

## MEDIA ALERT

### ***Support for Humans Emphasized at International Robotics Conference***

*IEEE International Conference on Robotics and Automation will attract 1,500+ robotics experts and technology providers to Saint Paul, MN*

St. Paul, MN– APRIL 26, 2012. – The world’s leading robotics and automation experts will gather at the Paul River Centre in Saint Paul, MN on May 14-18, 2012 for the 2012 International Conference on Robotics and Automation (ICRA). The theme of the annual robotics event is “Robots and Automation: Innovation for Tomorrow's Needs”. The event website is [www.icra2012.org](http://www.icra2012.org).

According to ICRA 2012 Program Chair Paul Oh, “The conference theme for the 2012 ICRA event, ‘Robots and Automation: Innovation for Tomorrow's Needs’, reflects a future where robots and automation will support humans in multiple ways, ranging from automated factories that will reduce dangerous work, to robotic companions that will improve quality of life. The research discussed at ICRA 2012 lays the groundwork for the development of these classes of robotic support systems.”

The conference will feature distinguished robotics scholars delivering innovative research findings. Plenary sessions include:

- *Robotics in the Small* - Brad Nelson, Professor of Robotics and Intelligent Systems, Swiss Federal Institute of Technology Zurich (ETH-Zürich) and Founder, Institute of Robotics and Intelligent Systems
- *Bio-Bots: Bio-Integrated Robotics Using Live Cells As Components* - H. Harry Asada, Ford Professor of Engineering, Director, d'Arbeloff Laboratory for Information Systems and Technology, Massachusetts Institute of Technology (MIT)
- *Development of the Humanoid Robot HUBO II* - Jun Ho Oh, Professor, Department of Mechanical Engineering, Korea Advanced Institute of Science and Technology (KAIST)

The **International Robotics and Automation Conference** features three days of plenary and general sessions delivered by the world’s leading robotics and automation researchers. The event also boasts of an exhibit floor featuring more than 30 companies exhibiting the latest robotics and automation products, along with special events and other networking opportunities. The main conference will include ten parallel tracks of technical presentations covering a wide range of robotics and automation topics including:

- Robots for Surgical and Medical Applications;
- Space and Underwater Exploration Robots;
- Bipedal and Multilegged Robots;
- Multi-Robot Systems;
- Micro and Nano Scale Robots;
- Path Planning, Mapping, and Localization;
- Grasping, Manipulation, and Part Handling;

- Visual Perception;
- Tactile and Force Sensing;
- Robots for Surveillance;
- Applied Machine Learning;
- Human-Robot Interaction.

The conference also includes interactive sessions where presenters will be able to combine their presentations with practical demonstrations of their research results. All the presentations will be videotaped and archived, to create a repository of knowledge that will help promote the community and serve its members.

Multiple robotics challenges are planned to engage teams or individual researchers to compete with each other to solve specific practical problems in mobile manipulation, microrobotics, manufacturing, contingency planning, and humanoid robotics. The challenges are designed to inspire students to use their creativity and imagination and to increase their passion and enthusiasm for robotics.

### **About the International Conference on Robotics and Automation**

The International Conference on Robotics and Automation (ICRA) is the international robotics community's premiere academic conference. The event, which is sponsored by the IEEE Robotics & Automation Society, has been held annually in different countries since 1984, attracting the best researchers from all over the world to present their latest research results.

### **About the IEEE Robotics and Automation Society**

The IEEE Robotics and Automation Society (IEEE RAS) is a professional society of the IEEE, world's largest professional association for the advancement of technology. Like all other 37 IEEE societies, the Robotics and Automation society provides publications, conferences, community networking, and many other benefits to members within our specialty areas.

The Society strives to advance innovation, education, and fundamental and applied research in Robotics and Automation. Robotics focuses on systems incorporating sensors and actuators that operate autonomously or semi-autonomously in cooperation with humans. Robotics research emphasizes intelligence and adaptability to cope with unstructured environments. Automation research emphasizes efficiency, productivity, quality, and reliability, focusing on systems that operate autonomously, often in structured environments over extended periods, and on the explicit structuring of such environments.

### **Note to Editors**

The ICRA 2012 event will bring together the leading robotics and automation experts at one time and at one location. The topics covered at the conference support numerous storylines which are both newsworthy and relevant. Photo, video and interview opportunities also exist. Press registration includes access to Plenary Presentations, Conference Sessions, the Exhibition Floor, and networking opportunities.

### **Contact**

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