



In conjunction with:



June 19–22, 2018 | Munich
automatica-munich.com

50th International Symposium on Robotics – ISR 2018 | June 20–21, 2018

Welcome address by the Chair of ISR 2018

Robotics in the era of Digitalization! After two years the 50th International Symposium on Robotics, ISR 2018, will again be held in Munich, Germany, from June 20–21, 2018. This international conference is jointly organized by the Mechanical Engineering Industry Association (VDMA) and the Information Technology Society (ITG) within VDE. In 2018, ISR celebrates its 50th anniversary. The 1st ISR in 1970 was the first global robot conference ever and it continues to be the world's leading robot conference!

The ISR 2018 conference will again take place at automatica, the leading exhibition for smart automation and robotics. With over 800 exhibitors and more than 43,000 visitors from all over the world, automatica 2016 established itself as the leading marketplace for automated production. As the fair will start one day before ISR 2018, there will be enough possibility and time for all conference participants to visit automatica.

In about 150 presentations, ISR 2018 will give an insight into the latest state-of-the-art robot technologies to participants from both industry and science. Sessions will be held on Modeling, Planning and Control as well as Components and Technologies. Robotics in Production / Industrial Robots will also be addressed as well as Service Robotics. Additionally there will be sessions on Robotics in New Markets and Applications and on the Workplace of the Future as well as a special IERA session. Presentations of the final nominees of the Joseph F. Engelberger Award and the IERA award highlight the conference's gala banquet. Of course there will be a conference poster session that can be visited between and during the conference sessions.

We cordially invite researchers and experts from the field of robotics to submit their abstracts, as we are confident we can provide an exciting conference program in June 2018.

We are looking forward to receiving your abstracts!



Univ.-Prof. Dr.-Ing.
Dr. h.c. mult. Alexander Verl

Chair of ISR 2018 on behalf of International Federation of Robotics (IFR)

The Place to be for Robotics

The 50th International Symposium on Robotics (ISR 2018) by IFR (International Federation of Robotics) will take place at Messe München Entrance East, Munich, Germany from June 20–21, 2018. The conference is organized in conjunction with automatica, the leading exhibition for smart automation and robotics.

automatica, June 19–22, 2018

automatica is the leading marketplace for automated production. It features the world's largest range of robotics, assembly solutions, machine vision systems and components. It gives companies from all branches of industry access to innovations, knowledge and trends with a great deal of business relevance. As the digital shift continues, automatica ensures market transparency and provides orientation with a clear objective: Being able to manufacture higher-quality products with greater efficiency.

Professional service robotics will again be presented with its own exhibition sector. Here, manufacturers of service robots, service robotics components and turnkey products as well as renowned research organizations will present marketable products and innovative developments.



Again, the simultaneous organization of the events will provide a number of benefits to the participants: The conference offers the latest results in the fields of research and development in robotics as well as in new applications. The trade show automatica will present the latest products, systems and components for assembly and handling, machine vision, industrial robotics and service robotics.

ISR 2018 is organized by

- ITG (VDE) Information Technology Society of VDE
- VDMA Robotics + Automation
- IFR International Federation of Robotics

VDE

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Contact

VDE Conference Service
Ms. Jasmin Kayadelen
Stresemannallee 15
60596 Frankfurt am Main, Germany

Tel. +49 / (0)69 / 63 08-275
Fax +49 / (0)69 / 63 08-144
jasmin.kayadelen@vde.com



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Abstract Submission

The official language of the ISR 2018 is English. Prospective authors can submit an extended abstract in pdf-format (two pages DIN A4). For extended abstract submission and more information please visit our website: www.isr2018.org

All submitted abstracts should include:

- Title of the paper
- Keywords
- Speaker's name
- Phone and e-mail

Important dates

- Deadline for abstracts: January 8, 2018
- Notification of acceptance: February 26, 2018
- Deadline for full paper: March 30, 2018

Symposium Topics

Contributions related, but not limited, to the following topics of interest are welcome:

1. Modeling, Planning and Control

- Mechanisms and kinematics
- Calibration and identification
- Branch marketing / experimental practices
- Theoretical foundations

2. Components and Technologies

- Vision / tactile / auditory sensors
- Visual serving and tracking
- Actuators and controllers
- Robot end-effectors / robot infrastructure

3. Robotics in Production / Industrial Robots

- Assembly, handling, painting, machining, processing, logistics etc.
- Robot programming and languages
- Intelligent manufacturing systems
- New applications
- Robots in the digital factory

4. Robotics in Service / Mobile Robotics

- Home and office robotics
- Service robotics for professional services
- Rescue / surveillance / security / defence robotics
- Assistance / rehabilitation / medical robotics
- Educational and entertainment robotics
- Exploration / space / aerial / underwater robotics

5. Robotics in New Markets & Applications

- Food / pharmaceutical / biology robotics
- Micro / nano robotics
- Cognitive robotics / learning and adaptive systems / network and ubiquitous robotics
- Biologically inspired robotics: humanoids / biomimetics / legged robots

6. Human-robot-collaboration / Future of work

- Standards / safety / profitability / ergonomics / socio-economics / industrial engineering
- Industrial papers related to applications and case studies are welcome
- Safe human-robot-collaboration / cooperating robots



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