



## Special Session on Advances in Robotics and Virtual Reality (ARVR'2010)

Under the framework of the 10<sup>th</sup> International Conference on Intelligent Systems  
Design and Applications, ISDA'10  
November 29 – December 1, 2010, Cairo, Egypt  
Conference web page: <http://cig.iet.unipi.it/isda2010/>

### Session Chairs

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#### Abstract:

This session is an effort to disseminate the current advances in robotics for manipulation and virtual reality as a non-destructive test-bed, and to stimulate a discussion on the future research directions in these fields. We expect that this session will succeed in invigorating research interests towards the development and applications of robotics and virtual reality for intelligent systems. Robotics may be exploited to assist human beings in number of ways from farming to avionics, bio-medicine, automotive, rehabilitation etc. However the non-destructive nature of virtual reality makes it a prime candidate for the testing of robotic techniques or train humans towards the operation of robots in a safe and danger free environment. The goal of this session “Advances in Robotics and Virtual Reality” is to exchange and stimulate research ideas to realize advancements in robotic and virtual reality systems together. Robotics and Virtual Reality are rapidly growing, interdisciplinary research areas lying at the intersection of computer science, mechatronics, control systems, electrical and mechanical engineering. Technologies, algorithms, system architectures, and applications will be presented and discussed during the session. The papers having the scope from the following topics will be discussed in this session:

- Robotics
- Virtual Reality Systems
- Autonomous Navigation
- Brain Remapping Systems
- Rehabilitation Robotics
- Environment Mapping
- Cognitive Robotic Systems
- Adaptive Learning Systems
- Intelligent Shared Control Systems
- Intelligent Graphical User Interfaces
- Dialogue Systems and Affect Learning
- Human Body Sensing and Systems

### **Instructions for Authors:**

Papers must correspond to the requirements detailed in the (Paper Submission) on the conference flyer <http://cig.iet.unipi.it/isda2010/flyer.pdf> and All accepted papers will be published in the proceedings of ISDA'10 that will be also included in the IEEEExplore digital library. Extended versions of selected papers will be considered for publication.

### **Registration Fees:**

All papers must be presented by one of the authors, who must pay the registration fees.

<http://cig.iet.unipi.it/isda2010/>

### **Paper Reviewing and Publication**

Submitted papers will be reviewed. Accepted papers, which should not exceed 6 pages (PDF) following the double column IEEE format. All accepted papers will be published in the proceedings of the ISDA'10. Selected papers will be published in special issues of a selection of International Journals (to be announced).

### **Tentative Dates of Submission and Acceptance**

- Deadline for paper submission June 26, 2010
- Notification of acceptance August 14, 2010
- Camera-ready manuscript submission September 15, 2010

### **International Program Committee**

- Manolya Kavakli – Sydney, Australia
- Tauseef Gulrez – Lahore, Pakistan
- Salma Farouque – Sydney, Australia
- Aboul Ella Hassanien - Cairo, Egypt
- Sajjad Mohsin – Islamabad, Pakistan
- Abdesselam Redouane – Dubai, UAE
- Nadeem Ghafour Chaudhry – Lahore, Pakistan
- Sarmad Hussain – Lahore, Pakistan
- Asif Ahmed – Lahore, Pakistan
- Alessandro Tognetti, Pisa, Italy
- Abdul Karim Shahid, Lahore, Pakistan
- Shyba Zaheer – Dubai, UAE
- Muhammad Tayyab Chaudhry – Lahore, Pakistan
- Ali Zia – Lahore, Pakistan