Message from the Program Chairs

On behalf of the 2012 General Chairs Tieniu Tan and Rama Chellappa, it is our great pleasure to welcome you to the Ninth IEEE International Conference on Advanced Video and Signal-Based Surveillance (AVSS) in the magnificent city of Beijing!

AVSS encompasses 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 application-oriented papers. It brings together experts from the worlds of academia, industry and government agencies, provides an excellent forum for exchanging information and fostering collaboration on everything that goes into an end-to-end surveillance system from video analytics to data management.

Several studies correctly forecast that the video and signal-based surveillance market is poised for an explosive growth thanks to the massive proliferation of smart devices, internet connectivity and cloud computing. The increasing availability and, thus, lower cost of higher-quality network cameras not only makes video more affordable for protecting people and property around the clock but also redefines cameras role in a variety of vertical markets such as retail, education, banking, transportation and business intelligence.

Over the years, AVSS has evolved into the most premier event representing both the latest and future trends in surveillance. Unlike the mainstream conference series that have to encompass to a long list of assorted and often unrelated areas, AVSS is unique in its in-depth coverage of surveillance techniques applied to a broad range of sensor modalities, giving a change to specialists in this field to enjoy thoroughly comprehensive discussions. After the first eight meetings held in Genoa, Italy (1998), Kingston, United Kingdom (2001), Miami, USA (2003), Como, Italy (2005), Sydney, Australia (2006), London, United Kingdom (2007), Santa Fe, USA (2008), Genoa, Italy (2009), Boston, USA (2010), Klagenfurt, Austria (2011), AVSS continues the tradition for dissemination of outstanding research results while proudly cosponsored by the IEEE Computer and IEEE Signal Processing Societies.

We have received 165 submissions to the main conference, and we accepted 29 as oral and 48 as poster papers, achieving an improved acceptance rate of 46.7% in comparison to the previous years. 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 reviewing process. With the dedicated team effort of the Area Chairs Andrea Cavallaro, Carlo Regazzoni, David Suter, Bir Bhanu, Greg Mori, Kaiqi Huang, Yoichi Sato, James Davis, Massimo Picardi, Dimitros Makris, Ioannis Pitas, and Wei-Shi Zheng, 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 Brian Lovell, Mohan Trivedi, and Kazuhiko Sumi to give keynote lectures on distributed real-time face in the crowd recognition, observing people, activities and interactions, and the past, present and future of human observation. Complementing the fascinating papers are two exciting tutorials on activity recognition for visual surveillance and retail visual analytics: status and change. In addition, we also host the PETS workshop chaired and always-popular industrial panel chaired by Peter Tu and Shiloh Dockstader.

AVSS 2012 has been made possible only through the hard work of many people, in particular, we are thankful to Ran He, Jing Dong, Man Zhang, Zhang Zhang, Yongzhen Huang, Wei Wang, Weiqiang Ren, Dong Wang, Zifeng Wu, Yanhu Shan, Hui Zhang, Zhenhua Chai, Yinan Yu, Junge Zhang and many
others for doing a superb job for local arrangements, finance, registrations, and web management. Most importantly, we warmly acknowledge Chinese Academy of Sciences for its valuable support.

Beijing has it all; opulent palaces and temples, lush pavilions and gardens, ancient historical sites, extravagant art, over one hundred museums, vibrant streets, modern universities have made it a center of culture and education in China.

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 AVSS, we can only expect to achieve excellent results.

Fatih Porikli, Liang Wang, Steve Maybank

AVSS 2012 Program Chairs