International Workshop on
Emotion Representations and Modelling
for Companion Technologies

ERM4CT 2016

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Important Dates

Submission deadline:
August 28, 2016

Notification of acceptance:
October 02, 2016

Camera-ready deadline:
October 09 2016

Workshop date:
November 16, 2016

Scope

The major goal in human computer interaction (HCI) research and applications is to improve the interaction between humans and computers. As interaction is often very specific for an individual and generally of multi-modal nature, the current trend of multi-modal user-adaptable HCI systems arose over the past years. These systems are designed as companions capable of assisting their users based on the users' needs, preferences, personality and affective state. Companion systems are dependent on reliable emotion recognition methods in order to provide natural, user-centred interactions.

In order to study natural, user-centred interactions, to develop user-centred emotion representations and to model adequate affective system behaviour, appropriate multi-modal data comprising not just audio and video material must be available. Following its ancestor, the ERM4HCI workshop series, the ERM4CT workshop focuses on emotion representations, signal characteristics used to describe and identify emotions as well as their influence on personality and user state models to be incorporated in companion systems. The ERM4CT 2016 workshop allows the in-depth analysis of technical prerequisites, modelling aspects and applications linked to the development of affective, multi-modal, user-adapted HCI systems.

Researchers are encouraged to discuss possible interdependencies of characteristics on an intra- and inter-modality level. Such interdependencies may occur if two characteristics are influenced by the same physiological change in the observed user and are especially relevant to multi-modal affective systems. Theoretical papers contributing to the understanding of emotions in order to aid in the technical modelling of emotions for companion systems are welcomed. The workshop supports discussions on the necessary prerequisites for consistent emotion representations in multi-modal companion systems.

The ERM4CT 2016 workshop is the second joint-workshop aiming at highlighting the specific issues associated with the multi-modal emotion representations needed for companion technologies. As a further highlight, this year's workshop offers a "hands-on" session, where a dataset comprised of 10 different modalities will be made available prior to the workshop to the participants. The participants are encouraged to analyse the dataset in terms of emotion recognition, interaction studies, conversational analyses, etc. The dataset provided is a snapshot of a new multi-modal dataset (Tornow, et al., 2016). Researchers are invited to address a specific research question using this dataset and submit their results to the workshop. During the workshop, all results will be presented and discussed in a subsequent panel session.

A joint journal paper will be submitted as post-conference article with all participants and their contributions of the hands-on session.

For further information refer to www.erm4ct.cogsy.de

Topics are, but not limited to:

1. Hands-on Dataset evaluations

- Single-modal, two-modal analyses
- Multi-modal analyses
- Emotion detection using bio-physiology
- Subject behaviour description with respect to abnormalities
- Influence of personality traits on subject behaviour
- Conversation and interaction analyses
- Multimodal Feedback analyses

2. Emotion Modelling and Representations

- Multi-modal aspects of emotion recognition, representation and identification
- Physiological background of emotion representations
- Personality models and the incorporation of emotion models
- Interdependencies of features used for emotion recognition
- Relationship between general user states and emotion recognition features

3. Companion Technologies

- Timing in multi-modal interactive scenarios
- Prerequisites for the consistent modelling of emotions in companion systems
- User state specific emotion and disposition modelling
- System response pattern for companion technologies
- System response perceptions within companions
- Companion technology application scenario
- Techniques for adapted system reactions

Submission

Prospective authors are invited to submit full papers (8 pages). All submissions should be anonymous and according to the specifications of the ICMI 2016 (http://icmi.acm.org/2016/index.php?id=authors). The reviewing will be double blind, so submissions should be anonymous: do not include the authors' names, affiliations or any clearly identifiable information in the paper.

It is appropriate to cite past work of the authors if these citations are treated like any other (e.g., "Smith [5] approached this problem by....") - omit references only if it would be obviously identifying the authors.