

Welcome to MRC 2011

Context has moved from the researchers' workbench to become a major selling point in applications, devices and smart environments. Indeed, context sensitive processing plays a key role in many modern IT applications, with context-awareness and context-based reasoning essential not only for mobile and ubiquitous computing, but also for a wide range of other areas such as collaborative software, web engineering, personal knowledge management, information sharing, health care workflow and patient control, adaptive games, and e-Learning solutions.

One of the challenges, from an intelligent systems perspective, is to integrate context with other types of knowledge for reasoning, decision-making, and adaptation to form a coherent and versatile architecture. There is a common understanding that achieving desired behaviour from intelligent systems will depend on the ability to represent and manipulate information about a rich range of contextual factors.

These factors may include not only physical characteristics of the task environment, but, possibly more importantly, many other aspects including cognitive factors such as the knowledge states (of both the application and user) or emotions, and social factors such as networks, relations, roles, and hierarchies. This representation and reasoning problem presents research challenges to which methodologies derived from areas such as artificial intelligence, knowledge management, human-computer interaction, semiotics and psychology can contribute solutions.

Despite the value of diverse approaches to context, integrating findings from the social sciences into the design of context-aware systems and building psychologically plausible knowledge models remains problematic. Furthermore, it is difficult to deal with uncertainty on different levels, from interpretation of uncertain sensor input data through to identification of contexts with fuzzy borders. Moreover, the ability of the system to use explanations, both as a part of its reasoning and as a means of communication with the user requires further consideration.

Background

MRC was first held at the German AI conference KI in 2004. Subsequent workshops have been held at IJCAI, AACL, CONTEXT, HCP and ECAI (2010).

These workshops have been successful in raising awareness about the importance of context as a major issue for future intelligent systems, especially for the use of mobile devices and current research on ubiquitous computing. At the same time, advances in methodologies for modelling and retrieving context have been made and MRC continues to provide a venue for the discussion and furthering of research into issues surrounding context.

Websites

More information and the paper submission system can be found on the workshop website at:

<http://events.idi.ntnu.no/mrc2011/>

The CONTEXT 2011 main conference website which has more information about the location and the registration process as well as other workshops:

<http://context-11.teco.edu/>

Join the mailing list for MRC by visiting:

<http://tech.groups.yahoo.com/group/mrc-discuss/>

Important Dates

Submissions	June 26
Notification	August 1
Camera-ready	August 16
CRC updates	August 23
MRC Workshop	September 26-27

MRC 2011



Seventh International Workshop
Modeling and Reasoning in Context
Held at CONTEXT 2011, Karlsruhe, Germany, September 26-30, 2011

Workshop Objectives

The Modelling and Reasoning in Context workshop series aims to bring together researchers and practitioners from different communities, both in industry and academia, to study, understand, and explore issues surrounding context.

By considering modelling and reasoning approaches for context-sensitive systems from a broad range of areas, the workshop will facilitate the sharing of problems, techniques, and solutions. The workshop covers different understandings of what context is, different approaches to modelling context, mechanisms and techniques for structured storage of contextual information, effective ways to retrieve it, and methods for enabling integration of context and application knowledge.

MRC provides a forum to exchange and discuss issues and ideas in a friendly, cooperative environment. The focus of this years workshop is on commercialising context and the impact of this on context models. Areas of interest include, but are not limited to:

Topics of Interest

Areas of interest include, but are not limited to:

- Generic and specific context models
- Explicit representations of context
- Representation of and reasoning with uncertainty
- Retrieval of context and context information
- Context-based retrieval and reasoning
- Socio-technical issues
- Integrating findings from the social sciences
- Context awareness and context-sensitivity
- Context awareness in applications
- Evaluation of context-aware applications
- Explanation and context
- Mobile context
- Issues of time, dynamics and information ageing
- Context focusing and context switching
- Context management

Submissions

Workshop submissions are electronic, in PDF format only, using the EasyChair submission system.

Paper length should not exceed 12 pages in the Springer LNCS format. Guidelines and templates are available on the web at <http://www.springer.de/comp/ncs/authors.html>.

Papers will be published in accompanying proceedings and online. Provided that the quantity and quality of submissions justifies a special journal issue on context aware systems, authors of accepted papers will be invited to submit extended versions for such a publication.

All workshop participants must register both for this workshop and the main conference. At least one author of each accepted paper must attend the workshop.

Agenda

The workshop will last two full days and will be organised into three main parts.

The first part will consist of short presentations of the accepted papers, grouped into sessions. Each session will be followed by a discussion period. The goal of these sessions is to introduce the work of all the participants.

The second part will consist of three panel discussion sessions, each dedicated to one specific issue. The suggested issues are “perception”, “context awareness”, and “context sensitivity”, but these are subject to change dependent on the interests of the attendees and the nature of submissions. The goal of these panels is to discuss the various approaches to each of these basic issues and to identify the critical problems in need of attention and the most promising research directions.

The workshop will be concluded with an open discussion summarising the most important lessons learned.

Chairs

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