Welcome Message from the Conference General and Program Chairs

On behalf of the organizing committee we would like to welcome you to ICRA2011. ICRA2011 is unique in several aspects. First, the conference is held in mainland China for the first time. As witnessed by the world, great economic success has been achieved by China over the past thirty years. The country is becoming more industrialized, and more relevant to robotics and automation. The leaders of the IEEE Robotics and Automation Society realized the importance of engagement with China even eight years ago, when ICRA2011 was approved to be in Shanghai, China, which happens to be the largest city of the country.

Secondly, ICRA2011 has received a profound support, morally and financially, from the Chinese government and several State Key Labs, which is beyond the normal in the previous ICRAs. We take this opportunity to convey our sincere gratitude to China Ministry of Education, Ministry of Science and Technology and the Natural Science Foundation of China as well as the Shanghai Municipal Government. Their supports have rendered a smooth and successful organization of this large-scale international conference.

Thirdly and finally, for the first time ICRA introduces a new Communication paper category. The purpose of the new category is to provide industrial researchers a platform to present their recent work, and to interact with academic researchers. This new paper category is further collaborated by two Industrial Forums which make ICRA2011 attractive to industrial participants. We consider this category to be particularly important for ICRA2011 since a large number of industries, national and international, are located in Shanghai.

The organizing committee has made every effort to deliver a productive ICRA2011. In addition to the new category just mentioned, we have successfully invited Professor Ziyuan Ouyang, Chief Scientist of the China’s first Lunar Exploration Program, to be the Keynote Speaker of the Opening Ceremony. We have also invited three renowned researchers in the field, from both academia and industry, to serve as Plenary Speakers. Furthermore, there are a large number of Workshops and Tutorials plus an Automation Forum and a Robotics Challenge Program devoted to the conference. To benefit those who are in Shanghai for the first time, technical and sight-seeing tours are arranged.

This year the theme of the conference is “Better Robots, Better Life”. Devoted to that theme, ICRA authors submitted 1968 papers, 36 videos and 59 Communication short papers. We regret that many interesting and well-written papers were not accepted due to the limit of the space. All the accepted papers are divided into 168 Technical Sessions, plus two Interactive Sessions which are also the first for ICRA. The twenty accepted videos are to be presented in two video sessions. 31 accepted Communication short papers are scheduled in five Communication sessions and an Interactive Session.

As always, a great conference needs great volunteers. ICRA2011 has involved perhaps more volunteers than any other ICRAs held elsewhere before since China is extremely good in mobilizing a large number of people to get an event done well. We will owe the success of this conference to too many people whom cannot all be detailed here, but please join us in thanking them and particularly the following individuals. We are grateful to the Conference Editorial Board of the Society led by Professor Antonio Bicchi for reviewing of all the papers in a short period of time. We deeply appreciate all the local arrangements made by the Shanghai Jiao Tong University (SJTU) team led by Professor Zhongqin Lin, the Deputy Vice President of SJTU. Last but not least, we enjoy working with the members of the ICRA2011 leadership team including: Executive General Co-Chair, T.J. Tarn, General Co-Chairs Michael Yu Wang and Han Ding, Program Co-Chairs Zhidong Wang and Jianwei Zhang, plus the General Affairs Chairs & Secretariat Dr. Xinjun Sheng and Yunjiang Lou.

Finally, we wish you all enjoy ICRA2011 and stay in Shanghai!