Message from the General Chair

It is a great pleasure to welcome you to the IEEE International Conference on Advanced Video and Signal based Surveillance (AVSS) in the wonderful city of Boston!

AVSS provides an excellent forum for exchanging information and fostering collaboration on everything that goes into an end-to-end monitoring system from video analytics to massive archiving technology. It brings together participants from the worlds of research, industry and government agencies, welcomes high-quality contributions in fundamental disciplines including image and signal processing, data fusion, pattern recognition and computer vision, and gives unique emphasis to cross-disciplinary and ground-breaking papers.

Our major theme, video surveillance, is a modern gold rush except that people are bringing cameras and computers instead of pickaxes and shovels. Several studies forecast that the video surveillance market is poised for explosive growth thanks to the massive deployments now taking place in North America, Middle East and China. There is more to this dramatic change: video finds uses in a variety of vertical markets such as retail, education, banking, transportation and business intelligence where it is not always about security. For example, crowd tracking to analyze customer behavior within stores, eye tracking to assess user attention on product displays. This is particularly true as the video surveillance solutions becomes increasingly price competitive. The introduction of high definition network cameras and the increasing adoption of open standards are expected to further accelerate the migration.

Over the years, AVSS has evolved to become surely the most premier event dedicated to surveillance representing both the latest and future trends. Success of the first two meetings held in Genoa, Italy (1998) and Kingston, UK (2001) by Carlo Regazzoni helped to establish this series as a conference in Miami, USA (2003), Como, Italy (2005), Sydney, Australia (2006), London, UK (2007), Santa Fe, USA (2008), and Genoa, Italy (2009) continuing the tradition for dissemination of outstanding research results.

Mainstream conference series such as CVPR, ICCV, ICPR, etc. have to encompass to a long list of assorted areas, which often requires one to meticulously pick few relevant presentations among hundreds of others. However, AVSS is unique in its in-depth and all-inclusive coverage of surveillance techniques applied to a broad range of sensor modalities and its bringing together of a diverse set of specialists in this field.

I am happy to announce that we finally achieved to sign a multi-year financial and technical co-sponsorship agreement with the IEEE Computer and IEEE Signal Processing Societies thanks to the strong support of the IEEE PAMI and IEEE IVMSP technical committees, especially John Mathews, Terry Boult, Gaurav Sharma and John Apostolopoulos. Such a decoration of honor is only dedicated to foremost conferences.

We have received more than 120 submissions to the main conference and its workshops, and we accepted 27 as oral and 36 as poster papers. In order to provide an outstanding technical level for the presentations, we have invited more than 250 distinguished experts in the surveillance field to participate in the Technical Program Committee. With the dedicated team effort of the Program Chairs Jim Davis and Janusz Konrad, and Area Chairs, George Bebis, Tsuhan Chen, Isaac Cohen, Dairu Gavrila, Massimo Piccardi, Stan Sclaroff and Chris Stauffer, all papers have been rigorously reviewed. As this is a specialist
conference, the quality of the submissions is proved high on average. We would like to thank all the authors who submitted their work for consideration.

We are proud to have Mubarak Shah, John Rush, and Harpreet Sawhney to give plenary lectures. Complementing the fascinating papers are 3 exciting workshops PETS, AMMCSS, and MMSS that are organized by James Ferryman, Tiziana D’Orazio, Mohan Trivedi, Mohan Kankanhalli and chaired by Andrea Cavallaro, 3 acclaimed plenary talks, and always-popular industrial panel chaired by Anthony Hoogs with John Fiscus and Erik Blash. As a first, we will have two-minute oral presentation for each poster paper this year. You certainly have a very busy week ahead of you. With more than a hundred experts, representing about 30 countries from all over the world, coming together at such a conference, we can only expect to achieve excellent results.

AVSS 2010 has been made possible only through the hard work of many people, in particular, we are thankful to Prakash Ishwar, Senem Velipasalar, Kuntal Sengupta, Venkatesh Saligrama, Ioannis Tziakos, Shiloh Dockstader and many others for doing a superb job for local arrangements, finance and registrations, publications, demonstrations, web management, and industrial liaison. Most importantly, we warmly acknowledge the sponsors: Boston University, Mitsubishi Electric Research Laboratories, IntuVision for their crucial involvement and valuable support. We are grateful to the IEEE Computer Society and IEEE Signal Processing staff in helping us in both the fiscal matters and in compiling the proceedings. In particular, we extend our gratitude to Brookes Little, Deidre Zeigler and Silvia Ceballos.

Boston is one of America’s most beautiful cities boasting a spectacular harbor and thriving downtown. With its forefront history, champion sports franchises, world-class educational institutions, and vibrant streets, you will find Boston as the most European place in the United States.

I hope that you will find the conference in all its aspects a most pleasant, stimulating and rewarding experience.

Fatih Porikli

General Chair, AVSS 2010