Foreword

We offer a warm welcome to all of the attendees of the 2009 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2009). This is a conference that over the years has established itself as a truly global enterprise of major technical importance. Our conference venue is St. Louis, Missouri located on the Mississippi River. St. Louis is the historical gateway to the West during the early years of growth and expansion in the United States. Crossing the Mississippi was the demarcation from east to west for early pioneers embarking on new hopes and horizons in the unsettled regions to the west. Building on this history, the conference theme is "Exploring New Horizons in Intelligent Robots and Systems." Indeed, most think of IROS as a conference where an attractive blend of recent results encompassing basic through applied research can be viewed. We believe this year's technical program offers just that.

Even under the current conditions of global economic stress, IROS 2009 continues the tradition of wide interest and participation from all over the world. 1599 papers were submitted from 53 countries. After a rigorous review process, 936 papers were accepted for presentation at the conference. The technical program consists of three plenary talks, 192 technical sessions in 16 tracks, 18 tutorials/workshops, and 13 video presentations. Session technical topics cover the full gamut from emerging areas of interest to more traditional subject areas within intelligent systems and robots. Some of the largest contributions have occurred in areas such as robot audition, biological inspiration, haptics, human-robot interactions, humanoids, medical robotics, and rehabilitation robotics. Like all recent IROS's, you face a challenge to navigate amongst the 16 tracks to hear the papers you are most interested. We have prepared this digest to assist you as much as possible in this challenge. We sincerely hope that you enjoy the conference, and that it provides you with useful and important information about current research.

We would like to thank all of the members of the IROS 2009 Organizing Committee for their contributions. It takes a dedicated team to be able to accomplish a conference of this size, and we are grateful to each of the committee members who have dedicated so much of their time and effort to IROS 2009. Finally, our thanks to all of the authors and participants who provide the intellectual exchanges that are the essence of IROS.



Ning Xi, General Chair



William R. Hamel, Program Chair