

UCAmI 2017 Special Session on “Socio-Cognitive and Affective Computing”

Description

Social cognition focuses on how people process, store, and apply information about other people and social situations. It focuses on the role that cognitive processes play in our social interactions. On the other hand, the term cognitive computing is generally used to refer to new hardware and/or software that mimics the functioning of the human brain and helps to improve human decision-making. In this sense, it is a type of computing with the goal of discovering more accurate models of how the human brain/mind senses, reasons, and responds to stimuli.

Thus, *Socio-Cognitive Computing* should be understood as a set of theoretical interdisciplinary frameworks, methodologies, methods and hardware/software tools to model how the human brain mediates social interactions. In addition, *Affective Computing* is the study and development of systems and devices that can recognise, interpret, process, and simulate human affects, a fundamental aspect of socio-cognitive neuroscience. It is an interdisciplinary field spanning computer science, psychology, and cognitive science.

Moreover, *Physiological Computing* is a category of technology where electrophysiological data recorded directly from the human activity are used to interface with a computing device. This technology becomes even more relevant when computing can be integrated pervasively in everyday life environments. Thus, *Socio-Cognitive and Affective Computing* systems should be able to adapt their behaviour according to the *Physiological Computing* paradigm.

This special session on *Socio-Cognitive and Affective Computing* aims at integrating these various albeit complementary fields. Proposals of researchers who use signals from the brain and/or body to infer people intentions and psychological state in smart computing systems are welcome. Designing this kind of systems requires combining knowledge and methods of ubiquitous and pervasive computing, as well as physiological data measurement and processing, with those of socio-cognitive and affective computing. The special session will provide a meeting point for UCAmI 2017 attendees who have a current or developing interest in the topics. Papers with a special focus on multidisciplinary approaches and multimodality are especially welcome.

Topics of interest

Topics areas include (but are not restricted to):

- Socio-Cognitive Computing
- Affective Computing
- Sentient Computing
- Social Interaction
- Virtual and Augmented Reality
- Emotional Robots
- Ubiquitous and Pervasive Computing
- Mobile Computing
- Context Aware Computing
- Ambient Intelligence
- Ambient Assisted Living
- Physiological Computing

- Brain-Computer Interfaces
- Biofeedback and Neurofeedback Systems
- Eye Movements, Gaze Monitoring and Eye Blink Activity
- Wearable Systems
- Applications and Case Studies

Chairs

Chairperson: Antonio Fernández-Caballero (antonio.fdez@uclm.es)
 Co-Chairpersons: Pascual González (pascual.gonzalez@uclm.es)
 José Manuel Pastor (josemanuel.pastor@uclm.es)
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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>