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An Automated Camera Orientation Recovery Algorithm for an Eye-in-hand Robotic Manipulator

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An Enhanced Vision Processing Algorithm for a Micro-manipulation System

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WELCOME MESSAGE

The organizing committee welcomes all participants to the 2007 IEEE International Workshop on Robotic and Sensor Environments, held in Ottawa, Canada, on October 12-13, 2007. The two-day program provides an opportunity for researchers interested in various applications of sensing and robotics to discuss their latest results and exchange ideas on the new trends. The main objective of the workshop is to encourage discussion on a broad range of topics and to stimulate new collaborations among the participants.

ROSE 2007 is the fifth edition of this international workshop since its introduction in 2003. Continuing the tradition established by the previous workshops, ROSE addresses recent developments, results and practical experiences in intelligent robotic and control systems from the particular point of view of sensing in the context of the IEEE Instrumentation and Measurement Society.

This year, contributions submitted to the workshop originate from 15 different countries in North America, Asia/Pacific, Europe, Middle East, and Latin America. 24 manuscripts presenting contributions of high quality have been selected for publication. They illustrate the diversity of problems and applications that combine sensors, decision systems and robots. The workshop is especially dedicated to the amalgamation of complementary technologies that provide a strategic advantage for the development of fully autonomous systems. Various types of sensors and sensor systems are discussed and the complementarity of sensing modalities, data fusion and the integration of distributed sensors are also examined. On the other hand, some papers address the development of innovative robotic platforms, their navigation and control techniques.

Three distinguished researchers in the field, Prof. Toshio Fukuda, Prof. Cesare Alippi, and Prof. Subhas Mukhopadhyay, kindly accepted the invitation to address the audience as keynote and invited speakers. Their presentations will contribute to a great conference. The workshop also features an exhibit session where original technologies developed both for commercial and educational purposes will be demonstrated. Participants are encouraged to take advantage of this exciting component of the conference to learn about these new platforms while interacting with researchers coming from complementary backgrounds.

We believe that the contributions to be presented are very valuable to the field of instrumentation and measurement technologies and to their integration in intelligent robotic systems. We wish all participants a fruitful experience at ROSE 2007 workshop.

Welcome to ROSE 2007 and thank for your participation!

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