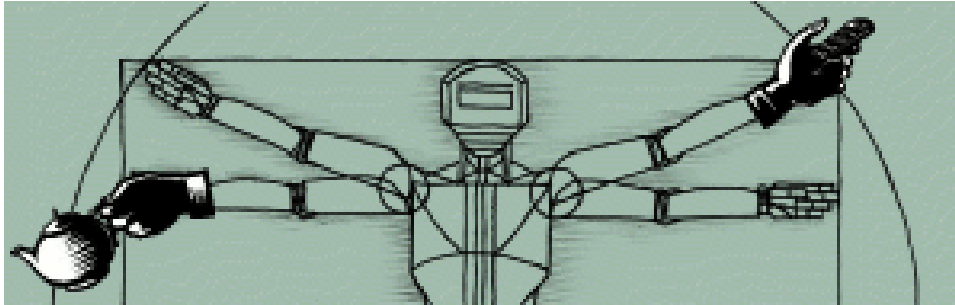


Call for Papers: RSS 2008 Workshop

Robot Manipulation: Intelligence in Human Environments

<http://www.robotic.de/rss08-manipulation/>

ETH Zurich, Switzerland, June 28th, 2008



The organizers invite you to submit a demo, poster, or paper for review to the RSS 2008 Workshop on Robot Manipulation: Intelligence in Human Environments. The workshop will take place on Saturday, June 28th at the Swiss Federal Institute of Technology Zurich in Zurich, Switzerland.

IMPORTANT DATES

- **Submission deadline extended - ~~4/30/2008~~ New deadline: 05/13/2008**
- Notification of acceptance - 5/25/2008
- Workshop - June 28th

DESCRIPTION

The workshop will explore new approaches to robot manipulation with an emphasis on the relationship between intelligence and successful interaction with human environments. There has recently been renewed interest in robot manipulation as researchers seek to push autonomous manipulation out of controlled laboratory settings and into less structured domains including the factory, health care, space exploration, and the home. The problem of autonomous robot manipulation in human environments poses a number of key challenges. These include: sensing relevant information; using sparse and incomplete information efficiently; and adapting to unforeseen characteristics of the environment. These challenges connect manipulation to the larger problem of robot intelligence.

This full-day workshop will consist of talks, discussions, a poster session, and demos. It will conclude with a moderated discussion of potential future applications for autonomous robot manipulation focused on identifying tomorrow's driving applications and the research required to enable these applications.

This is the fourth in a series of manipulation-centered workshops at RSS.

Appropriate topics include:

- Mobile manipulation
- Task-space control and representations of manipulation
- Behavior-based approaches
- Using object affordances
- Learning, adaptation, and development for real world manipulation
- Visual perception for manipulation in real-world environments
- Manipulation with partial or incomplete information
- Neuroscience and robot manipulation
- Safety to humans
- Force sensing and actuation for manipulators
- Force and impedance control of manipulators
- Formal measures of performance in real-world environments
- Reviews of the state of the art

SUBMISSION

All accepted work will be published in a citable digital archive of the proceedings. New results are welcome. We also encourage researchers with relevant work to retarget previously published results to the workshop topic. Authors will be asked to present their work as a talk, poster, or demo.

All submissions should be in PDF format using the RSS template

http://www.roboticsconference.org/doc/rss2008_paper_template.tgz

Papers should be between 4 and 6 pages in length. Proposals for demos and posters should be 1 page in length. Demo proposals should describe the work to be demonstrated and include a relevant image. Poster proposals should include a description of the material to be presented.

Submissions must be submitted to **<http://rss08-manipulation.confmaster.net>** by April 30th. Notification of acceptance will be given on or before May 15th.

ORGANIZERS

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RSS 2008 - <http://www.robotics-conference.org/>

Workshop - <http://www.robotic.de/rss08-manipulation/>

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