

# International Workshop on UI for Ambient Assisted Living (IUI4AAL 2008)

January 13, 2008  
Canary Islands, Spain

To be held in conjunction with the 2008 International Conference on Intelligent User Interfaces (IUI 2008)

## Introduction

Ambient Assisted Living (AAL) has emerged as one important application of Ambient Intelligence (AmI) due to the severe demographical and social changes facing industrialized countries. The vision of AAL is to provide technologies for supporting (elderly) people in their daily lives, allowing them to grow old in their own homes. AAL should therefore provide equipment and automated services that enable senior citizens to stay in their own homes longer, living independent and self-determined lives and thus avoiding the move to a nursing home.

A suitable AAL system should allow people to interact with it in a natural and personalized way, taking into consideration their specific interests, needs, and abilities as well as disabilities. They should also be enabled to perform their tasks, e.g., checking their vital data or controlling the home security system, by using any device available in the system (which may vary dynamically at runtime). A User Interface (UI) in AAL should therefore be multimodal, adaptive, and more importantly, usable. Hence, IUI can be appropriate for AAL. The challenging task of designing such UIs is the motivation for this workshop.

This workshop will thus offer the opportunity for researchers in the fields of AmI technology, cognitive psychology, (intelligent) user interface design, and context awareness to discuss the state of the art in each field with regard to the specificities of AAL. The main goal, however, should be the setup of an international research community for IUI4AAL, and the formulation of a corresponding research and cooperation agenda.

## Topics

Topics of interest include, but are not limited to:

- Acceptance studies for adaptive UI, for example on the way people perceive and accept adaptable UIs.
- Modality selection and combination approaches, for example determining suitable interaction modalities for the elderly and the criteria used to select and combine/integrate them.
- UI design patterns / guidelines / concepts for intelligent user interfaces.
- Approaches for intelligent user interfaces for life-long learning.
- Mobile User Interfaces to address AAL everywhere (indoor / outdoor).
- Approaches for determining the usability of integrated devices/systems, stating, for example, how the usability of the whole system depends on the subsystems/devices.

- Models and technologies for (dis)ability recognition, allowing, for instance, adapting the UI to the individual needs at runtime.

## Submissions

Prospective workshop participants are invited to submit a position paper or demonstration related to one or more of the main topics. A position paper does not necessarily need to include proven solutions. Position papers that raise relevant questions, or describe successful or unsuccessful practices, or describe experience, will all be welcome. Demonstrations should illustrate practical applications of systems that are in use, under development, or at a testing or prototype stage. The paper and demonstrator selection will be based upon the relevance of a paper to the main topics, as well as upon its quality and potential for generating relevant discussions. Position papers should not exceed six pages in length, while the body of demo papers should not exceed three pages. Submissions should be sent as PDF to the primary contact address (e-mail: [iui4aal@iese.fraunhofer.de](mailto:iui4aal@iese.fraunhofer.de)). Please use the ACM IUI paper format for submissions. Details on this format are available at <http://www.iuiconf.org/cfp.html>.

## Workshop Format

The aim of this one-day workshop is discussion, rather than presentation. To this end, short position or demonstrator papers are sought. Authors of accepted papers and demonstrations will present their work or positions in 15-minute presentations including time for questions.

The main part of the day will include discussing and defining a joint research agenda, setting up an international research community in the field of IUI4AAL, and coordinating how to proceed further.

There will also be an invited talk.

## Dissemination

After registration ends, all papers will be published on our website before the workshop, so that everybody can learn about the problems that are important for other participants. Accepted papers will furthermore be included in the electronic conference proceedings.

## Organizers

- Kizito Ssamula Mukasa, Fraunhofer IESE (Germany)
- Andreas Holzinger, Medical University Graz (Austria)
- Arthur Karshmer, University of San Francisco (USA)

Members of the program committee (to be extended):

- Andreas Holzinger, Medical University Graz (Austria)
- Reiner Wichert, Fraunhofer IGD (Germany)

- Arthur Karshmer, University of San Francisco (USA)
- Nikolas Georgantas, INRIA (France)
- Víctor M. López Jaquero, Universidad de Castilla-La Mancha (Spain)
- Boris de Ruyter, Philips (Netherlands)
- Martin Becker, Fraunhofer IESE (Germany)
- Marcus Trapp, University of Kaiserslautern (Germany)
- Sebastian Adam, Fraunhofer IESE (Germany)
- Kai Breiner, University of Kaiserslautern (Germany)

## Participation

Interested participants will have to register for the workshop. Though the submission of a paper might not be a requirement for this registration, those who submit a paper will be given first priority for attending, should the number of interested participants exceed the workshop capacity. We therefore encourage you to submit a paper. We would also like to encourage those who plan to attend this workshop to register early when registration opens, in order to help conference organizers with their planning as well as ensure that the workshop is not cancelled due to poor attendance. At least one author of an accepted paper has to attend the workshop.

## Important Dates

- Workshop paper submissions Sunday, 13 November, 2007, 5pm US EDT (2100 UTC)
- Workshop paper notification Saturday, 3 December, 2007
- Camera-ready paper due Sunday, 13 December, 2007, 5pm US EDT (2100 UTC)
- January 13, 2008: Workshop

Please send any questions or comments to [iui4aal@iese.fraunhofer.de](mailto:iui4aal@iese.fraunhofer.de)

Workshop website available: <http://www.iese.fraunhofer.de/download/iui4aal>