Welcome to MRC 2008

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 digital assistants, information sharing, health care workflow and patient control, adaptive games, and e-Learning solutions.

From an intelligent systems perspective, one of the challenges is to integrate context with other types of knowledge as an additional major source for reasoning, decision-making, and adaptation and 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 many other aspects such as the knowledge states (of both the application and user), emotions, etc. This representation and reasoning problem present research challenges to which methodologies derived amongst others from artificial intelligence, knowledge management, human-computer interaction, and psychology can contribute solutions.

One specific problem is to deal with uncertainty on different levels, from interpretation of uncertain sensor input data up to identification of contexts with fuzzy borders. Another issue is how to integrate findings from the social sciences and psychology into the design of context aware systems and how to build psychologically plausible knowledge models. A third aspect is the ability of the system to use explanations, both as a part of its reasoning and as a means of communication with the user.

Background

Where traditional software applications 'know' by design in which situations they are to function, applications in pervasive computing and ambient intelligence do not necessarily have this luxury. Due to the very nature of the dynamism in the world with which these systems interact, they have to dynamically adapt their behaviour in run time. To do this, they must be able to somehow interpret the environment in which they are situated. This ability is often referred to as being context aware, or even situation aware. Being aware of the environment facilitates the ability to adapt behaviour by being context sensitive.

Websites

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

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http://events.idi.ntnu.no/mrc2008/
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The HCP 08 main conference website which has more information about the location and the registration process as well as other workshops:

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http://wiki.decis.nl/publichcp2008/
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Important Dates (Changed)

Submission of papers	March 28
Notification	April 14
Camera-ready copies	April 21
MRC Workshop	June 9-10

MRC 2008

Fifth International Workshop
Modeling and Reasoning in Context
HCP 08, Delft, The Netherlands, 9-12 June 2008

Workshop Objectives

The major goal of the workshop is to bring researchers from both industry and academia, and representatives from different communities together to study, understand, and explore issues of development and application of IT systems utilising context.

MRC aims to provide a forum for scientists and practitioners exploring modelling and reasoning issues and approaches for context sensitive systems, from a broad range of areas, to share their problems and techniques across different research and application areas. The workshop will examine mechanisms and techniques for structured storage of contextual information, effective ways to retrieve it, and methods for enabling integration of context and application knowledge.

The Modeling and Reasoning in Context workshop series, established in 2004, provides a forum for scientists and practitioners addressing the above issues to exchange and discuss issues and ideas in a friendly, cooperative environment.

Topics of Interest

Areas of interest include, but are not limited to:

- Generic and specific context models
- Explicit representations
- Representation of and reasoning with uncertainty
- Retrieval of context and context information
- Context-based retrieval and reasoning
- Socio-technical issues
- Context awareness and context-sensitivity
- Context awareness in applications
- Evaluation of context-aware applications
- Explanation and context
- Mobile context
- Information aging
- Context focusing and context switching
- Context management

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. Suggested topics are "key issues for modelling context", "key issues for reasoning in context", and "open topics". These are subject to change dependent on the interests of the attendees and the nature of submissions. The goal 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.

Submissions

Workshop submissions will be electronic, in PDF format only, using the EasyChair submission system. Paper submission will be opened in the middle of February 2008. 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/lncs/authors.html.

Papers will be published in accompanying proceedings. Provided that the quantity and quality of submissions justifies a book or 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 HCP 08 conference. At least one author of each accepted paper must attend the workshop.

Chairs

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