BMVA News

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

Editor: Professor Roy Davies
Department of Physics
Royal Holloway, University of London
Egham, Surrey, TW20 0EX
tel: +44(0)1784 435064
email: e.r.davies@rhul.ac.uk

http://www.bmva.org/

BMVA News[1] 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 10 December 2014.

Contents

Editorial: *How Well is Machine Vision Adapted to its Environment?*

During September I saw various signs that bode well for machine vision – not least being Vision System Design's statement that "it is looking more and more likely that 2014 could be a record year for the machine vision industry". In

[1] The 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.

addition, VSD reported that "Global spending on robotics is expected to more than quadruple from just over $15 billion in 2010 to approximately $67 billion by 2015", which should have further beneficial knock-on effects for machine vision (MV). Hence it was with some curiosity and potential alarm that I read IEEE Spectrum's report that "as part of its current restructuring, Microsoft decided to shut down its robotics group". Knowing that robotics is a key application area for MV, one wonders what the rationale for this closure might be, and whether MS's highly impressive vision wing could also be hit. Before rushing to any conclusions on this, it is as well to note that MS is in eternal battles with other large players such as Google, which itself has made huge investments in the development of driverless cars. In addition, there are many companies working on UAVs, and one can scarcely pick up a IEEE newsletter without reading about a plethora of mobile robots, including robot cheetahs, wildcats, spiders, kangaroos and the like. Often one feels that these are schoolboy inventions that hardly advance the science or engineering of robotics. On the other hand, it is difficult to dismiss all such developments as mere toys when they serve to tackle and even solve fundamental difficulties such as balance, speed, control and capability for dealing with difficult terrain.

Incidentally, with all this apparent advance in practical robotics, I find it at least somewhat ironic, that three years after the Fukushima nuclear meltdown, there are still no robots that can replace human operators in carrying out and managing the clean-up operations. This indicates to me that insufficient investments in the right sorts of robot methodology are being made, though it is also possible that it is such a genuinely difficult problem as to be presently insoluble – in which case why haven't we heard *precise* reasons why this is the case?

With all the competition and need for very serious investment if important world-changing products are to emerge, it is perhaps unsurprising that MS and other international companies find the heat too great, or feel the need to hone their areas of activity, or even aim to leapfrog developing technologies by far-sighted moves. In any case, MS's apparent slow-down on this front can hardly presage the demise of robotics as such, or in any way spell the demise of MV. Any fears we may have must stem more from the fact that robotics is one of the key application areas

of MV than from any idea that it will be eschewed in favour of ultrasonic or radar sensors. In fact, looking at MV as a whole, the sensors available and in use comprise a vast range encompassing ultrasonics, radar, MRI, X-ray, NIR and even vision itself: my point is that our domain is the whole span of electromagnetic waves, including also those starting in other modalities such as ultrasonics from which visual models then emerge. At this juncture I am tying myself in a bit of a knot: what really do we do in MV? Surely we start with 1D, 2D, 3D and 4D (real) coordinates, and end up in more abstract representations – at which point it is difficult to say we are doing vision rather than modelling the world. Indeed, pattern recognition itself utilises abstract feature spaces, and fMRI analyses of our brain processes shows flows of information of unimaginable complexity, and even distinct differences between male and female modes of thinking. Furthermore, if I can believe an R4 programme I was listening to the other day, people who have been bilingual from an early age have considerably better control than others over their brain management, making it clear that people who have command of two languages can (a) learn further languages more easily (something I had already imagined to be so) and (b) manage brain diseases such as Alzheimer's more effectively – simply because their brains can have learnt how to restructure themselves (the proper jargon is that they exhibit substantially greater levels of plasticity).

With these deliberations, I seem to be moving in the direction that MV workers don't really do MV but rather construct computer representations that are better able to manipulate MV data. But let me get back to essentials. For I started with robotics, and postulated that it was one of the major applications of MV. But what of the others? Well, we must take account of automated inspection and surveillance (its outdoor analogue), vehicle guidance (closely related to robotics), medical image analysis, scene reconstruction (including CT) and image restoration (including noise suppression). While there are many more applications of MV, such as face detection and recognition, it can readily be argued that they are all either variants of those already mentioned or means for achieving them – such as feature extraction or PCA. Perhaps oddly (and following on from imagining that what BMVA members do is MV) I have failed to distinguish between CV and MV, which for the present purpose I will define respectively as the science of vision and the engineering of vision for practical and especially industrial applications – though nowadays I regard the two as having converged almost completely. This reflects the fact that MV used to imply use of special hardware to achieve CV in real time, whereas today computers are so fast that this distinction tends to be lost.

Be all this as it may, even if robotics suddenly ceased to exist, MV practitioners would still have a rosy well-employed future. So let's not worry any more: MV is well adapted to its environment and only needs minor tweaks to keep it going for another 1000 years – after all, Italian gradually emerged from Latin after a similar length of time …

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

In Remembrance of Maria Petrou

Professor Maria Petrou
1953 – 2012

So omni-present and full of life was Maria Petrou that it is difficult to come to terms with the fact that she passed away over 2 years ago. Since then many have paid tribute to her and her achievements. We now have pleasure in announcing that the PRL special edition celebrating Maria has been finalised and is about to appear – as will be seen from the following link:

http://www.sciencedirect.com/science/article/pii/S01678655 14001810

In addition, the Governing Board of the IAPR has set up and approved the Maria Petrou award. The relevant sections of the statutes are given below:

8.1 The Maria Petrou Prize is to be awarded biennially to a living female scientist/engineer who has made substantial contributions to the field of Pattern Recognition, and whose past contributions, current research activity and future potential may be regarded as a model to both aspiring and established researchers. This Prize honours the memory of Professor Maria Petrou as a scientist and engineer of the first rank, and particularly in her role as a pioneer for women researchers and highly successful role model. She is widely recognized for her extensive contributions to the field of image processing and pattern recognition. She also made significant contributions to the growth of IAPR, covering significant leadership roles. The Prize consists of a suitably inscribed plaque and a cash amount partially covering a visiting period of the winner at some research institution or university.

8.2 The Prize recipient shall be selected by the Maria Petrou Prize Committee, subject to approval by the IAPR Governing Board, upon nomination by an IAPR fellow or by a member of a member society of IAPR and by endorsement of at least two other members, out of which at least one is a woman. Nominations will be considered only for the Prize of the year for which they are submitted.

8.3 Members of the IAPR Executive Committee, as well as of the Maria Petrou Prize Committee, shall be ineligible for the Prize; nor may they serve as nominators or endorsers.

8.4 The Prize is to be made in recognition of substantial contributions to the field of Pattern Recognition, and whose past contributions, current research activity and future potential may be regarded as a model to both aspiring and established researchers.

Edwin Hancock
University of York
email: edwin.hancock@york.ac.uk

Roberto Cipolla, BMVA Distinguished Fellow 2013

Roberto Cipolla is often regarded as a great Italian computer vision researcher who has based his work in the UK, but in fact he grew up in Solihull, so is truly home-grown. He studied undergraduate engineering at Cambridge Engineering, and then went to the University of Pennsylvania where his Master's thesis (1985) was on radar signal processing. A love of the films of Akira Kurosawa, and the dream of what was then called '5th Generation' robotics brought him to Japan, to the famous Electrotechnical Laboratory. There he met some of the greats of computer vision: Ikeuchi, Kanade, Asada. They were doing pioneering work in 3D vision, and Roberto immediately saw the potential to apply that work to the difficult problem of analysing human motion, the subject of a further MEng. For his PhD, the ETL's greats had heard that Brady, and then Blake, were soon to arrive in Oxford, and it was there that Roberto completed his PhD on 3D reconstruction from smooth 2D contours, an immensely difficult problem to which Cipolla has contributed much of the seminal work, including the excellent monograph with Peter Giblin, "Visual Motion of Curves and Surfaces", to which I still refer frequently.

Starting as a lecturer at the Cambridge Engineering department in 1992, Roberto immediately became remarkable for the quality of the work he was doing. A stream of top-notch papers came from this new research group, making the rest of the world sit up and take notice. The range of topics was impressive: multiple-view geometry; model-based tracking; reconstruction and recognition of architecture; object recognition; and of course analysis of images of humans. From face recognition to hand tracking to 3D body modelling, Cipolla's group's work was certainly a key source of inspiration for my colleagues when we began work on human body tracking for Kinect for Xbox 360. All the work from Roberto's lab combines the best characteristics of great research: taking hard problems, and creating compelling solutions which display mathematical elegance, great depth of understanding, and strong practical engineering. He always has some amazing new demo to show on his laptop (or indeed nowadays on his phone), and is full of excitement both at the theoretical advances that it embodies and the real-world benefits it can bring.

Of the thirty or so PhD students he has graduated since he began at Cambridge, I count it that fourteen are now academics at major institutions across the world, and many of the remainder are among of the most highly regarded industrial academics in computer vision. This mentoring of PhDs continues with his highly regarded series of computer vision summer schools, held in Sicily every year. A place at the school is highly prized, not least because of the stellar field of international experts Roberto assembles every year. Indeed I would suggest that not only are places prized by the students, but also by the lecturers.

In parallel, his continuing interest in Japan (including a year-long visit to Toshiba just after his PhD) led to the founding in 2006 of the computer vision group at Toshiba's Cambridge Research Lab, and in 2007 Roberto was appointed Lab director. Real-world applications also underpin the spinout companies that have emerged from his lab. To name just two: Metail is already revolutionizing online clothes shopping, and Zappar is a winning take on the much-talked-about technology of virtual reality.

He has received many recognitions for his work: he became a Reader in Information Engineering in 1997 and a Professor in 2000, and in 2010 was elected a Fellow of the Royal Academy of Engineering. It is with great pride and delight then that I name him the 2013 Distinguished Fellow of the BMVA.

Andrew Fitzgibbon
BMVA Chair, 2013

Prizes and Awards at BMVC 2014

Best Scientific Paper

This prize was awarded to Ken Chatfield, Karen Simonyan, Andrea Vedaldi and Andrew Zisserman for their paper "Return of the Devil in the Details: Delving Deep into Convolutional Nets".

(The prize was for £750 together with a £150 Springer voucher.)

Best Industry Paper

This prize was awarded to Hanme Kim, Ankur Handa, Ryad Benosman, Sio-Hoi Ieng and Andrew Davison for their paper "Simultaneous Mosaicing and Tracking with an Event Camera".

(The prize was for £200 together with an Nvidia Quadro K5000.)

Best Poster

This prize was awarded to James Charles, Tomas Pfister, Derek Magee, David Hogg and Andrew Zisserman for their poster "Upper Body Pose Estimation with Temporal Sequential Forests".

(The prize was for £500 together with a £150 Springer voucher.)

BMVA Distinguished Fellow 2014

Professor Tim Cootes

> Michel Valstar
> Nottingham University
> email: michel.valstar@nottingham.ac.uk

Tim Cootes, BMVA Distinguished Fellow 2014

The BMVA Distinguished Fellowship is awarded to one person each year in recognition of his or her services to the British machine vision community. The awardees are 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.

Early on in its deliberations, the Distinguished Fellow Panel was astounded to see the citation rates for some of Tim's best-known papers, including one in excess of 5000 citations! This naturally made him a very strong contender, though of course the award is more about real achievements than about numbers.

Many of the major techniques in computer vision such as those of Canny, Harris, and Viola and Jones have huge numbers of followers. It is a pleasure to record that the same applies for the ground-breaking shape analysis techniques of this year's Distinguished Fellow. Indeed, the statistical shape and appearance models that he developed have been a mainstay of our armoury for over two decades. Importantly, once one has understood how active shape models work, it is difficult to think of any other way of modelling shape statistically.

Tim's background was in Maths and Physics, and his PhD was about modelling vortices in sewage! He carried out his seminal work on shape models shortly after joining Manchester in 1991 – initially through research grants and later via research council fellowships. He became a member of the permanent academic staff in mid-2001 and rose quickly to become Professor of Computer Vision in 2006.

Tim's recent work explores the difficult problem of finding and aligning corresponding points in groups of images. Although the primary focus of Tim's work is in the medical domain, he has also made contributions in face recognition. In fact, one of Tim's face models has even been seen on pop videos!

Tim has also had a major involvement with the BMVA: for a few years he looked after publicity before acting as BMVA chair from 2002 to 2005. He also co-chaired the annual student papers meeting before it was moved to BMVC. Last but by no means least, Tim achieved the accolade of being awarded Fellow of the IAPR in 2010.

It is with great pleasure that we name Tim Cootes the BMVA Distinguished Fellow for 2014.

> Adrian F Clark (BMVA Chair)
> Roy Davies (DF Panel Chair)[2]

Review of Vision for Language and Manipulation Meeting[3]

This BMVA Technical Meeting was held at the BCS in London on 11 July 2014, chaired by Nick Hockings (University of Bath) and Walterio Mayol-Cuevas (University of Bristol). This proved to be very substantial affair, 20 talks being presented in 4 sessions – almost a 'mini conference'! The speakers explored state-of-the-art developments related to sensing and manipulation, grasping, human–robot interaction, pose estimation and learning. There were presentations from academics from around the UK, as well as some key figures in the field from across Europe and the audience was similarly representative of the vision and robotics communities.

The first session began with a keynote presentation by Angelo Cangelosi (University of Plymouth) who showed the use of an iCub to demonstrate association learning between sensing modalities to learn language primitives and counting. Robert Haschke (University of Bielefeld) then discussed a real-time, model-free scene segmentation approach based solely on depth information captured by means of a Kinect camera. Miao Li (EPFL) presented work on bimanual compliant tactile exploration "where a tactile exploration strategy is proposed to guide the motion of the two arms and fingers along the object". Gerardo Aragon-Camarasa (University of Glasgow) gave a talk on cloth perception and manipulation using high-resolution binocular imaging for 2.5D range mapping, with 'real-time' GPU stereo matching, and feature extraction for gaze control. Nicola Notcetti (University of Genova) described an investigation into biological versus non-biological motion based on the relation between shape and motion, for the purpose of understanding human interaction.

---

[2]We have to thank Majid Mirmehdi for taking over this presentation at the last minute when Roy Davies had to go home early with a bad dose of flu.
[3]A longer, more detailed version of this review is available on the BMVA meetings website: www.bmva.org/meetings

The second keynote by Sinan Kalkan (METU, Ankara) addressed "Learning and conceptualizing word categories in language such as verbs, nouns and adjectives ...". Norbert Kruger (University of Southern Denmark) discussed "the problem of how to bridge from low-level sensory data to symbolic representations" with an overview of biological vision and his work addressing "... learning associations between low-level motor-sensory information and symbolic representations". Frank Foerster (now at QMW) presented what can only be described as an uncanny (no pun intended ...) demonstration of symbol grounding through verbal interaction with the iCub robot, in order to ground the meaning of the word "no", amongst others. This demonstration was the stuff of sci-fi and I was quite shocked that the field had advanced to this degree of human–machine interaction, which at least superficially, mimicked a young child interacting with an adult. To end the second session Waltero Mayol-Cuevas (University of Bristol) gave a talk on human machine interaction using a tenticle-like hand-held intelligent tool.

The third session opened with a fascinating keynote talk by Marco Davare (UCL, London) who described experiments that use trans-cranial magnetic stimulation to induce 'virtual lesions' in the brains of healthy volunteers. Using this methodology it becomes possible to probe "which parts of the brain are causally involved in integrating visual and tactile cues during action". Using these techniques within a VR environment, where vision and touch can be controlled, a specific network associated with grasping actions has been defined that appears to be responsible for "... the integration between a sensio-motor memory, the object properties and online visual cues ...". Giorgio Metta (IIT, Genova) presented work on mapping sensory features to motor invariants for automated action recognition. By combining a reduced set of vision and auditory features, discrimination of actions becomes more effective than single large databases of visual or auditory features. Giovanni Saponaro (Institutio Superior Tecnico, Lisbon) discussed a probabilistic framework to learn object affordances while executing actions, where simple low-level features are used to generalise previous knowledge for object affordances. John Darby (Manchester Metropolitan University) talked about a framework which allows computational systems to reason about "human–object interactions and their outcomes" based on action events over three different contexts, i.e., object-pose, human action and scenes. Vincenzo Lippiello (University of Naples Federico II) discussed aerial 'manipulation' using image moments to control visual servoing actions while aligning the targeted object and a manipulator on a UAV.

The final keynote was given by Jan Peters (TU Darmstadt) on learning motor skills, applied to manipulation of both static and dynamic objects perceived by computer vision. Jeremy L Wyatt (University of Birmingham) talked about methods for manipulation using grasp adaptations, active vision and active touch as part of the PaCMan European project. Patricia Shaw (Aberystwyth University) presented a system inspired by developmental stages in infants. With this the iCub robot is able to learn to control its eyes, then its gaze space and finally, hand and reach control behaviours. Panos Trahanias (FORTH, University of Crete) discussed a markless articulated upper human body tracking system for multiple users in RGB-D sequences, with severe intra- and inter-personal occlusions. Pietro Falco (Second University of Naples) presented a Bayesian sensor fusion approach for perception and interpretation of human manipulation, from the EU FP7 DEXMART project. Antonis Argyros (FORTH, University of Crete) overviewed a framework for hand-tracking using Particle Swarm Optimisation to obtain a consistent interpretation of the 3D position, orientation and full articulation of the hand.

Overall, the organisers must be commended for the resounding success of their meeting. The talks were of high quality, thought inspiring, and yet they remained accessible to junior academics. A number of attendees openly expressed their praise for the organisation and execution of the meeting.

My overriding impression (PS) was that this meeting had effectively revealed the state-of-the-art in cognitive robotic learning and that the state of play is much more advanced than I had anticipated. I truly envy young researchers entering this field, for this is surely going to be the most exciting and adventurous field to work in over the next 10–20 years!

Gerardo Aragon-Camarasa
Tadeo Corradi
Paul Siebert

Upcoming BMVA 1-day Technical Meetings

Surgical Vision and Biophotonics
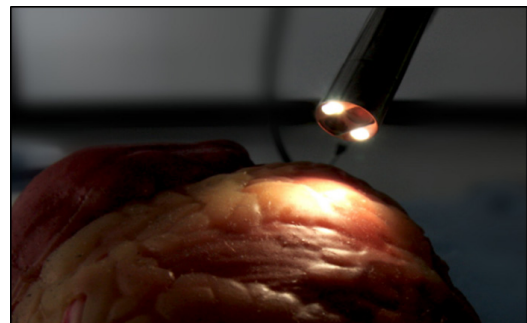
Wednesday 15 October 2014 at the British Computer Society, 5 Southampton Street, London.

Chairs: Danail Stoyanov (UCL), Dan Elson (Imperial)

Programme

09:00 Registration + Coffee
09:30 Keynote: Computational endoscopy: achievements and open issues: Lena Maier-Hein, DKFZ, Germany
10:10 Intraoperative multispectral imaging of the small bowel: Neil Clancy, Imperial College London
10:30 Multispectral image deblurring: Geoff Jones, University College London
10:50 Break
11:20 Keynote: Optical ultrasound transducers for imaging and medical device guidance: Adrien Desjardins, University College London
12:00 Development of an image-guided laparoscopic liver surgery system: Matt Clarkson, University College London

12:20 Development of a robotic trans-oesophageal ultrasound probe: Shuangyi Wang, King's College London

12:40 Soft-tissue tracking for intra-operative guidance in MIS: Stamatia Giannarou, Imperial College London

13:00 Lunch

13:50 Keynote: Robotic endoscopic vectors for focused action and therapy: Gastone Cuiti, The BioRobotics Institute, Italy

14:30 Multimodal reconstruction for image-guided interventions: Philip Pratt, Imperial College London

14:50 Flattened maps of the left atrium to guide an MR-compatible robotic catheter: Rashed Karim, King's College London

15:00 A miniaturized self-calibrated structured light system used in MIS: Jianyu Lin, Imperial College London

15:20 Break

15:40 Keynote: geometric computer vision for computer aided surgery: Joao Barreto, P3D and University of Coimbra

16:20 Quantitative stereo-endoscopy for laparoscopic surgery: Sebastian Bodenstedt, Karlsruhe Institute of Technology, Germany

16:40 Live colonic size measurements using the infocus-breakpoint: F Chadebecq, Université Blaise Pascal: Clermont-Ferrand II, France

17:00 End of meeting

Vision for Robotics
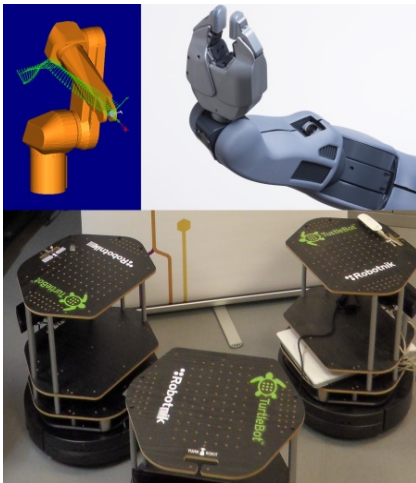
Wednesday 3 December 2014 at the British Computer Society, 5 Southampton Street, London.

Chairs: Marco Paladini and John Illingworth

Programme

09:30 Registration + Coffee

10:00 Keynote: SLAM and scene understanding for domestic robots: Andrew Davison, Imperial College, London

10:45 Parts, uncertainty and action in visually guided robot manipulation: Jeremy Wyatt, University of Birmingham

11:10 TBC: Margarita Chli, University of Edinburgh

11:35 Clothes perception and manipulation: J Paul Siebert, University of Glasgow

12:00 Lunch

12:50 Keynote: Vision for robotic manipulation: Bruno Siciliano, University of Naples Federico II

13:35 Real-time Robot correction for high accuracy operations: Diego F Boesel, Centre Suisse d'Electronique et de Microtechnique (CSEM)

14:00 Many-core landscape and SLAMBench-14: Zia, Zeeshan, Imperial College, London

14:25 Software for 3D machine vision: Johannes Hiltner, MVTec

14:50 Coffee Break

15:20 Keynote: Paul Newman, University of Oxford

16:05 Collaborative navigation and mapping from low-cost exploratory robots: Pedro Cavestany, Cranfield University

16:30 Towards human–robot gesture transfer using point-based medialness: Daniel Berio, Goldsmiths University, London

17:00 End of meeting

Upcoming Meetings in 2015

We also have a number of meetings arranged for 2015:

Face analysis (Michel Valstar):	28 January
Student Symposium:	late March/ early April
Vision for human computer interaction and virtual reality system (Manuela Chessa and Fabio Solari):	6 May
Efficient 3D representation for real time mobile systems (Zeeshan Zia and Andrew Davison):	17 June

www.bmva.org/meetings

Andrew Gilbert
University of Surrey
email: a.gilbert@surrey.ac.uk

James Ferryman Promoted to a Personal Chair!

It is my pleasure to announce that James Ferryman has been promoted to a Personal Chair in Computational Vision at the University of Reading. I'm sure many of you would like to join me in congratulating him!

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

Around and About at BMVC

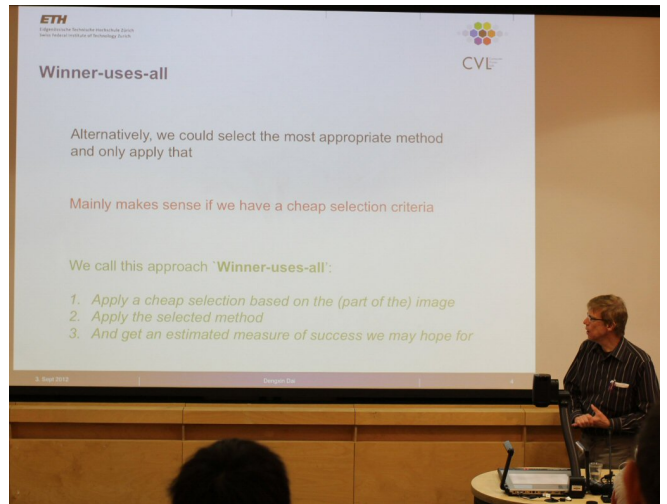A basic recognition task at the Welcome Reception …

People getting to know each other

Nottingham VIPs – Stefan Mairhofer, Andrew French and Susie Lydon. (Stefan managed the team of BMVC helpers and Susie was Local Management Chair.)
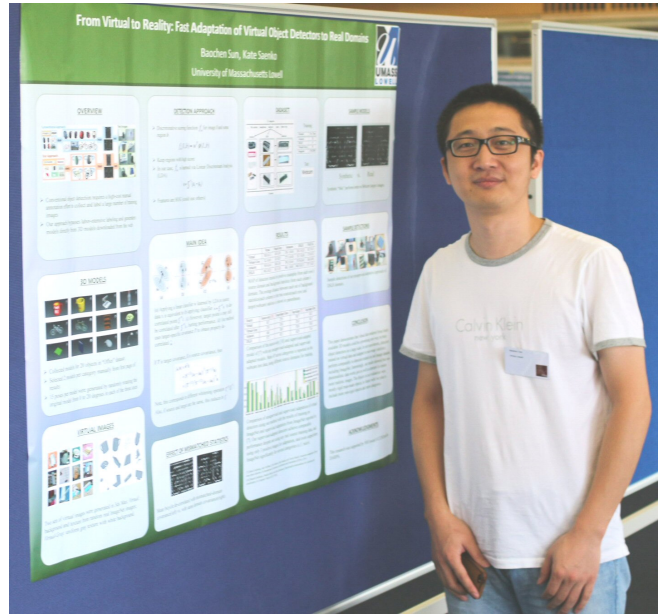

Delegates arrive for a lecture

Luc van Gool gives his invited lecture.

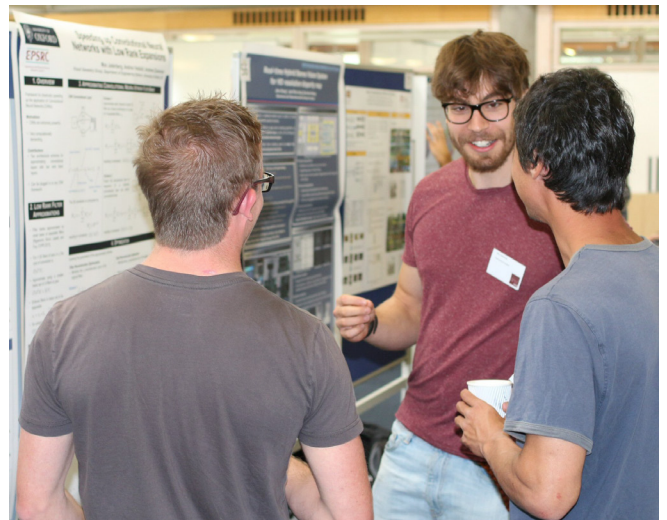Tony Pridmore looks around for more questions for Andrea Vedaldi.

Oral presentation by Takahiko Furuya: "Fusing multiple features for shape-based 3D model retrieval".

A simple formulation can be an advantage.
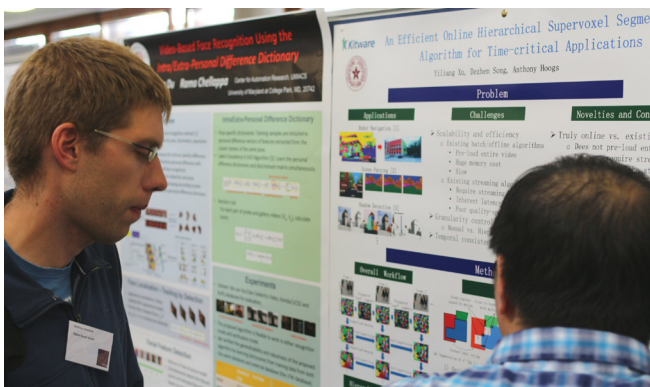

Friendly organisers police the conference – Michael Pound and Andrew French.
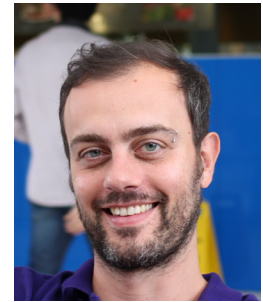

Many well-designed posters appeared.

Much friendly discussion took place.
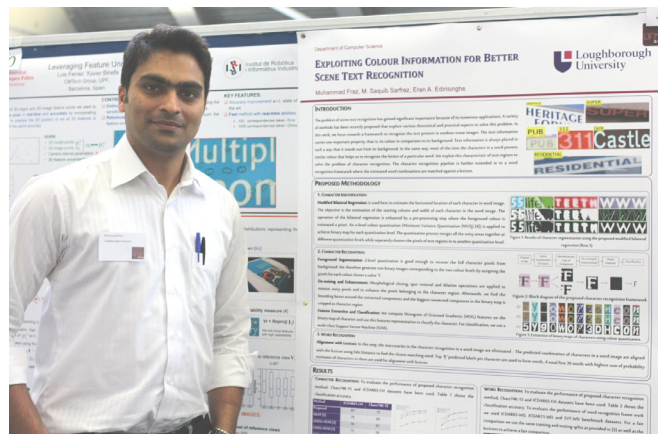
Muhammad Fraz with his poster
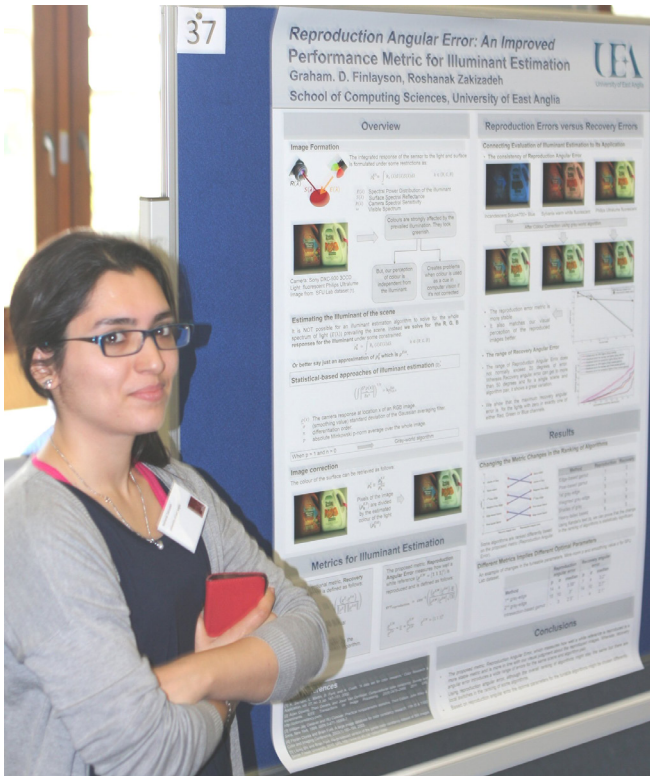
Roshanak Zakizadeh with her poster
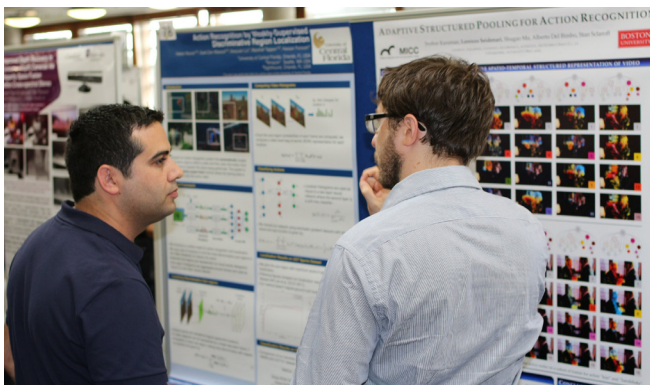
Happy organisers make for …

… happy delegates!

James Charles with his prize-winning poster

At the Space Centre: the Nottingham team with two inter-galactic policemen: ignoring the latter we see conference organisers Tony Pridmore, Andrew French, Susie Lydon, Michael Pound, and Michel Valstar, together with Majid Mirmehdi.

An unsuspecting delegate is singled out.
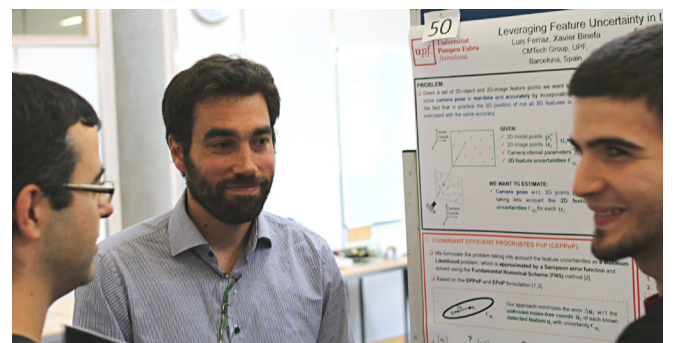
Presentation of Prizes and Awards at the Banquet

Ken Chatfield receiving his Best Scientific Paper award from Michel Valstar

Hanme Kim and Andrew Davidson receiving the Best Industry Paper award

James Charles receiving his Best Poster award

Tim Cootes receiving his Distinguished Fellow award from Majid Mirmehdi

Wollaton Hall, Nottingham

A view of Wollaton Park

Lecture at Wollaton Hall

I would like to express my sincere thanks to the dedicated Nottingham photographers who put so much effort into taking over 500 pictures (from which I have unfortunately only been able to include a handful in this issue). They are Tuan Nguyen, James Johnson and Timur Almaev.

Professor Roy Davies
Editor, BMVA News

Report on BMVA Computer Vision Summer School 2014

The BMVA Computer Vision Summer School is probably the longest running annual event in the field. This year its 19th edition was held at Swansea University from 30 June to 4 July. The summer school has moved from the University of Manchester, where it was successfully organised for a number of years, and has been transformed from relying on EPSRC sponsorship to being self-sustained. The summer school offers substantial discount to students and early career researchers from UK institutions. For example, the UK non-residential early rate is £240 – versus £500 for non-UK. A total of 67 delegates from 14 different countries, with 21 from outside the UK, attended this year's summer school. The group photo below was taken on the last morning in front of the Digital Technium, where the lab sessions took place, just before a typical Welsh drizzle arrived for the first time during the week.



Summer School Group Photo
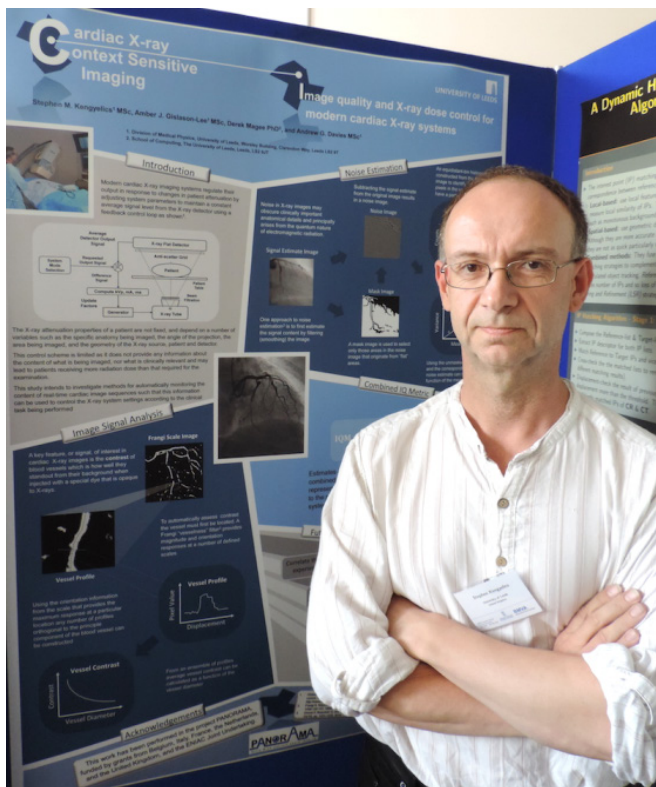
SM Kengyelics

The attendees had a busy week of lectures on a range of current topics in computer vision. A total of 17 speakers from both academia and industry delivered 19 ninety-minute lectures and 2 lab sessions. The poster session also proved to be popular. The Best Poster prize went to SM Kengyelics of University of Leeds for "Image Quality and X-Ray Dose Control for Modern Cardiac X-Ray System". The recipient was awarded £100 and Professor Roy Davies's book "Computer and Machine Vision: Theory, Algorithms, Practicalities". Two runner-up prizes (£50 each) were awarded to J Xiao of University of Birmingham for "Continuously Adaptive Data Fusion and Model Re-Learning for Particle Filter Tracking" and to O Koller of RWTH Aachen University Germany[4] for "Read my Lips: Continuous Signer Independent Weakly Supervised Viseme Recognition". The attendees also enjoyed the summer school banquet at the Meridian Tower (the tallest building in Wales), overlooking the majestic Swansea Bay.
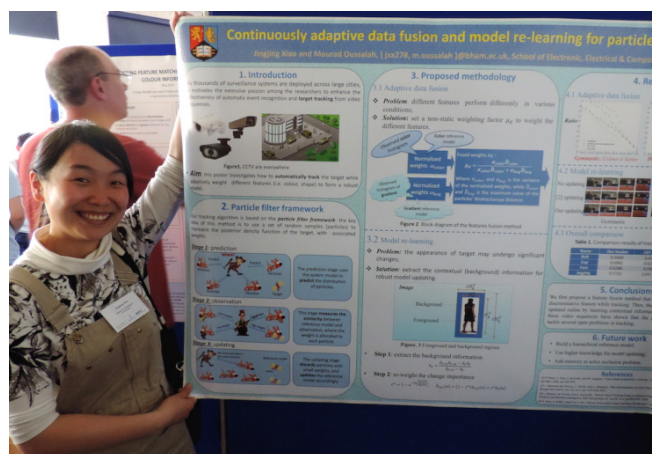
J Xiao

---

[4]Being Welsh, I first interpreted this as a German university named after Rwth (Ruth) Aachen, but in fact RWTH is short for Rheinisch-Westfälische Technische Hochschule – Ed.
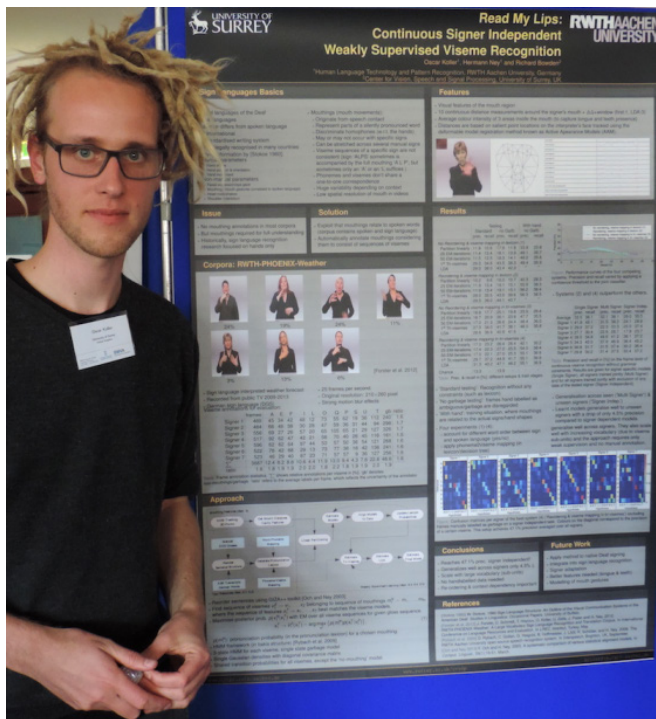
O Koller

On behalf of the organisers, I would like to thank the speakers, attendees, Manchester team, and volunteers. Please keep an eye open for announcements about the 20th edition in 2015.

Dr Xianghua Xie
Swansea University
email: x.xie@swansea.ac.uk

BMVC 2015

The 26th British Machine Vision Conference (BMVC) will be hosted at Swansea University (Singleton Campus), 7–10 September 2015. For more information, please visit the conference website: http://bmvc2015.swansea.ac.uk/

Dr Xianghua Xie
Swansea University
email: x.xie@swansea.ac.uk

Imaging for Crime Detection and Prevention 2015

15–17 July 2015, Queen Mary University London, UK

This conference follows the successful IDSS (Intelligent Distributed Surveillance Systems) events held in 2003 and 2004 and ICDP 2005, 2006, 2009, 2011 and 2013, to bring together researchers, industry, end-users, law-enforcing agencies and citizen groups to share experiences and explore areas where additional research, development and better working practices are needed, to identify possible collaboration, and to consider the societal impact of such technologies.

The 6th International Conference on Imaging for Crime Detection and Prevention (ICDP-15) aims to create an important networking forum in which participants can discuss the present and future of image-based technologies for crime detection and prevention.

ICDP (and its predecessor IDSS) has traditionally been a special meeting point of different disciplines (computer science, social science, engineering, management, etc.) and an opportunity for a wide range of stakeholders to discuss the many different aspects of the application of imaging technologies in this socially crucial domain.

Paper submission timetable

Submission of full papers (6 pages): 15 April 2015
Notification of acceptance: 25 May 2015
Submission of camera-ready papers: 15 June 2015

Sergio Valestin
Universidad de Santiago de Chile
email: sergio@velastin.org

Sullivan Thesis Prize

Every year, the BMVA awards a prize for the best thesis out of those brought to its attention as having been examined in the previous calendar year. The prize is awarded in the name of Geoff Sullivan, who played a significant role in the early days of the BMVA. I am delighted to announce that the winner of the thesis prize for 2014 is Mattias Heinrich of the University of Oxford. His thesis is entitled "Deformable lung registration for pulmonary image analysis of MRI and CT scans" and was unanimously selected by the review panel. I would like to pass on congratulations to Mattias from all members of the Executive Committee.

If you are in the final stages of writing up your thesis, please consider submitting it to the BMVA's thesis archive: all the information is on the website. If you are supervising a PhD student who you think has done particularly well, please consider entering him or her for the Sullivan prize; again, the procedure is on the website.

Adrian Clark
BMVA Chair
email: alien@essex.ac.uk

Elections to the Executive Committee

As you may know, the day-to-day running of the BMVA is managed by an Executive Committee which consists of 12 elected members and several co-optees. The normal tenure of an elected member on the committee is two years, and half of the elected members are replaced each year. The election took place over the summer – you will have seen the call for nominations in an earlier issue of BMVA News – and the following people were nominated:

- Toby Breckon
- Adrian Clark
- Andrew Gilbert
- Paul Tar
- Carole Twining
- Xianghua (Jason) Xie

This exactly matched the number of vacancies, so these people were duly elected. Two of the newly-elected members, Andrew Gilbert and Paul Tar, had previously been co-opted and they filled vacancies left by Sasan Mahmoodi and Neil Thacker; the remainder were re-elected.

On behalf of the Executive Committee, I would particularly like to thank Neil Thacker for his hard work over the last few years, combining the responsibilities of Secretary and Company Secretary and improving the way the BMVA manages itself.

Adrian Clark
BMVA Chair

BMVA Summer School 2015

Every year, the BMVA hosts a summer school for first-year research students. In recent years it has been going from strength to strength, with the number of attendees generally increasing and some industrial delegates also attending. Following the very successful 2014 event in Swansea, we are looking for a venue for the 2015 summer school: the Swansea group is too busy running BMVC to consider hosting it again. If you would be interested in running the Summer School in 2015, please get in touch. It is good fun and gives excellent experience at running a conference.

Adrian Clark
BMVA Chair
email: alien@essex.ac.uk