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# SmartObjects: Fifth Workshop on Interacting with Smart Objects

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## Abstract

The increasing number of smart objects in our life radically changes how we interact with everyday objects. 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 technologies.

## ACM Classification Keywords

H.5.m [Information interfaces and presentation (e.g., HCI)]:  
Miscellaneous

## Interacting With Smart Objects

In *Hype Cycle for Emerging technologies*, the analysts envision that “smart machine technologies will be the most disruptive class of innovations over the next 10 years due to their computational power, scalability in analyzing large-scale data sets, and rapid advances in neural networks.” [11].

There is a trend on embedding computing capabilities into everyday objects, turning them into smart objects [4]. Examples range from tangible objects [3] to even large-scale urban infrastructures [8]. Other recent examples deal with smart sensory augmentation [9] and smart spaces [2].

The smart objects workshop will focus on how the intelligence situated in these smart objects can be used to provide more efficient and enjoyable interaction possibilities for the users. 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 an interdisciplinary appeal, addressing researchers as well as industry from areas of IUI, HCI, UbiComp and IoT. The program committee comprises researchers and practitioners active in these research areas. Thereby, we ensure active participation in preparation and execution of the workshop. We will especially encourage young scientists and Ph.D. students 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 in addition to promotions through our website and OSNs. We expect approximately 15 participants.

### Format

The workshop accepted submissions in 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 (4-8 pages) covering a finished piece of novel research.

Our goal is to attract high-quality submissions from several research disciplines to encourage and shape the discussion. Topics will be collected during the workshop whereby we want to focus on combining complementary topics. Therefore, the workshop chairs will take special care about those topics that receive most attraction during the discussion. This will serve as a starting point for an interdisciplinary discussion.

### Organizers and Program Committee

The organizers were already members of the previous workshops on interacting with smart objects, held in conjunction with IUI 2011 [1] and 2013 to 2015 [5, 6, 7].

**Dirk Schnelle-Walka** is a Functional Owner for Speech at the Connected Car Division of Harman International. His main research interest is on multimodal interaction in smart spaces and automotive.

**Florian Mueller** is a researcher at Telecooperation Lab in TU-Darmstadt, Germany. His research focuses on exploring novel ways of interaction with Head Mounted Displays and body-based interfaces in smart spaces.

**Tobias Grosse-Puppendahl** is a postdoctoral researcher at Microsoft Research, Cambridge, UK. He investigates new methods of sensing human interactions.

**Kris Luyten** is full professor at the Expertise Centre for Digital Media - Hasselt University. His research focuses on interactive systems, ubicomp, and multitouch interfaces.

**Oliver Brdiczka** is a Principal Data Scientist at Vectra Networks, Inc. where he leads the research on insider threat and anomaly detection. Before that, he was area manager of Contextual Intelligence at Palo Alto Research Center (PARC) focusing on constructing models for human activity from various sensor inputs using machine learning.

**Max Mühlhäuser** 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 program committee consists of: **Bo Begole** (Samsung, USA), **Marco Blumendorf** (smartB, Germany), **Jingyuan Chen** (TU Braunschweig, Germany), **Aba-Sah Dadzie** (Open University, United Kingdom), **Alexander Kröner** (Technische Hochschule Nürnberg, Germany), **Germán Montoro** (UAM, Spain), **Patrick Reignier** (Inria, France), **Boris de Ruyter** (Philips, Netherlands) **Geert Vanderhulst**

(Alcatel-Lucent Bell Laboratories, Belgium), **Raphael Wimmer** (Universität Regensburg, Germany) and **Massimo Zancanaro** (Fondazione Bruno Kessler, Italy). All submissions were peer-reviewed by at least two reviewers.

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