# **2015 Picture Coding Symposium**

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#### Message from the PCS 2015 General Co-Chairs

It is our great pleasure to welcome you to the 31st Picture Coding Symposium, the longest continuously running conference in the field of image and video compression. We also take this opportunity to welcome you to Cairns, one of Australia's premier destinations and gateway to two UNESCO world heritage sites: the Great Barrier Reef; and the Daintree Rainforest. We hope you will have an opportunity to experience some of what this region has to offer.

There are a number of novel aspects to this year's PCS to which we would like to draw your attention. Since the poster format of paper presentation is well known for its effectiveness, this year we have arranged for each oral presentation to be accompanied by a small poster presentation on the same day. This year's PCS includes a feature session on evaluation of image compression technologies that will take place on Wednesday afternoon. We strongly encourage all attendees to participate in this feature session, which is intended to increase the dialog between academics, industry and standardisation activities in the area of media compression. This session was originally to have been chaired by Prof. Ian Burnett from UTS, Sydney. Unfortunately, Ian was taken sick shortly before the event, but we are grateful to him for his efforts and also to Prof. Fernando Pereira, who was able to pick up where Ian left off.

This year, papers that were initially submitted to the Packet Video (PV) workshop have been merged into PCS, in order to provide an enhanced experience for all participants. An additional message from the PV general chairs follows below.

We are delighted to be able to bring to outstanding Plenary speakers to this year's PCS: Professor Yoshiaki Shishikui from Meiji University, Tokyo; and Professor Fernando Pereira from IST, Lisbon.

We wish to express our sincere thanks to the entire PCS organizing committee, without whom this event would not be possible. Our Technical Program co-chairs, Thomas Sikora and Manzur Murshed, and Special Sessions chair Henry Wu, have invested much effort and time in order to bring us an outstanding program; our Venue chair, Reji Mathew, has professionally organized an outstanding venue, facilities and experience for all PCS attendees; and our Publication and Publicity chairs, Wei Xiang and Ulrich Engelke, have made substantial contributions to the promotion and smooth running of the event. We also take this opportunity to acknowledge the substantial roles played by Jeff Steinacker (web-site designer at UNSW Canberra) and Lance Cotton from Conference Management Services Inc.

We are endebted to our sponsoring institutions for making this event possible. In particular: UNSW Australia for provision of seed funding and significant administrative support; Federation University Australia and RMIT University for provision of seed funding and contributions to the creation of the program; and Canon Information Systems Research Australia (CiSRA) for their contribution to awards and finances.

David Taubman and Mark Pickering PCS 2015 General Chairs

### ADDITIONAL MESSAGE FROM THE PV GENERAL CO-CHAIRS

Welcome to the 21st International Packet Video (PV) Workshop (PV 2015). It is our wish that the integration of PV 2015 with PCS 2015 will provide, not only an opportunity for researches and developers from the media coding and networking fields to meet, interact, and exchange ideas, but also a platform for collaboration and discussion with researchers in the visual coding community.

We would like to express our special thanks to the PV organizing committee for their contributions and the PV steering committee for their constant support and timely advice. We appreciate the seed funding support provided to PV2015 from the Faculty of Engineering and Information Technology, UTS Australia.

Dacheng Tao and Xiangjian He PV 2015 General Chairs

#### Message from the PCS 2015 Technical Program Chairs

We are pleased to welcome you to the 2015 International Picture Coding Symposium. This year's PCS has attracted excellent research contributions from Australia, Europe, Asia and the USA, covering research topics ranging from advanced standards HEVC compression schemes as well as scalable and multi-view coding approaches to novel and inspiring signal processing techniques for redundancy reduction and coding and for image and video content analysis.

This year 95 papers were submitted to PCS. Each paper was assigned to at least three independent reviewers by the respective Area Editors or the Special Sessions Chair. On the basis of the recommendations of the reviewers, the Technical Program Committee has accepted a total number of 49 high quality papers to be presented at the conference.

Among the 49 accepted papers, 26 papers will be presented in five Oral Sessions, including a Special Session focusing on novel ideas and research frontiers, and the remaining 23 papers will be presented in the main Poster Session. As a novelty to PCS, all the papers assigned to the oral sessions have also been invited to participate in a small Poster Session on the same day to give them maximum exposure.

This year's PCS presents two exciting plenary lectures:

"8K SUPER Hi-VISION: Science, Engineering, Deployment and Expectations" by Professor Yoshiaki Shishikui from the Department of Frontier Media Science of the School of Interdisciplinary Mathematical Sciences at Meiji University, Tokyo, Japan.

"Visual Coding: Step by Step towards Reality" by Professor Fernando Pereira from the Electrical and Computer Engineering Department at the Instituto de Telecomunicações, Lisbon, Portugal.

PCS 2015 also presents a best paper award sponsored by Canon Information Systems Research Australia (CiSRA), along with two best student paper awards and two highly commended student paper awards. Best papers have been judged by an independent panel of experts from the top 10% of papers based on the reviewer scores and recommendations. The awards will be announced immediately before the second plenary lecture.

We are very much indebted to the Area Editors, Andreas Krutz, Ralf Schäfer, Aljoscha Smolic, and Seishi Takamura, and the Special Sessions Chair, Henry Wu, for organizing the reviews and to the many anonymous reviewers who helped to ensure a high quality reviewing process. Finally, we express our appreciation to Conference Management Services (CMS), in particular Lance Cotton and his technical support team.

The PCS program this year includes papers that were originally submitted to the Packet Video (PV) workshop and separately reviewed using a high quality process similar to that of PCS. These papers were subsequently transferred into the CMS system for verification and management under PCS. An additional message from the PV technical program chairs follows below.

Thomas Sikora and Manzur Murshed PCS 2015 Technical Program Co-Chairs

#### ADDITIONAL MESSAGE FROM THE PV TECHNICAL PROGRAM CHAIRS

We would like to welcome you to the 21st International Packet Video (PV) Workshop (PV2015), whose papers are appearing as part of the Picture Coding Symposium. This year, we received 25 full paper (6 page) submissions; 11 for the main workshop and 14 for special sessions. Based on the recommendations of the reviewers, the Technical Program Committee accepted 6 papers for the main workshop. 3 additional papers appear within a special session on the final day of the program. The highest quality papers submitted to PV have been selected for consideration as part of the PCS 2015 best paper competition.

Jian Zhang, Weisi Lin and Ce Zhu PV 2015 Technical Program Chairs

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