

[IROS'13 WS] Assistance and Service Robotics in a Human Environment - November 7, 2013, Tokyo, Japan.

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We apologize in advance if you receive multiple copies of this CFP.

Deadline: ~~August 12, 2013~~ **September 1, 2013 – (extended)**

Authors of selected papers will be invited to submit extended version of their papers to be published in a Special issue of the Elsevier journal **Robotics and Autonomous Systems journal – RAS**

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International Workshop on “**Assistance and Service Robotics in a Human Environment**”, in conjunction with the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS'2013) - <http://www.iros2013.org>

Workshop Website: www.lissi.fr/iros-ar

Scope:

Assistive Robotics covers currently a broad spectrum of research axis, from intelligent robots acting as a servant, secretary, or companion to intelligent robotic functions such as autonomous wheelchair navigation, embedded robotics, ambient intelligence, or intelligent spaces. The proposed workshop focuses on Robotics for people assistance with a particular focus on frail people. This major research issue will affect our lives in the near future. The purpose of this workshop is to gather researchers from various fields to discuss topics related to the challenging problems of assisting people in their everyday life. Topics related to social interaction, intelligent habitat, mobility assistance, healthcare and wellbeing will be covered. Fundamental and technological research particularly related to autonomous indoor vehicles, sensor and actuators networks, wearable and ubiquitous technologies, and human-robot interaction, will be presented. The objective of the workshop is to provide a review and challenges of the relevant applications in Assistance and Service Robotics in a Human Environment.

As continuity of the first edition held at IROS'12, this workshop will consist of four sessions with one keynote speaker for each:

- **Session1:** Behavioral modeling and Human/Robot Interaction Analysis
Keynote Speaker: Jesse HOEY, University of Waterloo, Canada

- **Session 2:** Navigation and manipulation in human populated environments
Keynote Speaker: Kai O. ARRAS, Albert-Ludwigs-Universität Freiburg, Germany

- **Session 3:** From sensors/actuators networks to cloud robotics
Keynote Speaker: Norihiro HAGITA, ATR Lab, Japan

- **Session 4:** Robotics for elderly and frail people
Keynote Speaker: Takashi YAMAMOTO, Toyota Motor Corporation, Japan

The solicited papers address particularly the following topics:

- Elderly care assistive robots
- Mobility aids for locomotion or navigation
- Automated manipulation systems
- Robot companion
- Social interaction
- Multi-modal human-machine interfaces for assistive robotics
- Interaction control of assistive robots
- Human Behavioral modeling, Human locomotion
- Activity monitoring systems, Activity recognition
- Rehabilitation system, transfert machine
- Wearable robots: Exoskeletons, actuated orthosis and prostheses
- Mechatronic design and control of human movements

- Sensor networks, Actuator networks, Domatics, Distributive robotics
- Multi-modal perception, new sensors
- Cognitive ubirobots
- Context and Intention awareness
- Ambient Intelligence and smart spaces
- Middleware and networked robots
- Cloud robotics
- Ethical issues for assistive robotics

Submissions:

Three to four submissions will be accepted per session for oral presentations based on their quality, originality, and relevance to the related session. A poster/demo session is also planned in the workshop program.

All accepted papers will be published on the workshop website. Authors of selected papers will be asked to submit extended versions of their papers for **a special issue in Elsevier Robotics and Autonomous Systems journal (RAS)**. Submitted papers should not be under consideration for publication anywhere else. Submission of papers and review process will be handled through EasyChair conference management system.

Important dates:

Papers submission deadline: ~~August 12, 2013~~ **September 1, 2013 – (extended)**

Acceptance Notification: ~~September 20, 2013~~ **October 4, 2013**

Camera Ready deadline: ~~October 4, 2013~~ **October 11, 2013**

Registration deadline: see [IROS web site](#)

Workshop date: November 7, 2013

Organizers:

David Daney, david.daney@inria.fr

Yacine Amirat, amirat@u-pec.fr

Anne Spalanzani, anne.spalanzani@inria.fr

Samer Mohammed, samer.mohammed@u-pec.fr

Abdelghani Chibani, chibani@u-pec.fr

Olivier Simonin, olivier.simonin@inria.fr