

# UCAmI 2017 Special Session on “AmI Systems and Machine Learning”

## Description

Many AmI systems incorporate only low-level type intelligence. Very often, they are built in the absence of Artificial Intelligence (AI), while the emphasis is concentrated on their hardware component: with sensors, communication protocols, and, in general, distributed technology. As an example, many smart cities projects consist primarily in the distribution of thousands of sensors over the urban space. This limited amount of intelligence represents an inconvenient, at least in early stages of an AmI system, but it is rapidly being solved with emerging software Machine Learning (ML) applications that will result in a balanced combination of ubiquitous technologies and AI methodologies. For example, humans most often interact through written or spoken language. So, it's clear that they will also expect this kind of interaction with AmI environments.

Our proposed session hopes to bring together those investigators who are active in all fields of ML and AI research that can help AmI systems in a variety of activities such as interpreting the environment's state, modeling, simulating, and representing entities in the environment, representing the information and knowledge associated with the environment, planning decisions or actions, learning about the environment and associated aspects interacting with humans.

## Topics of interest

Particular topics that would be highly relevant to this special session include, but not limited,

- Learning from observation from humans
- Learning from natural instruction
- Learning from conversation with a human
- Experiential learning
- Learning from a human coach (reverse intelligent tutoring systems)
- Human Interaction with Ubiquitous and mobile System
- User modeling
- User Profiling
- Human-Ambient Interaction.
- User experience in Ambient Computing.
- Evaluation of interfaces in Ambient and Ubiquitous environments.

## Chairs

Chairpersons: José L. Montaña and Rafael Duque-Medina (Universidad de Cantabria)

Co-Chairpersons: Cristina Tirnauca, Sergio Salomón (Universidad de Cantabria, Axpe Consulting), Santiago Ontañón (University of Drexel), Avelino J. González (University Central Florida).

## Important dates

Submission deadline: May 1st, 2017  
Notification of acceptance: June 15th, 2017

Camera-ready version: July 10th, 2017  
Conference dates: November 7 to 10th, 2017

### **Paper submission**

Papers accepted in this Special Session will be published in Springer Lecture Notes in Computer Science as part of the UCAMI 2017 conference. Selected papers will be published in the following journals:

- Sensors Journal (IF 2015 = 2.033)
  - Journal of Ambient Intelligence & Humanized Computing (IF 2015 = 0.835)
- More journals to be announced shortly on <http://mamilab.esi.uclm.es/ucami2017>

UCAMI invites high quality contributions describing significant, original and unpublished results for submission in the following categories:

- Long papers (max. 12 pages)  
Intended to allow presentation of academic research results of high quality. Submissions must contain an original contribution and may not have already been published in another forum, nor be subject to review for other conferences or publications. Contributions should include unpublished results of research, case studies or experiences that provide new evidence about the research or application regarding to the main topics. Articles accepted in this category will be published in the proceedings of the event. Long papers must not exceed 12 pages (including figures and appendices).
- Short papers (max. 6 pages)  
Intended to allow presentation of ongoing studies with partial (however, significant) results. Submissions must contain an original contribution and may not have already been published in another forum, nor be subject to review for other conferences or publications. Articles accepted in this category will be published in the proceedings of the event. Short papers must not exceed 6 pages (including figures and appendices).  
Please ensure that your papers are formatted correctly and are within the specified page limits. Author information and templates are available in Information for LNCS Authors web. All papers should be written in English.

All submissions should be made through the EasyChair platform at <https://easychair.org/conferences/?conf=ucami2017>