

Call for Participation AITAmI Challenge Intelligent Environments Competition

<http://aitami2014.mondragon.edu/>

Held in conjunction to
9th Workshop on Artificial Intelligence Techniques for Ambient Intelligence
(AITAmI 2014)
30th of June 2014 (Shanghai, China)

Co-located with 10th International Conference on Intelligent Environments (IE 2014) <http://www.intenv.org/>

The workshop series on Artificial Intelligence Techniques for Ambient Intelligence (AITAmI) provides the opportunity to understand latest developments and takes action to shape the future of the Intelligent Environments (IE) area by gathering researchers in a variety of AI subfields together with representatives of commercial interests to explore the technology and applications for ambient intelligence. Among the goals of the workshop, the definition of benchmarks for data, methods and competitions in IE research area would constitute a basic step in order to elicit “gold standards” for years to come. To further foster such goal, the AITAmI workshop proposes the first Intelligent Environments Challenge to encourage advances in the realization of Intelligent Environments looking for suitable solutions in specific real world application areas such as homes, offices, classrooms, public spaces, etc.

The first edition of the competition will propose two benchmark environments: a Smart Home and a Smart Classroom. In this regard, the AITAmI Challenge Steering Committee (in collaboration with the Intelligent Environments local organization) will set up two concrete reference test environments. In particular, a Smart Home environment will be setup by means of an easy-to-install tool that provides smart home capabilities: the CASAS architecture [1]. The challenge will be performed in the reference test environments proposing a set of scenarios in which users are supposed to perform tasks and each IE system participating in the challenge is requested to support the users while achieving them. Further details about the challenge may be found at the following web site <http://aitami2014.mondragon.edu>.

Anyone who is developing IEs for Smart Home and/or Smart Classroom is invited to participate. Each system will be assessed according to its ability to be:

- a) *intelligent* to recognize a situation where the system can help a user. The system is to monitor both user behaviors and environment status aiming to detect situations in which the system can provide a suitable support. Then, the system should understand whether its help might be needed.
- b) *sensible* to recognize when the system is allowed to offer help. In case there is an opportunity, the system is to decide if and how to intervene to help/support a user. Then, it should reason about when and how to interact with the user.
- c) *able* to deliver help according to the needs and preferences of those which is helping. The system is to support/facilitate users with proper actions. Then, it should effectively act in order to provide support.

A referee (a member of the Steering Committee) will observe the system behaviors during the contest and, then, will provide a score for each participating system. After their interaction

experience, also user(s) will provide a score for each system. Then, the system that will gather the best score will be nominated the winner of the competition. The results of the competition will be communicated during the AITAmI workshop. Only winners will be announced. All the other participants to the challenge will receive private feedback on the assessment.

In order to participate, an email should be sent to the Steering Committee to the address aitami.challenge@gmail.com to participate in the selection process for the AITAmI Challenge event. Each mail must contain a cover letter and a System description paper.

The cover letter should contain the following basic information: (a) IE System Name, (b) Country, Affiliation, a Contact Person Name, Contact information (E-mail), (c) Link to a system video (if present), (d) Link to a system web site (if present).

The System Description Paper must contain the following information: a general introduction about the presented system; Innovative technology and scientific contribution; Focus of research/research interests; Re-usability of the system for other research groups; Applicability of the system in the real world; Description of the hardware and software including a list of integrated externally available components (including commercial products, freeware, Open Source, etc.).

The length of the description paper is limited to 8 pages. Please use the same IOS format used in the AITAmI submissions (<http://www.iospress.nl/service/authors/latex-and-word-tools-for-book-authors/>). System Description Papers accepted to run in the competition will be included in the proceedings of the AITAmI workshop. A Thematic Issue with selected extended papers will be organized on the Journal of Ambient Intelligence and Smart Environments (JAISE - <http://www.jaise-journal.org/>).

Important dates:

Application deadline: 4th of April 2014

Notification of acceptance: TBA

Challenge event: 30th of June 2014

Challenge Technical Details:

Available at the following web site: <http://aitami2014.mondragon.edu/>

Steering Committee:

- Juan C. Augusto (Middlesex University, UK)
- Asier Aztiria (University of Mondragon, Spain)
- Tibor Bosse (VU University Amsterdam, Netherlands)
- Diane J. Cook (Washington State University, USA)
- Matjaz Gams (Jožef Stefan Institute, Slovenia)
- Andrea Orlandini (CNR - National Research Council, Italy)
- Carlos Ramos (Institute of Engineering of Porto, Portugal)

[1] Cook, D.J.; Crandall, A.S.; Thomas, B.L.; Krishnan, N.C., “CASAS: A Smart Home in a Box”, Computer, vol.46, no.7, pp.62, 69, July 2013.

(Open access link: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3886862/>)