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Foreword

The 2002 IEEE International Conference on Robotics and Automation (ICRA 2002) is the 19th meeting of what has become the premier robotics conference in the world. It is the largest technical meeting sponsored each year by the Robotics and Automation Society and by virtue of the hard work of authors and organizers, it is rich in traditions and reflects the highest standards of technical contribution. Our deepest hope is that ICRA 2002 will contribute significantly to the ICRA heritage.

This year the conference is being held in Washington, D.C., for the first time. The Washington venue is significant with respect to the technical dimension of ICRA 2002. Numerous federal agencies as well as federal laboratories and high-tech companies are located within the metropolitan area. A large population of engineers and scientists that have interests in the technical program is within local traveling distance to the conference. Important government agencies such as NSF, DOE, NASA, DARPA, and the DOD have their headquarters within minutes of the conference hotel. The fact that Washington is a decision center regarding many aspects of robotics research and development motivated the conference theme, *Future Pathways in Robotics, Intelligent Machines, and Automation*.

A record number of papers, 1172, from 42 countries were submitted to the Technical Program Committee (TPC) through a totally internet-based process. Regional chairs from the USA, Asia and Europe worked electronically with TPC members located all over the world to review and select 689 papers for presentation at the conference. The TPC worked very hard to provide a balanced technical program that includes 14 tracks. Supplementing the technical sessions, the program includes an opening plenary panel discussion on the emerging area of bio-robotics. The second day includes dual-track panel discussions on humanoid robots and military robotics. The last plenary session on the third day considers rescue robotics based on actual experiences in the aftermath of the New York World Trade Center disaster. In addition, the program offers several tutorials and workshops on the two days prior to the main program.

We are grateful to the entire organizing committee and student workers for their tireless efforts and contributions to ICRA 2002. We would particularly like to recognize the strong support of the Program Vice Chairs, Lynne Parker, Shigeki Sugano, and Antonio Bicchi. The effective local arrangements work of Norm Caplan, Ella Atkins, Allison Okamura, and Charles Nguyen were a key ingredient to the smooth operation of the conference. The tenacity, expertise, and hard work of Vita Feuerstein, our IEEE Conference Planner, were absolutely essential.

ICRA 2002 occurs during the year of one of the world's worst tragedies, the attacks on the New York World Trade Center and the Pentagon. Over 800 papers were submitted after September 11th bearing testimony to the international robotics community's resolve, like so many others, to not have others dictate how they live. In this vein, our deepest thanks go to the contributing authors, conference attendees, exhibitors, and financial contributors for making ICRA 2002 a memorable event.

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