



By Taken by Jesse Varner. Modified by AzaToth.

4th International Workshop on Multimodal Analyses enabling Artificial Agents in Human-Machine Interaction MA3HMI 2018

Organisers

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Venue

Boulder, USA
(in conjunction with the
ICMI 2018)

Important Dates

Submission Deadline:
July 30th, 2018

Notification of Acceptance:
September 10th, 2018

Camera-ready Deadline:
September 15th, 2018

Workshop Date:
October 16th, 2018

Scope

One of the aims in building multimodal user interfaces and combining them with technical devices is to make the interaction between user and system as natural as possible. The most natural form of interaction may be how we interact with other humans. Although technology is still far from human-like, and systems can reflect a wide range of technical solutions. They are often represented as artificial agents to facilitate smooth inter-actions. While the analysis of human-human communication has resulted in many insights.

Transferring these to human-machine interactions remains challenging especially if multiple possible interlocutors are present in a certain area. This situation requires that multimodal inputs from the main speaker (e.g., speech, gaze, facial expressions) as well as possible co-speaker are recorded and interpreted. This interpretation has to occur at both the semantic and affective levels, including aspects such as the personality, mood, or intentions of the user, anticipating the counterpart. These processes have to be performed in real-time in order for the system to respond without delays, in a natural environment.

The MA3HMI workshop aims at bringing together researchers working on the analysis of multimodal data as a means to develop technical devices that can interact with humans. In particular, artificial agents can be regarded in their broadest sense, including virtual chat agents, empathic speech interfaces and life-style coaches on a smart-phone. More general, multimodal analyses support any technical system being located in the research area of human-machine interaction. For the 2018 edition, we focus on the environment and situation an interaction is situated in extending the investigations on real-time aspects of human-machine interaction. We address the synergy of situation, context, and interaction history in the development and evaluation of multimodal, real-time systems.

We solicit papers that concern the different perspectives of such human-machine interaction. Tools and systems that address real-time conversations with artificial agents and technical systems are also within the scope of the workshop.

Topics (but not limited to, further details on website):

a) Multimodal Environment Analyses

- Multimodal understanding of situation and environment of natural interactions
- Annotation paradigms for user analyses in natural interactions
- Novel strategies of human-machine interaction in terms of situation and environment

b) Multimodal User Analyses

- Multimodal understanding of user behavior and affective state
- Dialogue management using multimodal output
- Multimodal understanding of multiple users behavior and affective
- Annotation paradigms for user analyses in natural interactions
- Novel strategies of human-machine interactions

c) Applications, Tools, and Systems

- Novel application domains and embodied interaction
- Prototype development and uptake of technology
- User studies with (partial) functional systems
- Tools for the recording, annotation and analysis of conversations

Submission

Prospective authors are invited to submit full papers (8 pages) and short papers (5 pages) in ACM format as specified by ICMI 2018. Accepted papers will be published as post-proceedings in the ACM Digital Library. All submissions should be anonymous.

For further information refer to <http://ma3hmi.cogsy.de>

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