

## Welcome to HCCBR 2009

Human-centered computing focuses on methodologies and technologies to improve the interaction and performance of socio-technical systems. Intelligent systems are not longer considered to be black boxes that provide a full solution to a problem on their own, instead, problem solving is seen as an interactive process. Case-Based Reasoning appears to be a natural fit for such integrated human/computer systems.

A number of important questions are raised by Human-centered approaches. It is important to gain a better understanding of how each part of the combined system can help to extend the capabilities of the other. It is also of interest to examine how human knowledge modelling and construction can best be supported through technology.

One important research topic in human centred computing centres around the issue of communication and, in particular, explanations. Problem descriptions, as well as other input, can be incomplete and changing. As a consequence, there has to be communication between human and software agents, which requires mutual understanding which can be supported by explanations.

Further, context sensitive processing plays a key role in many modern IT applications. Context-awareness and context-based reasoning are 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, adaptive games, and e-Learning.

Starting from an intelligent systems perspective, a further challenge 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.

## Background

Many of the issues in human-centered computing are already being addressed in other disciplines, however, the question remains as to how findings from the social sciences and psychology may be integrated into the design of CBR systems. This integration ranges from psychologically plausible knowledge models to the delivery of an attractive end user experience.

This workshop aims to bring together researchers and practitioners exploring human aspects of the design, implementation, and use of intelligent systems, from a broad range of areas, to share their problems and methodologies across different research and application areas. The workshop will examine methods, mechanisms, and techniques to keep the human in the centre of attention during the whole lifecycle of an intelligent system, from initial problem description through to knowledge acquisition and modelling and on to interactive use and maintenance.

## Websites

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

<http://events.idi.ntnu.no/hccbr2009/>

The ICCBR 09 main conference website which has more information about the location and the registration process as well as other workshops:

<http://www.iccbr.org/iccbr09/>

## Important Dates

|                |          |
|----------------|----------|
| Submissions    | March 27 |
| Notification   | May 4    |
| Camera-ready   | May 25   |
| HCCBR Workshop | July 21  |

# HCCBR 2009



First International Workshop

## Human Centered Case-Based Reasoning

ICCBR 09, Seattle, USA, July 20-23, 2009

## Workshop Objectives

The major goal of the workshop is to bring researchers from both industry and academia, along with representatives from different communities together to study, understand, and explore issues of human centered design, development, and application of case-based reasoning systems as well as the utilisation of case-based reasoning in human-centered computing.

## Topics of Interest

Areas of interest include, but are not limited to:

- Knowledge construction and extension
- Explicit user representations
- Mixed-initiative issues
- Representation of and reasoning with uncertainty
- Psychological, linguistic, and sociological foundations
- Socio-technical analysis and design of CBR systems
- Social awareness
- Shared conceptualisation and sense-making
- Evaluation of user aspects of CBR systems
- Context awareness and context-sensitivity
- Explanation generation and usage
- Adaptation of results
- Visualisation of results and processes

## Submissions

Workshop submissions will be electronic, in PDF format only, using the EasyChair submission system through the workshop website. Paper length must not exceed 10 pages in the Springer LNCS format. Guidelines and templates are available at the Springer website <http://www.springer.de/comp/lncs/authors.html>.

Three members of the program committee will review each submission. A review form will direct submitters to evaluate submissions for appropriateness, technical strength, originality, presenta-

tion, and overall evaluation, as well as recording the reviewer's confidence in the topic.

Papers will be published in accompanying proceedings. Authors of the best accepted papers will be invited to submit extended versions for inclusion in a special journal issue on human centered computing, if warranted by quality and quantity of submissions.

All workshop participants must register both for this workshop and the main ICCBR 09 conference. At least one author of each accepted paper must attend the workshop.

## Agenda

The workshop will last one full day and will be organised into three main parts.

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

The second part will consist of two panel discussion sessions, each dedicated to one specific issue. The suggested issues are "Analysis and Design" and "Implementation and Use", 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, to identify the critical problems in need of attention and to identify the most promising future research directions.

The panels will be comprised of authors of accepted paper. Each panelist is given the task to describe his take on the issue in form of a short, 5 minute kick off talk. The panel will then engage in open discussion with the floor.

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

## Chairs

Jörg Cassens

*IMIS – Institute for Multimedia and Interactive Systems, University of Lübeck, Germany and*

*Department of Computer and Information Science  
Norwegian University of Science and Technology*

Anders Kofod-Petersen

*SINTEF ICT – Information and  
Communication Technology  
Trondheim, Norway*

Thomas R. Roth-Berghofer

*DFKI – German Research Center for  
Artificial Intelligence  
Kaiserslautern, Germany*

## Program Committee

- Klaus-Dieter Althoff, *University of Hildesheim, Germany*
- Ralph Bergmann, *University of Trier, Germany*
- Patrick Brézillon, *University of Paris, France*
- William E. Cheetham, *GE Research, USA*
- Lorcan Coyle, *University College Dublin, Ireland*
- Monica Divitini, *Norwegian University of Science and Technology, Norway*
- Michael Herczeg, *University of Lübeck, Germany*
- Martin Christof Kindsmüller, *University of Lübeck, Germany*
- Ramon López de Mántaras, *IIIA, CSIC, Spain*
- Marius Mikalsen, *Sintef, Norway*
- Markus Nick, *empolis GmbH, Germany*
- Sven Schwarz, *DFKI, Germany*
- Barry Smyth, *UCD, Ireland*
- Barbara Weber, *University of Innsbruck, Austria*
- Rebekah Wegener, *Macquarie University, Australia*
- Marielba Zacarias, *Algarve University, Portugal*