay of Games, Broadcasting, Film and Production

This IEE Seminar will be held on Wednesday 27 April 2005 at The IEE, Savoy Place, London: it is organised by the Visual Information Engineering and Multimedia Communications Professional Networks

This event will provide a forum where game, computer graphics, film and TV production key players both from research and the industry can exchange knowledge and bring together their different perspectives and approaches. Topics to be covered include Computer Games, Digital media production, use of Computer Game Engines in film/TV production, linear and non-linear narratives and formats, realistic computer Graphics.

For further details, see the following website:

www.iee.org/events.interplay.cfm

Paul Mathews
IEE
email: p.mathews@iee.org.uk

Multimedia and the Semantic Web

http://www.acemedia.org/ESWC2005_MSW

This meeting is to be held on 29 May 2005 as part of the 2nd European Semantic Web Conference, Heraklion, Crete 29 May to 1 June 2005.

This one day workshop on Multimedia and the Semantic Web aims to bring together researchers and practitioners in the multimedia and Semantic Web domains in order to assist in forming bridges between the communities for mutual benefit.

This workshop includes a mix of invited and peer-reviewed papers, with a balance of topics from the perspective of the Semantic Web and from the perspective of multimedia applications. BMVA and multimedia community participants would benefit from the workshop in discovering how Semantic Web technologies can be used to increase the value of image, video and multimedia assets such as using ontologies and reasoning to assist with multimedia analysis, or identification means to facilitate content location.

We anticipate some significant debate owing to differences in opinions about approaches to take in solving the relevant joint problems, and we invite you to join the workshop to give your views on these subjects.

Dr Paola Hobson
Motorola Labs, UK

Corrigendum

Unfortunately, the *Tribute to Mark Bradshaw* published in the last issue of BMVA News was wrongly attributed, and was written by the head of Mark's Department, Dr Chris Fife-Schaw (the article was only communicated by Professor Illingworth). For a fuller obituary, please refer to:

http://www.bmva.ac.uk/obituaries/mark_bradshaw.html

Warning!

Readers should note that while great care has been taken to provide up-to-date information on conferences and meetings, they should check critical information, such as submission dates, from conference websites. Typos apart, conferences very often change such details to make sure of attracting the maximum number of papers and delegates. – Ed.