

BMVA News

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

Volume 12 Number 4
June 2002

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 31 May 2002.

Contents

| | |
|---------------------------------------|---|
| Editorial..... | 1 |
| BMVC 2002..... | 2 |
| New Prize at BMVC..... | 3 |
| Professor Michael Brady, FRS..... | 3 |
| Reverse Engineering Human Vision..... | 3 |
| Free Information on CV and IP..... | 4 |
| ICVS 2003..... | 4 |
| OPTO-Ireland..... | 5 |
| Obituary..... | 6 |
| CIVR 2002..... | 6 |

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.

| | |
|---|---|
| Imaging Companies Explore Investment..... | 7 |
| Nominations for Executive Committee..... | 8 |
| Book for Review..... | 8 |
| Stop Press..... | 8 |

Editorial

This issue shows a picture of Professor Mike Brady, last year's Distinguished Fellow, whose impressive career was reported in the March issue of *BMVA News*. Many people were surprised that we didn't include a picture of him with the article, and I've now rectified this. In fact this omission was not so much one of negligence as one of ensuring that we don't infringe copyright. For the copyright issue is one which publishers take very seriously, and I fear academics less so. Personally, I always try to play it safe, adopting the maxim 'multiple copying of copyright material without permission is always illegal'. Indeed, asking for permission to reprint my own material – let alone other people's – has been the bane of my life: whenever one writes a review article or gives an invited paper and wishes to report some aspect of one's own work, it can be useful to slip in a picture from file instead of starting again from scratch and wondering how that old algorithm worked, or whether one still has the computer it was on, or access to the language in which it was coded.

But what I can't understand is why I have all this trouble, while others don't seem to be bothered about it. Quite the contrary in fact – as most academics seem to have a 'gung ho' attitude: copy first, and maybe ask questions afterwards. As



evidence, note the number of papers one sees that are almost facsimiles of each other, with the same illustrations, but with no acknowledgement in sight. Amazing that all these people get away with it. Furthermore, the situation has now become even more alarming with borrowing from the internet being rife – or even standard practice. How else can we compare algorithms rigorously without using standard images? Yet once one such image has been published, the first publisher owns its copyright, and then in theory all other publishers or the authors have to ask for permission to use it. A neat way of getting around this problem is not to publish the raw data but just the modified versions that one's algorithms produce. However, referees are hardly likely to appreciate not seeing the original data, as it's so crucial in defining the problem.

By way of example, I recently gave a tutorial at an IEE conference and followed it by publishing a printed version. The original church image I used to illustrate some aspects of feature detection was *exactly* what was needed: yet I found I couldn't use it because I couldn't find the source (on the web), and ended up wasting an afternoon taking photos of some local churches, and selecting one.

It's all a big waste of effort, yet those who write books know that it's necessary to protect copyright: also academic journals would be in a sad way if they couldn't protect their priority and make profit from their wares: we all have an interest in that too. But if anyone can spot the errors in my thinking, I would appreciate hearing from them. It has already, as you can see, affected BMVA News, and incidentally, the lack of pictures of the BMVC venue (Cardiff) in this issue shows that the problem is ongoing.

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

BMVC 2002

Organisation of BMVC 2002 is well underway. There have been a record number of submissions – 190 in total, which meant we had to press-gang some extra help for the paper refereeing. Of the 185 'unspoiled' submissions, 81 were accepted, leading to a healthy 56% reject rate. Notification of the outcome of the reviewing process was 24 June, and the deadline for camera-ready electronic copy is 12 July.

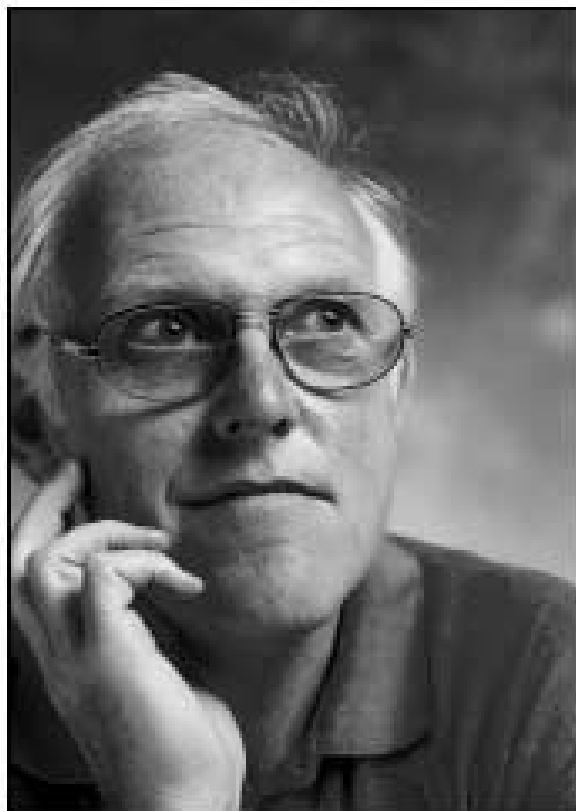
This year we are initiating an additional invited speaker into the program to enhance coverage of industrial applications. The invited speakers are: Professor Yiannis Aloimonos (University of Maryland) Professor Vaclav Hlavac (Czech Technical University), and Dr. Andrew Stoddart (2d3).

The conference will be held in the Department of Computer Science at Cardiff University. The conference dinner will be held at Celtic Manor Resort, which is the venue for the Ryder Cup in 2010.

For more details see:

<http://www.cs.cf.ac.uk/BMVC2002/>

Paul Rosin & David Marshall
 Cardiff University
paul.rosin@cs.cf.ac.uk
dave.marshall@cs.cf.ac.uk



New Prize at BMVC

The Imaging Faraday Partnership will be awarding a prize at BMVC2002 for the work that best deserves help with exploitation. The prize is offered in support of the BMVA objectives of encouraging the practical applications of Computer Vision and Pattern Recognition and the transfer of research results to industry.

All types of work presented at the conference will be eligible for the prize (demonstration, poster or paper). The only exclusions are the papers winning the Science and Industrial prizes and any work involving a core partner in the Imaging Faraday Partnership. We would particularly like to see the prize encourage a greater number of demonstrations at the conference. Existing work that is perhaps not new in terms of publication but is now in the form of an interesting demonstration will be eligible for the prize.

Dr John H Gilby
Sira Ltd.
email: john.gilby@sira.co.uk

Professor Michael Brady, FRS

Mike Brady's photograph appears above: as reported in the last issue of BMVA News, he is our Distinguished Fellow for 2001.

Reverse Engineering the Human Vision System: Biologically Inspired Computer Vision approaches

CALL FOR PARTICIPATION

One Day BMVA symposium in London, UK in January 2002.

There is a plethora of computer vision research that has been inspired by biological vision, from the simple choice of thresholds to motion detection and object recognition. Such research serves a dual purpose: computer models help understand the functionality of the human vision system, and computer vision systems using such an approach are perhaps more appropriate in certain applications where the human expert has to be imitated.

The meeting is going to bring together scientists who work on both aspects of this topic, i.e. computer vision as well as cognitive psychology and neurophysiology and it is hoped that it will enhance the dialogue and collaboration between the two communities.

If you are one of these scientists and would like to present your work, please send an abstract of no more than 200 words to Maria Petrou (m.petrou@surrey.ac.uk) no later than 30 November 2002.

The date of the meeting will be 29 January 2003: the exact venue will be announced in a future communication.

Professor Maria Petrou
University of Surrey
email: m.petrou@surrey.ac.uk

Free Information on CV and IP: CVonline and HIPR2

CVonline

<http://www.dai.ed.ac.uk/CVonline/>

is a free web-based compendium of topics in computer vision. We have recently restructured CVonline to make the hierarchical topic structure clearer. CVonline just had its 100,000th visitor, each of which accesses about 4 topics. There are 1319 topics of which 793 have content so far.

HIPR2

<http://www.dai.ed.ac.uk/HIPR2>

is a collection of free web-based tutorial materials on the 50 most commonly used image processing operators. Each operator has an individual JAVA exercise program, plus there is a JAVA-based Khoros-like drag and drop workspace tableau. We have recently changed the JAVA so that it works under Internet Explorer and Mozilla as well as Netscape (Java 1.2 or higher is needed). HIPR2 just had its 65,000th user.

Dr. Robert B. Fisher
University of Edinburgh
email: r.b.fisher@ed.ac.uk

3rd INTERNATIONAL CONFERENCE ON COMPUTER VISION SYSTEMS: ICVS'03

FIRST ANNOUNCEMENT AND CALL FOR CONTRIBUTIONS

Special Topic: *Cognitive Vision Systems*

1-3 April 2003

Graz, Austria

<http://dib.joanneum.at/ICVS03>

SCOPE

Computer Vision is the science of machines that see. In recent years, the domain has sufficiently matured that researchers have begun to build and experiment with systems that observe, model and interact with the world. Experiments with such systems enable researchers to propose and evaluate architectures and design methods. The goal of the International Conference on Computer Vision Systems is to document the emergence of an engineering science of Computer Vision Systems and to discuss the embedding of complete machine vision systems within the real world.

ICVS solicits original, unpublished high quality scientific papers on the design, control and evaluation of vision systems. The conference is particularly interested in papers providing methods for the following problems.

- Architectural models for computer vision systems.
- Design methods for vision systems.
- Cognitive Models for interpretation, integration and control.
- Methods and metrics for performance evaluation.

The special theme for the third ICVS is methods for Cognitive Vision Systems. Cognitive computer vision is concerned with integration and control of vision systems using explicit but not necessarily symbolic models of context, situation and goal-directed behaviour. Cognitive vision implies functionalities for knowledge representation, learning, reasoning about events and about structures, recognition and categorisation, and goal specification, all of which

are concerned with the semantics of the relationship between the visual agent and its environment.

Original, high quality, scientific papers of at most 10 pages (Springer LNCS Format) are solicited for inclusion in a single track program. Papers will be reviewed by an international program committee according to the following criteria:

- **Pertinence:** Does the paper describe methods or theories concerning the theme of the conference (vision systems and cognitive vision systems)?
- **Scientific quality:** does the paper clearly identify a scientific problem, document the state of the art and demonstrate an original technique or method that resolves the problem?
- **Impact:** is the method likely to be adopted for the design or evaluation of computer vision systems?
- **Generality:** Can the method be used for a variety of problems?
- **Innovation:** Does the method demonstrate an improvement in the current state of the art?

Poster sessions will be reserved for papers that document computer vision applications, as well as classical style computer vision papers dealing with techniques for image processing, recognition, geometric methods or reconstruction. Student researchers are encouraged to present vision systems and evaluation results.

IMPORTANT DATES

Submission of papers: 15 October 2002
 Notification of acceptance: 15 December 2002
 Camera ready paper: 15 January 2003
 Early registration: 15 February 2003
 Hotel reservation: 15 February 2003
 Conference: 1–3 April 2003 (2 days conference, 1 day workshops/tutorials)
 ECVision Meeting: 4 April 2003

SPECIAL ISSUE in *Machine Vision and Applications*

The best papers of the conference will be selected for a reviewed special issue of the Springer International Journal Machine Vision and Applications. Editor: Mohan Trivedi, Guest editors: Markus Vincze, Lucas Paletta, James L. Crowley.

BEST PAPER PRIZE

The best conference paper will be awarded at the conference dinner.

WORKSHOP and TUTORIAL PROPOSALS

Please contact Hilary Buxton (email: hilaryb@cogs.susx.ac.uk) with a proposal summary. The deadline is 15 October 2002.

Dr. Markus Vincze
 Vienna University of Technology
 email: vm@infa.tuwien.ac.at

OPTO-Ireland

SPIE Regional Meeting on Optoelectronics, Photonics, and Imaging 5–6 September 2002, Galway, Ireland.

Registration and complete details are online: <http://spie.org/info/ireland>

Register by 16 August; make Hotel reservations by 13 August.

Conferences on:

Biomedical Optics and Biophotonics
 Optoelectronic and Photonics Devices
 Laser-Based Material Processing
 Nanotechnology & MEMS
 Optical Sensing
 Optical Sciences
 Applications of Spectroscopy
 Optics Education
 Business in Optics/Photonics

Co-located conference:

Optical Metrology/Imaging/Machine Vision

Join your colleagues from the leading companies, laboratories, government research centres, and universities across Ireland and world-wide who are focused on research, development, applications, and commercialisation of high-tech light-driven technologies.

Sponsored by: SPIE – The International Society for Optical Engineering, <http://spie.org>

SPIE
 email: spie@spie.org



Obituary: Ian Todd

We are sad to report that Ian Todd died recently, after a long illness. Ian worked for the National Engineering Laboratory at East Kilbride, and was very much involved in the early development of BMVA. At the time, in the early 1990s, DTI were investing significant sums in joint academic/industry research, advised in the area of machine vision by NEL. Ian was our official link to the DTI, and did much to help the Association establish itself as an effective advocate for the machine vision research community. He played an active role on the programme committee of BMVC, at a stage when we were establishing its reputation as an event of international significance. He also pioneered our involvement in what has now become IPOT bringing the results of academic research to a wider audience in industry and commerce. More recently he was involved in the Imaging Faraday partnership, again working for the good of our discipline as a whole.

We offer Ian's family our sincere condolences for their untimely loss. He was a good friend to BMVA and a delight to work with he will be greatly missed.

Professor Chris Taylor, Founder Chair of
BMVA
Manchester University
email: chris.taylor@man.ac.uk

Another person who knew Ian well is Adrian Clark (University of Essex), who adds his own personal tribute:

"I've been in touch with Ian regularly over the intervening years and he maintained a positive approach throughout the time. I, for one, am terribly saddened by the news."

INTERNATIONAL CONFERENCE ON IMAGE AND VIDEO RETRIEVAL (CIVR 2002)

CALL FOR PARTICIPATION

18–19 July 2002 Brunei Gallery, Bloomsbury,
London, UK.

WHY ATTEND?

CIVR is one of the leading fora for image and video retrieval. The conference programme contains papers on a wide variety of topics including user modelling, shape matching, evaluation, clustering, compressed retrieval, summarisation and many more. The programme covers a diverse range of application areas from pornography to basketball and from funeral monuments to robotics! A feature of this conference is the mixture of researchers and practitioners which makes CIVR a unique melting-pot of ideas and collaborations.

The conference programme contains thirty-nine papers from international experts that represent the state-of-the-art in image and video retrieval. These are augmented with panel discussions, keynote talks, reviews and exhibitors. The conference takes place in Bloomsbury in the centre of London, one of the world's most vibrant capital cities, and is scheduled for Thursday and Friday to allow you to maximise the effectiveness of your visit.

WHO SHOULD ATTEND?

Previous conferences have attracted computer scientists, strategists, librarians, museum informatics specialists, archivists, digital library researchers, government information providers, publishers, and

content specialists from a broad cross-section of sectors and disciplines. Over the previous two conferences (CIR 99 and CIR 2000) roughly 53% of the delegates have come from University and 47% from industry or government.

VENUE

The conference takes place in the prestigious Brunei Gallery, School of Oriental and African Studies (SOAS), Russell Square, London, WC1H 0XG, UK. For further details of the conference venue and a map, see <http://www.soas.ac.uk/gallery/>.

ACCOMMODATION

Delegates are responsible for making their own accommodation arrangements. There are a number of international quality hotels within walking distance of the Gallery which is situated in the centre of London.

REGISTRATION

Registration covers attendance at the conference, proceedings, refreshments and lunch. Members from our sponsoring organisations and graduate students qualify for discounts. The sponsoring institutions are: Institution of Electrical Engineers (IEE); the British Computer Society (BCS) and the British Machine Vision Association (BMVA).

The members fees are:

Full conference: £190 (student); £250 (academic/non-profit); £340 (commercial).

The non-members fees are:

Full conference: £275 (academic/non-profit); £375 (commercial). One day only: £180 (academic/non-profit); £240 (commercial).

Registration forms and fuller details are available at the conference website www.civr2002.org. Please note that all prices are quoted in UK pounds sterling.

YOU MUST REGISTER BEFORE 30 JUNE TO BE ELIGIBLE FOR DISCOUNTED RATES.

Dr Richard Harvey
University of East Anglia
email: rwh@sys.uea.ac.uk

Imaging Companies Explore Investment

The Faraday Partnerships have been active in helping technology-based SMEs and start-ups/spin-outs to explore opportunities for venture capital investment. Activity has been co-ordinated by the Faraday Partnerships' Investment Group (FPIG), a cross-Faraday initiative led by Sira Ltd. Members of the FPIG visited a variety of early stage investors in technology in order to address the need for a better understanding of venture capital and the requirements of the investors by scientists and small technology-based enterprises. Additionally they have been ensuring that the investors are aware of the commercially attractive technology being developed under the Faraday banner. Further effort went into looking into each Faraday Partnership's communities for investment prospects that were appropriate for placing before investors and then brokering the meetings between the two parties.

The FPIG then hosted an investment event at DTI Conference Centre on 11 April at which investment prospects and investors were brought together through a series of matched meetings in order to explore the opportunities. Imaging-based companies associated with the Imaging Faraday Partnership were particularly strongly represented. These companies covered a variety of imaging related areas including biometrics; 2D and 3D imaging; facial recognition; people tracking; body scanning; smart CCTV systems; X-ray inspection; video compression and image analysis. Each investment prospect was able to have meetings with several investors over the course of the day. Ongoing contact with the companies involved has indicated that many are taking talks further and found the event useful. Feedback from the investors is that they were impressed with the range and quality of the prospects and would be keen to access more. Continued activity and further investment events are planned for the future.

Dr Simon Aliwell
Sira Ltd.
email: simon.aliwell@sira.co.uk

Nominations for BMVA Executive Committee

Nominations are requested for the forthcoming election of Executive Committee members of the BMVA. Nominees must be paid-up members of the Association and agree to serve for a period of two years. A member of the Committee is expected to participate in the bimonthly committee meetings normally taking place in Oxford. Regrettably BMVA does not cover the travel expenses of the members participating in the committee meetings.

Completed nomination forms should be sent to the BMVA Secretary at the address below and must be received by 16 July 2002. This request for nomination must be signed by the individual standing and one other member. The nomination should also include a brief biographical statement for distribution to BMVA members.

The elected committee consists of 10 elected members, 5 of whom are elected each year. The members elected in 2000, who will stand down this year are:

Mr. W.G.L. Adaway
Dr. T.F. Cootes
Prof. J. Kittler
Dr. T. Pridmore
Dr. P.L. Rosin

If more than 5 nominations are received for the five elected places then a postal ballot will be held. Voting papers will be sent out in early August and will need to be returned by 30 August. Each member will be able to vote for up to 5 candidates. The results will be announced at BMVC2002 in Cardiff and in BMVA News.

Please send completed nomination form (see tear-off sheet at end of newsletter) to:

Dr. Paul Rosin
Department of Computer Science
Cardiff University
Newport Road
PO Box 916
Cardiff, CF24 3XF
email: paul.rosin@cs.cf.ac.uk

Book for Review

Would you like to have the opportunity to review a book for BMVA News? If you review a book you can of course keep it for your own use! Books will be sent out on a first come-first served basis.

So far I have had no offers to review the following book, which appears to be doing well around the world after just a few months.

M. Nixon and A. Aguado *Feature Extraction and Image Processing*, Newnes, 2002, ISBN 0 7506 5078 8, paperback, xii + 350 pp.

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

STOP PRESS

BMVC2002 Provisional Programme

We are pleased to announce the provisional programme for the British Machine Vision Conference 2002 is now available:

<http://www.cs.cf.ac.uk/BMVC2002/>

Any queries should be addressed to Paul Rosin at paul.rosin@cs.cf.ac.uk.

Paul Rosin & David Marshall
Cardiff University

See the BMVA website for further up-to-date information on BMVA activities:

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

Nomination Form for BMVA Executive Committee

Brief Biography of Nominee

To be completed by the Nominator

As a fully paid up member of the BMVA, I

Name:

Address:

.....

.....

wish to nominate:

Name:

Institution:

for the Executive Committee of the BMVA.

Signed:

To be completed by the Nominee

I am a fully paid up member of the BMVA and I am willing to serve for a minimum period of one year on the BMVA committee.

Name:

Address:

.....

.....

email:

I attach below a brief biography for distribution to BMVA members.

Signed:

Please send completed nomination form to:

Dr. Paul Rosin
Department of Computer Science
Cardiff University
Queen's Buildings
Newport Road
PO Box 916
Cardiff, CF24 3XF, UK

tel/fax: +44 (0)29 2087 5585/4598

email: paul.rosin@cs.cf.ac.uk

WWW: <http://www.cs.cf.ac.uk/User/Paul.Rosin/>