



# 14<sup>TH</sup> INTERNATIONAL CONFERENCE ON ADVANCED ROBOTICS

Munich, Germany  
June 24th to 26th, 2009

<http://www.icar2009.org>

## CALL FOR PAPERS / PARTICIPATION

Venue: Munich Marriott Hotel, Germany

### General Chair

Erwin Prassler, Bonn-Rhein-Sieg University of Applied Sciences

### Program Chair

Paolo Fiorini, University of Verona

### Financial Chair

Rainer Bischoff, Kuka Roboter GmbH

### Honorary Chairs

Rolf Dieter Schraft, Fraunhofer IPA  
Gerd Hirzinger, DLR Institute of Robotics and Mechatronics

### Publication Chair

Martin Hägele, Fraunhofer IPA

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R. Schraft (Germany)  
J. Trevelyan (Australia)  
Y. Umetani (Japan)

### Local Organizer

Corinna Noltenius, GPS Gesellschaft für Produktionssysteme GmbH

### Schedule

March 13, 2009    Deadline paper submission  
April 24, 2009    Notification of acceptance  
May 15, 2009    Camera ready copy

### Paper Submission

Paper submission and review will be fully electronically. Please, upload an electronic copy of your manuscript either in Postscript or in PDF to the conference web site [www.icar2009.org](http://www.icar2009.org).

### Contact

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### 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 addressing the following scientific and technological issues:

#### cap-able

learning, interaction, reasoning, programming,  
robust perception, mobile manipulation

#### afford-able

wide-area navigation, localization, manipulation and grasping,  
obstacle avoidance, coverage

#### measur-able

performance measures & 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
- robust autonomy
- robotic learning by experimentation