

Message from the Program and General Chairs

Welcome to Miami and the 27th IEEE Conference on Computer Vision and Pattern Recognition (CVPR). Following in the tradition of its distinguished predecessors, CVPR 2009 has a number of events co-located with the main conference, including short courses and workshops. A passport system allows registrants easy access to these other events, and their proceedings are available on the CVPR 2009 DVD.

The 2009 edition of this conference was over two years in the making. After evaluating several properties in the Miami area, we selected the Fontainebleau Resort due to its excellent conference facilities and beachfront location. The Fontainebleau also has an historical connection to the CVPR community, as the third CVPR meeting was held here in 1986. Within the past two years, the Fontainebleau has undergone an extensive \$1 billion renovation and expansion. The modernized facility retains many of the historical architectural features introduced by noted architect Morris Lapidus, who designed the original property in the early 1950's. Following the tradition of recent CVPR meetings, we have obtained ample space for poster presentations and have integrated the poster space into the overall layout of our meeting rooms to encourage interactions.

Over the past few years, the number of submissions to CVPR has grown considerably, and this year was no exception. We received 1,464 complete submissions by the November 20, 2008 deadline. No extensions were given, and papers that did not meet the submission criteria were rejected and removed from the review process. Based upon a study of previous vision meetings and discussions with previous Program Chairs and other senior members of the community, we decided to assemble the largest Area Chair (ACs) committee in the history of CVPR, to facilitate a thorough review process. Our goal was simple: to conduct a rigorous and fair double-blind review process, and provide the best possible feedback to the authors. A lower load for the ACs was a significant step in this direction. We invited 46 well-known vision researchers as ACs, a significant number of whom had previous AC experience. We ensured that the AC committee provided balanced coverage of the diverse sub-areas within computer vision, based on trends from the last few meetings. The committee included a healthy mixture of junior and senior researchers. Our goal was to assign each AC fewer than 35 papers, and in return, we obtained commitments from all ACs to closely shepherd the reviewing process. Based on input from these ACs and previous organizers, we assembled a Papers Review Committee of 749 members from the broader computer vision community. We also set up an aggressive schedule for the review process, in order to ensure that the decisions for CVPR 2009 were available before the ICCV 2009 deadline in March, 2009.

To facilitate the online review process, we elected to utilize Microsoft Research's CMT System (cmt.research.microsoft.com). This was another first for CVPR, and a substantial change from the tried and tested system used in past CVPR/ICCV/ECCV meetings. We were driven by the need to have a stable and professionally-maintained system capable of supporting a large meeting with a large number of papers and reviews, with reliability and security as major requirements. This decision required an extensive engagement with the CMT team in order to adapt their software to support our multi-tiered review process (consisting of ACs and Reviewers). We received excellent advice and guidance from the developers of the previous years' system, and invited Jiri Matas to be our Review Software Advisor. The CMT Team (Yuri Siradeghyan, Sanjay Agrawal, and Gaoxiang Xu) spent considerable time and effort to adapt the system fully to our needs. In addition to better security, complete backups and reliability, and amazing service by the CMT team, we now have a system with expanded functionality that is available for future use by other vision meetings. One feature of the system that the committee used extensively this year was the

anonymous discussion board for Reviewers and ACs to discuss the reviews. This allowed for frank discussion amongst the reviewers and enabled each AC to obtain a better understanding of the reviewer comments.

Here is a brief snapshot of how the review process unfolded. After the paper deadline, the papers were distributed to the Area Chairs, who in turn identified at least 5 reviewers for each paper. 3 reviewers were automatically selected per paper, taking into consideration conflict information and reviewer load constraints. The Papers Review Committee was given seven weeks to complete the reviews, at which time the ACs stepped back in to finish their work: consolidating reviews, initiating discussions for clarification, and making recommendations for decisions on papers. The author rebuttals were visible to the reviewers, so that author feedback could be taken into account in the final discussions. The ACs were assigned in pairs, in order to provide an additional level of verification and consistency of reviews and proposed decisions. The process was designed to ensure that every paper and its reviews were looked at by at least two ACs. To further support a thorough review process, at the AC Meeting in Atlanta, we divided the ACs into four panels, with no two ACs within a panel having any conflicts. In these panels, ACs were asked to discuss the more difficult cases, specifically papers with divergent scores. The ACs also proposed and discussed candidate papers for ORALs within the panel sessions. In essence, the goal of the panel sessions was to discuss the best and borderline papers in order to make informed decisions. The Program Chairs served as the panel chairs (one of the General Chairs was asked to step in as a panel chair for one of the panels) and worked hard to maintain consistency between the panels. The Program Chairs required that all decisions be made by at least 2 ACs and, as needed, by the whole panel. A consensus of the entire panel was sought on the most difficult cases. The Program Chairs did not over-rule any decisions by the ACs, but asked for clarification on decisions where it was needed, and requested detailed consolidation reports to justify all decisions. Thanks to detailed reviews by the reviewers and the hard work of each AC, the process went very smoothly. As promised, the Program Chairs did not submit any papers to CVPR 2009, allowing them to work without any direct conflicts throughout the review process. Additionally, the respective Program Chairs were excluded from any decisions associated with papers from their affiliated institutions. The double-blind nature of the CVPR review process was strictly maintained throughout the review process.

The ACs accepted 61 papers as ORALs (4.2%) and 322 papers as POSTERs (22%), with an overall acceptance rate of 26.2%. 20 papers were recommended to the Awards Committee, which consisted of senior members of the vision community with no conflicts with the candidate papers. This committee selected 4 award papers after the final camera ready copies were submitted. These awards papers will be presented in the only single-track session of the main conference.

In terms of the acceptance criteria, our policy was to assemble a distinguished group and to let them make decisions by consensus. While we provided the ACs with a minimum number of orals, there was no upper bound, either on the number of orals or posters. While it is inevitable in a process of this scale that some incorrect decisions were made, we believe that the overall process worked well, and the feedback we received remains overwhelmingly positive.

Another addition to the program for CVPR 2009 is the introduction of a series of Doctoral Spotlight Sessions, to be held at the beginning of each morning poster session. The purpose of the Spotlight Sessions is to give recently-graduated or soon-to-be-graduating Ph.D. students with an accepted poster at CVPR 2009 an opportunity to give a brief talk introducing their posters, on the day that they will be presented. Prospective employers and other interested parties are encouraged to attend the Spotlight

Sessions and then follow-up with the individual students at their poster presentations. We are grateful to Kristen Grauman, our Volunteers and Student Activities Chair, for organizing and conducting this special session.

CVPR 2009 has followed the recently-established custom of publishing its proceedings in DVD form. Special thanks go to our Publication co-Chairs, Patrick Flynn and Eric Mortensen, for their tremendous dedication and effort that resulted in a smooth publication process. As in the past, all published papers in the main conference and associated workshops will be indexed by the IEEE, and available through the IEEE Digital Library.

We wish to thank our Steering Committee (Larry Davis, Andrew Fitzgibbon, David Lowe, Harry Shum, Tanveer Syeda-Mahmood, and Ramin Zabih), the previous Program and General Chairs, and other senior researchers in computer vision, for very helpful advice on a wide range of topics. Special thanks go to our Finance and Registration Chairs, Terry and Ginger Boulton, for their indispensable and wide-ranging contributions to the planning and running of this meeting. We also thank the Chairs for Corporate Relations (Anthony Hoogs), Demos (Jan-Michael Frahm), Local Arrangements (Shahriar Negahdaripour and Marshall Tappen), Short Courses (Yanxi Liu), Videos (Gabriel Brostow), Website (Matthew Flagg), and Workshops (Rahul Sukthankar), along with the workshop organizers and short course presenters, for their contributions in making CVPR 2009 a premier event. Our primary thanks to everyone involved in the submission process: the ACs, reviewers and authors. Special thanks go to the CMT team for working hard to ensure a smooth review process and for helping to set up a new reviewing system for CVPR. We believe that the final output of this intensive process is well worth the enormous effort behind it.