



# Call for Papers

IEEE

IEEE TRANSACTIONS ON ROBOTICS

## Special Issue on Human-Robot Interaction

The recent trend toward developing a new generation of robots that can participate in our lives and exist in human environments has introduced the need for investigating the paradigms, techniques, and technologies for the **interaction between people and robots**. An important goal for the field of *Human-Robot Interaction* is to develop autonomous and semi-autonomous robots that operate within human spaces and play a beneficial role in the daily lives of ordinary people. Interaction between people and robots may potentially span physical, cognitive, task-based, social, or emotional dimensions. Human-robot interaction poses multi-faceted problems, requiring not only technical but also cultural, sociological, psychological, philosophical, and even ethical considerations. How to model the interaction of a human being with a robot? How to manage the physical, intellectual, and emotional exchange between human beings and robots? How to realize an effective communication of robots with the humans and their environments? These questions and many others are the stimulus for this Special Issue of the *IEEE Transactions on Robotics* (T-RO), aimed at gathering the latest results by robotics researchers facing the diverse problems related to human-robot interaction.

### Topics

Topics for contributions include, but may not be limited to, the following research challenges:

Multi-modal interaction	Robots in the assistance of Humans
Adjustable autonomy	Reciprocal learning
Interaction control in robotic systems	Human-guided learning
Natural interfaces	Human-Robot Cooperation in Teamwork
Cognitive modeling/science in Human-Robot Interaction	Case studies in Human-Robot Interaction

### Important dates:

<b>June 1, 2006:</b>	Call for Papers
<b>September 30, 2006:</b>	Deadline for Paper Submission
<b>February 28, 2007:</b>	Completion of First Review
<b>June 30, 2007:</b>	Completion of Final Review
<b>December 2007 (tentative):</b>	Publication

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*Co-Chairs of the IEEE-RAS Technical Committee on Human-Robot Interaction and Coordination*

### Submission and Review of Papers:

Submission procedures can be obtained from the T-RO web site <http://www.dis.uniroma1.it/ieetro>. Papers submitted to the Special Issue will undergo the usual reviewing process of T-RO. For further information on this Special Issue, please refer to the web site of the IEEE-RAS TC on Human-Robot Interaction and Coordination at <http://thth.berkeley.edu/tab-db/>.