

## Editorial

# British Machine Vision Conference 2000

This edition of the IVC journal is devoted to some of the top-rated papers from BMVC2000, the 11th British Machine Vision Conference, hosted by the University of Bristol in September 2000. The conference coincided with a fuel shortage crisis, but there were no delegate cancellations and there were even some new registrations on the first day. Altogether there were around 150 delegates from all over the UK as well as 18 other countries most of whom had contributed papers. In addition to the contributed papers at BMVC2000, there was a pre-conference tutorial presented by Prof. Andrew Blake (Microsoft Research, Cambridge, UK) on *Probabilistic Inference and Learning in Computer Vision*. There were also two invited speakers: Prof. Eric Grimson, (MIT, USA) who spoke on *Computer Vision Methods for Image Guided Surgery*, and Prof. Luc Van Gool (KTH, Belgium) who presented a paper on *Wide Baseline Stereo Matching based on Local, Affinely Invariant Regions*.

There were 149 original papers submitted to the conference for double-blind refereeing. Three referees reviewed each paper and a total of 38 oral papers and 42 poster papers were accepted. Updated versions of some of the highest ranking papers, as voted by the Programme Committee, were then selected and sent to totally new referees for further review for possible inclusion in this special issue. The papers that appear in this issue are a testament to the high quality of work regularly presented at BMVC conferences. Although a British conference, many papers are international, such as Ahmed and Farag from the USA, Rother from Sweden, or Krüger and Sommer from Germany in this issue. The standard is, as usual, internationally outstanding.

Face and gesture recognition is currently a very popular area of research in computer vision and this is well represented in this special issue through papers by Bowden and Sarhadi, Cootes et al., Costen et al., and Krüger and Sommer concentrating mainly on building and manipulating models. For example, Cootes et al. extend their previous work and report on building models that represent the appearance of a face as seen from two or more different viewpoints simultaneously. There were also a significant number of motion segmentation and tracking papers at the conference. Making a well-earned appearance here are the papers by Karaulova et al. presenting a hierarchical model of dynamics for tracking people with a single camera, also the winner of the best demonstration prize at the conference, the paper by Tweed and Calway on

depth ordering of motion layers based on colour region segmentations with motion estimates obtained via block correlation, and the paper by Bromiley et al. who describe statistical techniques to isolate localised differences from global differences in motion sequences. Also Arbel and Ferrie present their interesting work on an HCI based scenario for recognising objects from curvilinear motion.

Two works in this issue contribute to clustering methods: Holmes and Taylor's paper on presenting an improved metric space for non-linear transformation of scale orientation pixel signatures in application to mammographic data, and Kelly and Hancock's paper on grouping line segments using eigenclustering to segment objects.

A variety of other very interesting papers appearing here are the work on image mosaicing by McLauchlan and Jaenicke, on vanishing point detection in architectural environments by Rother, on zoom-lens camera calibration by Ahmed and Farag, on evolution of algorithms that combine decision spaces by Benson, and the winner of the best scientific paper prize by Maciel and Costeira from ISR in Portugal on robust point correspondence between two or more images.

Although these were judged to be the best papers from BMVC2000, there were many other high quality, relevant, and topical papers at the conference, including the invited talks. All conference papers for the BMVC series since 1996 can be downloaded from the British Machine Vision Association WWW site at <http://www.bmva.ac.uk/>. Links to future BMVC conferences are also available from this site.

We extend our sincere thanks to Prof. Keith Baker in helping us put this special issue together, to the reviewers of this special issue, to all the authors, to the members of the original conference Programme Review Committee for their monumental task, and to the British Machine Vision Association for trusting us to organise the conference in the first place. We are very proud to have been hosts to BMVC2000 and look forward to many BMVC conferences in the years to come.

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