



14TH INTERNATIONAL CONFERENCE ON ADVANCED ROBOTICS

Munich, Germany
June 22nd to 26th, 2009

<http://www.icar2009.org>

Sponsored by the German Robotics Society (DGR)
Technically Co-sponsored by IEEE Robotics and Automation Society (RAS)

CALL FOR PAPERS / PARTICIPATION

Venue: Munich Marriott Hotel, Germany

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Gerd Hirzinger, DLR Institute of Robotics and
Mechatronics

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Erwin Prassler, Bonn-Rhein-Sieg Univ. of
Applied Sciences

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Schedule

March 23, 2009	Deadline paper submission
April 25, 2009	Notification of acceptance
May 01, 2009	Camera ready copy

Paper Submission

Paper submission and review will be fully electronically. Please, upload an electronic copy of your manuscript in PDF to the conference web site www.icar2009.org.

Conference Theme

The theme of ICAR 2009 will be "able robots", where "able" is the lexical intersection of "cap-able", "depend-able", "measur-able", "afford-able". These adjectives stand as synonyms for four rather fundamental and important features of robots which are supposed to deliver useful and economically competitive services in everyday environments under everyday conditions. Robots need to be "cap-able" of performing functions, which are considered to be of real use to a customer. These functions and capabilities have to be shown in a "depend-able" manner 24 hours per day, 7 days per week and 52 weeks per year. Service robots, which have become products, have become "measur-able" because their price performance ratio determines their competitiveness. Measurability of functions, components, system designs is needed to develop competitive service robot products. Finally, attention must be paid not only to the development of high technology but also to "afford-able" technology, which leads to a competitive price performance ratio of the eventual service robotics products.

We solicit original high-quality contributions particularly, but not exclusively addressing the following scientific and technological issues:

cap-able

motion planning and navigation, reactive and sensor-based planning, visual navigation, mapping and localization, robot control, kinematics and dynamics, behavior based systems, robot architectures, distributed robot systems, sensing and perception, scene understanding, situation awareness, force and tactile sensing, haptics, sensor fusion, visual servoing, tracking, manipulation, mobile manipulation, grasping, reasoning, learning, interaction, service robotics, domestic robotics, home automation, field and service robotics

afford-able

low-cost localization, low-cost sensing and 3D perception, low-cost wide-area navigation, low-cost collision detection and obstacle avoidance, low-cost manipulation and grasping, low-cost actuation, low-cost coverage, low-cost robot design

measur-able

performance measures and procedures, benchmarks, experimental robotics, standards

depend-able

robust autonomy, error recovery, remote diagnosis and monitoring, self-modeling, self-monitoring, self-repair

Special sessions will be organized for the following topics (amongst others):

- disposable robots
- robotic learning by experimentation

For more information contact

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