Conference Proceedings

DECEMBER 6-8, 2005

Cairns Convention Centre, Brisbane, Australia

Hosted by
The Australian Pattern Recognition Society

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DICTA 2005
DIGITAL IMAGE COMPUTING: TECHNIQUES AND APPLICATIONS

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Organized by
The University of Queensland
National ICT Australia
CSIRO ICT Centre
The CSIRO e-Health Research Centre

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Message from the Chairs

Welcome to DICTA 2005, in the sunny and steamy tropical city of Cairns! The Australian Pattern Recognition Society (APRS) is proud to present the next DICTA in this exotic location.

Venue
For this, the eighth DICTA, we chose a regional city in the interests of variety, and we hope this will set a trend for new cities to host DICTA in the coming years. The sequence so far (from 1991) has been Melbourne, Sydney, Brisbane, Auckland, Perth, Melbourne and Sydney, so this year was really “Queensland’s turn” again. We also believe that delegates like to do more than just attend the conference when they have had to travel so far to get here, and Far North Queensland certainly offers sights and experiences unattainable elsewhere in Australia. We hope this will be a pleasant and memorable DICTA for you, and that you will support this conference again in the future.

Vision
There are many conferences in the rapidly expanding fields of computer vision and pattern recognition. Late 2004, the APRS and the DICTA 2005 organisers made a decision to move DICTA upmarket both in terms of the venue and technical quality. Our vision is that over time DICTA will become established as the premium Australian-based international event in CVPR. For this reason we have located this event in one of the World’s most attractive cities. Rather than using traditional University facilities, we have booked a convention centre that was voted the World’s Best in 2004. The organisers have secured acknowledged international experts in CVPR for our invited speakers and many of our reviewers are at the leading edge of CVPR research. For example, one of our reviewers was the General Co-Chair of ICCV2005 and another is a former President of the IAPR. Finally we have adopted a prestigious international publisher, IEEE CS Press, so that all DICTA papers will appear alongside ICCV, ICPR, and CVPR in the major on-line databases such as IEEE Digital Library and DBLP.

These changes do incur some costs, both in terms of elevated registration fees and more stringent reviewing standards. To keep costs down, we have decided to adopt CDROM proceedings rather than paper proceedings for the first time. Also we have introduced an unreviewed poster session to allow researchers, especially students, to participate in the event more fully even if they were unable to get a paper accepted into the formal proceedings.

Technical
DICTA 2005 continues the reputation this conference has built for high quality papers on current research, across a wide range of topics in image processing and pattern recognition. All accepted papers are intended to meet DEST E1 publication standards. The organisers would like to acknowledge the generous assistance of the international and national peer reviewers who contributed their expertise and efforts to refereeing the submissions. All papers were reviewed by between 2 and 4 experts in the field, and acceptance decisions were made on the basis of a combined scoring system and reviewer comments.

We particularly welcome increased international and especially Asia-Pacific regional participation. This year we introduce an informal unreviewed poster session (not included in these proceedings) to allow delegates to display "work in progress" and receive feedback, which we hope will lead to formal papers at a future DICTA or other APRS events.

Sponsorship
DICTA has always emphasized digital imaging but has admitted papers in other areas of pattern recognition in line with the charter of the APRS. This year, DICTA is co-supported by two other professional societies: IAPR, our international umbrella body, and IEEE (through the Queensland branch). At this time we find that interest in digital imaging is still growing as challenging applications areas such as medical imaging and security pose many unsolved problems, with very strong dependencies on domain-specific knowledge. It is therefore important that we adopt multidisciplinary approaches to addressing these problems, and we believe DICTA offers a suitable arena at which such “mingling of minds” can occur. We also see DICTA as a rather informal and equitable environment where we welcome postgraduate students and early career researchers on the same terms as experienced experts.

We have a number of financial sponsors as always, and to them we express our gratitude for their generous contributions which help to assure the stability of the conference and allow us to keep conference fees to a minimum. This year we are pleased to welcome CISRA as a sponsor both of the event and of a new continuing
DICTA prize in the area of colour imaging. We hope this will set a trend for other externally sponsored prizes in particular areas of interest to APRS members. We also welcome the generous sponsorship of National ICT Australia and the CSIRO e-Health Research Centre.

International
We thank our international invited speakers who have travelled a long way to be with us: their contribution in keeping us “connected” with research activities in the rest of the world is invaluable. We must also acknowledge the hard work of our organising committee members, who have contributed to the success of the program and logistics through their many hours of effort and acceptance of multiple roles. CSIRO through the e-Health Research Centre has provided the conference secretariat, which allowed many processes to work smoothly via the organisation’s administrative backup.

Now is the time to sit back and enjoy the “DICTA experience”, learn about activities of colleagues elsewhere, make some new contacts and catch up with friends!

Brian Lovell & Anthony Maeder
DICTA 2005 General Co-Chairs

Terry Caelli & Sebastien Ourselin
DICTA2005 Technical Co-Chairs
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