

GENERAL PROCEDURES FOR MEETINGS

One of the major activities of the BMVA is the organisation and facilitation of Technical Meetings on activities of interest to its membership. This short document describes the procedures that should be followed in the organisation of such meetings.

Meetings organisation will involve two principal people: the BMVA Meetings Secretary and a Technical Programme Organiser (Meeting Chairman). The BMVA Meetings Secretary is a post held for one or more years and deals with the routine matters of organisation that are common to all meetings i.e. booking of lecture theatre etc. The post is currently held by Andrew Gilbert (a.gilbert@surrey.ac.uk) The Technical Programme Organiser (Chair) will vary from meeting to meeting and is the person responsible for organisation specific to a single meeting i.e. technical programme and individual speakers.

Technical Programme Organiser

Any BMVA member can propose a topic for a meeting and such a proposal will be considered by the Executive Committee. If the meeting receives approval then a Technical Programme Organiser (TPO), is appointed. Typically the TPO is the BMVA member who suggested the meeting. It is the responsibility of the TPO to:

- Define the programme format.
- Contact speakers and confirm their participation
- Liaise with the BMVA Meetings Secretary concerning administrative matters.
- Be present on the day of the meeting to act as Meeting Chairman.
- Arrange for a meeting report to be prepared for inclusion in a subsequent BMVA Newsletter.
- Act as guest editor for the Annals of the BMVA.

For a more detailed checklist of the technical programme organiser's responsibilities, please see section below.

BMVA Meetings Secretary

The BMVA Meetings Secretary is an Executive Committee post associated with the organisation of meetings. The principal roles of the Meetings Secretary include:

- Chair any BMVA Meetings Sub-Committee that considers meetings proposals and dates
- Ensure that meetings organisation is progressing and that meeting organisers have a good coherent programme of speakers and everything is done in good time.
- Arrange venue for meetings.
- Coordinate catering arrangements for meetings.
- Liaise with staff at the institution hosting the meeting.
- Prepare meeting notices in standard format.
- Publicise meetings in BMVA News.
- Coordinate with BMVA Secretary to include meetings notices in mailshots.
- Act as registration secretary on the day of meeting (also includes advising Membership Secretary and Treasurer of new members and monies collected).

Following approval by the Executive Committee a date will be fixed for the meeting and suitable administrative arrangements will be dealt with by the BMVA Meetings Secretary. The BMVA Meetings Secretary is the primary contact for all Technical Organisers.

Meeting Budget

The BMVA pays for hire of the meeting rooms and has some funds for the travel costs of invited speakers (up to £350) are occasionally available, under consultation with the Meetings Secretary. However organisers are asked to advise speakers that funds are limited and speakers are therefore encouraged to seek contributions from other sources. Normally, the BMVA will cover travel expenses for invited speakers that are equivalent to 2nd class rail fare. Speakers envisaging more expensive modes of transport or travelling from outside the U.K. should have their claims approved by the TPO prior to the meeting.

BMVA meetings are free to BMVA members but a nominal charge (currently £20) is made for attendance by non-members. Separate charges are made for lunches. For a fee of £10.00 (2012 prices) per person, the host institution will make arrangements a light sandwich lunch from an outside caterer. The BMVA subsidises the lunch and charges £5 per attendee. Lunch is free for speakers and chairpersons. Refreshments usually provided during the registration time half hour before the meeting and also in mid-afternoon. This is provided free. Lunch should usually be scheduled to last 1-1½ hours to allow adequate interaction and discussion among attendees.

Publicity

Technical meeting organisers are requested to supply at least three months in advance of the meeting date, a Call for Participation. A confirmed programme is required two months before the meeting for distribution and advertising (BMVA News, BMVA mailshot, Pixel email, Vislist and London-AI).

Venue

The majority of meetings are held at the British Computer Society, Southampton St, London <http://www.epsg.org.uk/locations/SouthamptonStGuide.pdf> . Alternate venues can be suggested but suitable arrangements would have to be made by the meeting organizer. Other past venues have included UCL and the Royal Academy of Engineering. It is important to ensure that venues have liability insurance (the BCS and most universities do).

The BCS offers an air-conditioned lecture theatre which seats up to 90. Audio-visual equipment includes a data projector. It is important to let the organizer know the approximate expected numbers for the meeting so that a suitable room can be booked.

Regional Meetings

It is possible to organize meetings outside London. The BMVA technical meetings organizer can provide advice, publicity and administrative help and the BMVA will subsidise the food and travel expenditure at a level similar to that for London meetings. However, it is not usually possible for the technical meetings organizer to make the local arrangements (booking venue, arranging food, on-day registration etc.). Please contact the BMVA for further details.

DETAILED CHECKLIST FOR TECHNICAL MEETING ORGANISERS

1. Agree a date for the meeting with the BMVA meetings secretary (Andrew Gilbert, a.gilbert@surrey.ac.uk) . Meetings are normally held on Wednesdays.
2. Produce a call for participation in the meeting (see example overleaf). This should be submitted to the BMVA meetings secretary 3-6 Months before the proposed meeting for distribution. Ideally, the call for participation should be produced just before an Issue of the BMVA News is distributed (January, April, July and October).
3. Receive the responses from the Call for Papers, contact potential speakers and confirm their participation.
4. Arrange the program. (see example overleaf). The majority of meetings are organised as one-day meetings beginning at 10:30 am and closing at 5:00 pm. The format is largely at the discretion of the organiser, though typically meetings consist of 6-8 presentations, each of 30-40 minutes duration. It is important that meetings do not continue after 5 pm as punitive hire costs may be incurred for use of the lecture theatre. Where appropriate, it is hoped that a meeting can begin with a tutorial overview of the subject, in order to provide those people with only a slight background a reasonable grounding in the subject. The tutorial might be provided by the programme organiser (the Chair) or an invited keynote speaker. The program should be submitted to the BMVA meetings secretary a minimum of 2 months before the meeting to provide enough time for publicity. Ideally, the call for participation should be produced just before the subsequent issue of the BMVA News is produced.
5. Arrange travel expenses for the invited speaker only. Travel costs for this speaker may be reimbursed up to maximum of 350 pounds on request. Receipts for this travel should be passed to the BMVA meetings secretary on the day of the meeting.
6. Be present on the day of the meeting to act as Meeting Chairman.
7. Arrange for an independent meeting report to be prepared suitable for inclusion in a subsequent BMVA News newsletter. (see attached example).
8. The organizer will become the guest editor for the Annals of the BMVA. This involves inviting around 50% of the presenting authors to submit a paper and overseeing the refereeing. (see below for more details).

The organizers are **NOT** responsible for registration and financial administration on the day, booking the venue, or arranging the refreshments. Please contact the meetings secretary if you have any further questions.

EXAMPLE CALL FOR PARTICIPATION FOR BMVA MEETING

Call for Participation

www.bmva.org/meetings

Image Analysis in Cellular Bioscience

www.bmva.org/meetings

One Day BMVA symposium in London, UK on April 30, 2003

Chairs: Patrick Courtney (PerkinElmer Life Science) and Jim Graham (University of Manchester)

Studying the function and dysfunction of the cell is at the centre of modern medicine, life science research, the pharmaceutical/biotechnology industry and, more recently, agriculture. The interactions of cells, cellular components, genes, proteins, and other related molecules is an immensely data-rich undertaking, especially with the availability of genetic information.

Since the invention of the microscope, images have had a central role in the study of the cell. Current analytical methods, such as microarray systems and 2D gel electrophoresis are also essentially image-based techniques. However tools to analyse this body of data have often lagged other application domains such as bioinformatics or computer vision more generally.

Scientists and biologists working to understand the functioning of cells have access to a range of imaging tools to examine the cell in its various states. These may be used in conjunction with various dyes and fluorescent proteins which highlight active structure or events and offer new opportunities as well as new problems.

The meeting will highlight recent work in the area of automated cytology, cell image analysis, analysis of 2D electrophoresis gels and related fields. We are seeking papers that report on recent work in the area from the perspective of technology and/or application.

Relevant topics include:

- cell and subcellular tracking
- multispectral and 3D cell image analysis
- deformable models of cells
- cell segmentation and classification
- machine learning techniques applied to cell images
- artifact detection and rejection
- control of focus and automation
- cell assay screening systems
- cell sorting
- use of fluorescent proteins, GFP, FISH in image analysis
- 2D gel analysis
- gene and protein screening systems/microarrays
- human user interfaces
- higher dimensional data visualisation and exploration
- integration with external datasets
- software architectures
- performance evaluation

This list is illustrative, and is not intended to be exhaustive. However please note the day is about image analysis, so we would exclude papers on optics or the physics of image formation. We would also exclude image analysis of "macroscopic" medical images (radiology etc.) as there are established forums where such work can be presented.

Please submit an extended summary of about one A4-sized page (no longer than two pages) in length (PDF preferred) and which includes links or pointers to web-based illustrations, demonstration material or papers giving more details.

Please submit papers by email attachment (1Mb max please!) to Patrick Courtney (patrick.courtney@perkinelmer.com) by 17:00 on Friday 28th February 2003.

EXAMPLE PROGRAM FOR BMVA MEETING**Visual Recognition**

One Day BMVA symposium at the [British Computer Society](http://www.bcs.org), 5
Southampton Street, London, WC2E 7HA, UK on March 1st 2006.
www.bmva.org/meetings

Chairs: Dr. Jiri (George) Matas (University of Surrey)

- 10.00 **Registration and coffee**
10.25 **Welcome and Introduction**
10.30 **Object and Scene Recognition in Large Datasets**
D. Lowe (U. of Oxford)
11.10 **Efficient clustering and matching for object class recognition**
K. Mikolajczyk (U. of Surrey)
11.50 **New constraints on machine vision approaches to shape-based image recognition
from studies of 3D object representation in the human visual system**
E. Ch. Leek (U. of Bangor)
12.30 **Lunch**
13.30 **Contour-Based Learning for Object Recognition**
J. Shotton (U. of Cambridge)
14.00 **Multiscale keypoint detection using the Dual-Tree Complex Wavelet Transform**
J. Fauqueur (U. of Cambridge)
14.35 **Robust Image Features from Complex Wavelet Phases**
R A. Anderson (U. of Cambridge)
15.00 **Tea and Coffee**
15.20 **Network of Ideas**
M. Petrou (Imperial College)
15.50 **Discovering objects and their location in images**
J. Sivic (U. of Oxford)
16.20 **Closing remarks and finish**

REGISTRATION FORM: 1st March 2006 Meeting

Please return this form to BMVA Secretary, 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".

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

EXAMPLE MEETING REPORT FOR BMVA NEWSLETTER**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 colourspace 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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GUEST EDITING THE ANNALS OF THE BMVA

For various interrelated reasons, the BMVA has, through its Executive Committee, decided to publish selected papers from its technical meetings as printable papers, which will appear on its website in PDF format under the heading *Annals of the BMVA*. It is intended to maintain a high level of published quality, so that the Annals will be known within the machine vision community as a reliable and worthy source of information; at the same time, publication in this way – at a known level of respectability and quality – will provide some level of achievement and kudos to authors, and particularly graduate students, and will be worth including in their CVs.

To achieve this degree of quality, it will be necessary to referee papers. Refereeing will be for two specific aspects: (1) originality and technical content, (2) presentation in all its aspects. Aspect 1 will be controlled primarily by the chairs of technical meetings, who will send the submitted papers to a minimum of two referees. Aspect 2 will be controlled primarily by a designated BMVA Editor, who will insist on quality of presentation, including general scientific aspects, language and whether the paper adheres adequately to the chosen house-style. A further aspect of the quality control and refereeing process is that only a limited number of the authors from any meeting will be invited to submit papers for publication in the Annals.

Rather than going for a totally new house-style, it has been decided to use the already existing BMVC format, which is widely known, though papers will normally be expected to be around 6 (maximum 8) pages – rather shorter than for BMVC. Details of BMVC format will appear on the BMVA website for reference.

The procedure will be for Chairs to invite papers immediately after the relevant technical meeting, read through initial written up versions of the papers, get them refereed, and finally submit them to the Editor.

Once the Editor has finished vetting a paper, the authors will be informed of FORMAL ACCEPTANCE, and the paper will be sent for inclusion on the Annals website.

As happens for BMVC, copyright will rest with the authors, but acknowledgement of first publication by BMVA will be expected.

Important note: Papers will be refereed using the peer improvement practice relevant for journals rather than the accept/reject practice of most conferences.

Supplementary materials: When published on the Annals website, each paper may be accompanied by a reasonable amount of supplementary material (e.g. videos) at the discretion of the website manager.

The roles of meeting Chairs¹

Meeting Chairs will have the following important roles:

1. Immediately after the relevant technical meeting, they will invite/encourage submission of papers for the Annals, from selected presenters.
2. They get the papers refereed by a minimum of two referees.
3. They recommend some for acceptance, and send the papers to the BMVA Editor together with the referee reports.
4. Overall, they take care to eliminate trivial or incremental publications.
5. In the Annals, the Chairs will be cited as *Guest Editors* for the papers resulting from a particular technical meeting.
6. Guest editors may include an editorial covering the submissions they invite.

¹These roles will naturally have to vary between meetings and also adapt over time to varying circumstances, but this is the Executive Committee's current view of the situation – Ed.