Call for papers

The Fourth International Workshop on Human Aspects in Ambient Intelligence
`http://www.few.vu.nl/~tbosse/HAI10/`

1. Background

Recent developments within Ambient Intelligence and Agent Technology provide new possibilities to contribute to personal care. For example, an intelligent ambient agent in our car may monitor us and warn us when we are falling asleep while driving or take measures when we are too drunk to drive. Such Ambient Intelligence applications can be based on the one hand on possibilities to acquire sensor information about humans and their functioning, but on the other hand, more knowledgeable applications crucially depend on the availability of adequate knowledge for analysis of such information about human functioning. If such knowledge is computationally available in intelligent devices in the environment, these devices can show more human-like understanding and contribute to personal care based on this understanding.

In recent years, scientific areas such as cognitive science, psychology, neuroscience and biomedical sciences have made substantial progress in providing an increased insight in the various physical and mental aspects of human functioning. If models of human processes and their management are represented in a formal and computational format, and incorporated in the human environment in agents that monitor the physical and mental state of the human, then such ambient agents are able to perform a more in-depth analysis of the human's functioning. An ambience is created that has a human-like understanding of humans, based on computationally formalised knowledge from the human-directed disciplines.

This workshop series addresses multidisciplinary aspects of Ambient Intelligence and Agent Systems with human-directed disciplines such as psychology, social science, neuroscience and biomedical sciences. The first workshop in the series (HAI'07) took place at the European Conference on Ambient Intelligence (AmI'07), in Darmstadt, Germany, November 2007. The second workshop (HAI'08) took place at the International Conference on Intelligent Agent Technology (IAT'08), in Sydney, Australia, December 2008, and the third workshop (HAI'09) took place at the International Conference on Intelligent Agent Technology (IAT'09), in Milan, Italy, September 2009. The aim of the workshops is to get researchers together from the human-directed disciplines or working on cross connections of Agent Systems and Ambient Intelligence with these disciplines. The focus is on the use of knowledge from these disciplines in ambient agent applications, in order to take care of and support in a knowledgeable manner humans in their daily living in medical, psychological and social respects.

2. Submission and proceedings

Papers can be submitted in the IEEE 2-column format (see the IEEE Computer Society Press Proceedings Author Guidelines). Expected length is 4 pages, with the possibility to buy one additional page. The workshop proceedings will be published by the IEEE Computer Society Press and will be available at the workshop. More submission details will follow at the workshop's website.

3. Important dates

Submission deadline: April 16, 2010
Notification: June 7, 2010
Camera ready papers: June 21, 2010
Workshop: August 31, 2010

4. Coordination committee

 – Juan Carlos Augusto (University of Ulster)
 – Tibor Bosse (Vrije Universiteit Amsterdam)
 – Cristiano Castelfranchi (CNR Rome)
 – Diane Cook (Washington State University)
 – Mark Neerincx (TNO Human Factors; TU Delft)
 – Fariba Sadri (Imperial College)