# SmartObjects: Third Workshop on Interacting with Smart Objects

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## ABSTRACT
The increasing number of smart objects in our everyday life shapes how we interact beyond the desktop. In this workshop we discuss how the interaction with these smart objects should be designed from various perspectives.

## Author Keywords
smart objects; HCI ; novel interaction; multimodal and adapter interaction; context-awareness; embodied interaction; tangible interaction; enabling techologies

## ACM Classification Keywords
H.5.2.1 User Interfaces: Miscellaneous

## INTERACTING WITH SMART OBJECTS
There is an undeniable ongoing trend to put computing capabilities into everyday objects, turning them into smart objects [5]. Well known examples range from smart kitchen appliances (smart coffee machines, smart knifes and cuttings boards) [2, 7, 1], smart (tangible) objects [4, 3], up to smart meeting rooms [6] and even urban infrastructures [8].

## WORKSHOP CONTENT
While other venues have focused on the many technical challenges of implementing smart objects, far less research has been done on how the intelligence situated in these smart objects can be applied to improve their interaction with the users. This research field poses unique challenges and opportunities for designing smart interaction. Smart objects typically have only very limited interaction capabilities. Yet, their behavior exhibits an amazing amount of intelligence.

More information about the previous workshops can be found on our website at **http://www.smart-objects.org/** .

## PARTICIPANTS AND WORKSHOP PUBLICITY
The workshop will have interdisciplinary appeal. We expect about 15-20 participants from the areas of IUI, HCI, UbiComp, IoT and related areas like psychology and product design. The program committee comprises researchers that are active in these research areas and who moreover plan to encourage researchers, also from their institutes, to submit to this workshop. Thereby, we ensure active participation in preparation and execution of the workshop. We will especially encourage young scientists and Ph.D. students to submit papers to explore their research topics with domain experts. The call for papers and participation will be distributed through well-established mailing lists and websites in various research communities, including IUI, CHI, UIST, UbiComp, ITS and TEI. We also plan to promote the workshop through our website and OSNs. The previous workshops were very successful and we expect word of mouth to attract others to our workshop. Up to now, we received interest in the workshop from more than ten internationally renowned researchers:

- **Shrivastava Abhishek** (IIT Bombay, India)
- **Lisa Anthony** (UMBC, USA)
- **Roman Bednarik** (University of Eastern Finland, Finland)
- **Boris Brandherm** (DFKI, Germany)
- **Ampara Cano** (University of Birmingham, United Kingdom)
- **Betsy van Dijk** (University Twente, Netherlands)
- **Carlos Duarte** (University of Lisbon, Portugal)
- **Jens Haupert** (DFKI, Germany)
- **Beibei Hu** (Ecole Central Paris, France)
- **Michael Schmitz** (Hochschule der bildenden Künste Saar, Germany)
- **Christian H. Schulz** (DFKI, Germany)
- **Markku Turunen** (TauiCHI, Finland)
- **Bo Zhou** (DFKI, Germany)

The results of the workshop will be made available on the workshops website as well as in a dedicated proceedings that will be accessible via our publication server.

**FORMAT**

We plan for a full-day workshop with submissions in the following three categories: (i) position papers and posters (2 pages) focusing on novel concepts or works in progress, (ii) demo submissions (2 pages) and (iii) full papers (4-6 pages) covering a finished piece of research.

Our goal is to attract high-quality submissions from several research disciplines to leverage the discussion and thus to advance the research of interacting with smart objects. To stimulate discussion between the workshop participants we plan a poster and demo session to spark further in- depth discussions on selected topics. We also plan to collect topics during the workshop whereby we want to focus on bringing together complementary topics, e.g. how ontologies can be used to enhance multimodal interaction. In the previous workshops this strategy lead to an ongoing discussion during the remainder of the conference. We also plan to summarize the outcome and publish it on the workshops website and our publication server at the TU Darmstadt to ensure that the submissions can be cited. This publication strategy will attract higher quality submissions, and increase the exposure of the workshop before and after the event.

**ORGANIZERS AND PROGRAM COMMITTEE**

Most of the organizers were already members of the first two workshop on interacting with smart objects, held in conjunction with IUI 2011 and 2013.

**Dirk Schnelle-Walka** leads the "Talk&Touch" group at the Telecooperation Lab at TU Darmstadt. His main research interest is on multimodal interaction in smart spaces.
**Jochen Huber** is an SUTD-MIT Postdoctoral Fellow at the MIT Media Lab, focusing oninteraction design for smart mobile projections and wearable technology. **Stefan Radomski** is a PhD candidate at the Telecooperation Lab at TU Darmstadt. His main research interest is about multimodal dialog managment in pervasive environments.
**Oliver Brdiczka** is the area manager of Contextual Intelligence at Palo Alto Research Center (PARC). His group focuses on constructing models for human activity and intent from various sensorsranging from PC desktop events to physical activity sensorsby employing machine learning methods.
**Kris Luyten** is associate professor at the Expertise Centre for Digital Media - iMinds, Hasselt University. His research focuses on engineering interactive systems, ubicomp, multitouch interfaces and HCI in general.
**Max Mühhlhäuser** is full professor and heads the Telecooperation Lab at TU Darmstadt. He has over 300 publications on ubicomp, HCI, IUI, e-learning and multimedia.

The preliminary list of program committee members is as follows:

- **Bo Begole** (Samsung, USA)
- **Marco Blumendorf** (DAI Laboratory, Germany)
- **Jingyuan Chen** (DFKI, Germany)
- **Aba-Sah Dadzie** (University of Birmingham, United Kingdom)
- **Fahim Kawsar** (Bell Labs, Belgium)
- **Alexander Kröner** (Georg Simon Ohm Hochschule, Germany)
- **Germán Montoro** (UAM, Spain)
- **Patrick Reignier** (Inria, France)
- **Boris de Ruyter** (Philips, Netherlands)
- **Geert Vanderhulst** (Alcatel-Lucent Bell Laboratories, Belgium)

PC members will help the organizers to publicize the event in more scientific communities and allow for a competent peer-review process.

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