



CALL FOR PAPERS

Special Issue on Physiology in Personalized Systems User Modeling and User-Adapted Interaction: The Journal of Personalization Research (UMUAI)

<http://www.umuai.org/>

Submission deadline for extended abstracts: **20. September 2015**

Submission deadline for full papers (for accepted abstracts): **15. December 2015**

Special Issue web site:

http://www.cp.jku.at/people/tkalcic/umuai_physiology.html



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SCOPE OF THE SPECIAL ISSUE

Personalization techniques, in general, build upon user models. These models are application-specific and account both for long-term user characteristics (traits, such as preferences, attitudes, personality, which are stable over longer time periods) and short-term user characteristics (e.g. affective/cognitive states, which change more rapidly). Long-term characteristics can be acquired with existing acquisition techniques using either one-time intrusive questionnaires or slowly and unobtrusively via various modalities, e.g. ratings, browsing history, social media streams. However, these approaches may not be as effective for measuring short-term characteristics, which change rapidly. Personalisation in response to short-term states often depends on implicit measures of behaviour and psychophysiology. Hence, a lot of research has been done to develop quick, responsive and unobtrusive techniques to acquire the short-term user characteristics.

The measurement of peripheral physiology and brain activity of users can provide insight into short-term, dynamic changes in user behaviour. Physiological measurement can be **continuously available**, **quantitative** and **relatively unobtrusive** (given recent advances in sensor technologies). Therefore, personalized systems can accommodate a dynamic representation of the user that incorporates adaptive changes in cognitive and affective states. In addition, if these physiological data are collected over a long period of time, long-term user characteristics (e.g. personality traits) can be derived without any need to consult directly with the user. Finally, physiological measures can be combined with behavioural data to provide a more detailed multimodal model of the user.

TOPICS

The topics of interest for the special issue include (but are not limited to):

- Physiological user models for personalized systems
- Physiology acquisition for user modeling in personalized gaming and serious gaming, personalized education, multimedia consumption, personalized medical applications, other applications/domains
- Datasets with physiology information in personalized systems/human-computer interaction
- Privacy issues
- Evaluation of physiology-based personalized services;
- Novel applications considering physiology including games, student modeling in intelligent tutoring systems, multimedia content consumption/creation, social media, recommender systems, personalized medical applications, pervasive applications

PAPER SUBMISSION & REVIEW PROCESS

The prospective authors must first submit an extended abstract of no more than 4 single-spaced pages, formatted with 12-pt font and 1-inch margins, through easychair: <https://easychair.org/conferences/?conf=umuai-physiology-201> by **20. September 2015**. This abstract should be preceded by a completed UMUAI self-assessment form that can be found at <http://www.umuai.org/self-assessment.html>, preferably both in a single PDF file. All submitted abstracts will receive an initial screening by the editors of the special issue. The authors of the abstracts will be notified about the results of the initial screening by **30. September 2015**. Abstracts that do not pass this initial screening (i.e., the abstracts that are deemed not to have a reasonable chance of acceptance) will not be considered further. Authors of abstracts that pass the initial screening will be invited to submit the full version of the paper by **15. December 2015**. The formatting guidelines and submission instructions for full papers can be found at http://www.umuai.org/paper_submission.html. Papers should not exceed 40 pages in journal format. Each paper submission should note that it is intended for the Special Issue on Physiology in Personalized Systems and be submitted via email to the address mentioned in the submission instructions given above (submission@umuai.org).

The further tentative timeline for the special issue is as follows:

- March 30, 2015 First round review notifications
- June 15, 2016 Revised papers due
- August 15, 2016 Final notifications due