



The Sixth International Workshop on Symbiotic Interaction
Eindhoven, The Netherlands
December 18-19, 2017

Second call for papers

Submission Deadline (all papers): September 30, 2017
Submission Deadline (DC and demo proposals): October 31, 2017

Website: www.symbiotic-interaction.org/symbiotic2017

The International Workshop on Symbiotic Interaction collects research and discussion on the changing nature of the relationship between computer systems and humans. Traditionally there has been a clear boundary between the user and the computing system, computers served user's goals as tools or services, and the interaction was mostly governed by explicit input from users.

However, solutions are increasingly adopted to implicitly (even subliminally) detect the user's goals, preferences or/and psycho-physiological states and to modify computer output accordingly. This represents a step forward in the continuous attempt to facilitate users in their activity, but also sets new challenges, including ethics ones.

This workshop is a venue to present novel work in adaptive systems, physiological computing, Brain-Computer Interfaces (BCIs), collective systems, cyber-physical systems instantiating such kind of relationship, which - provokingly - we called 'symbiotic'. Research on non-human animal behavior would be off-topic in this workshop.

This year the International Workshop on Symbiotic Interaction will be held in Eindhoven, The Netherlands, after successful editions in Padua, Helsinki, London and Berlin. It will take place on the Monday and Tuesday December 18 and 19, 2017 and will be hosted by Eindhoven

University of Technology (TU/e).

Keynote speakers are **Elisabeth Andre** (Augsburg University, Germany), **Anne-Marie Brouwer** (TNO Human factors, The Netherlands) and **Pim Haselager** (Donders Institute for Brain, Cognition and Behaviour, Radboud University Nijmegen).

Submissions of any category are welcome on the following topics (and more):

REVIEWS

- Theories on symbiotic systems and interaction
- Design and evaluation approaches: relevant dimensions for designing usable and satisfactory symbiotic system
- Methods to decode psycho-physiological state from neural signals
- Data analysis techniques for revealing implicit information for brain signals
- Persuasion with symbiotic technology and implicit data

USERS' PERSPECTIVE

- Acceptance, user experience and accessibility of symbiotic systems
- User's perception of adaptive systems and intelligent interfaces: trust, blame, performance, facilitation
- Ethical issues and responsibilities (control, profiling, agency, ...)
- Security and data protection in symbiotic systems
- Transparent visualisation and feedback
- Attributions, expectations and practices in interacting with symbiotic and automatic devices
- User-based validations of symbiotic systems accuracy and effectiveness

NEW, VALIDATED ALGORITHMS

- Context-aware and user-aware adaptive solutions
- Detecting and interpreting user's affective states
- Modelling/profiling individual and collective states and preferences from usage behaviour
- Prediction of users' goals and information relevance
- Machine learning for symbiotic engines
- Physiological computing and cyber-physical systems
- Multimodal input for symbiotic systems

APPLICATIONS USING IMPLICIT AND BEHAVIORAL DATA

- Recommender systems, advertising and persuasion
- (Neuro)adaptive devices and automatic systems in specific domains (cars, displays, security, manufacturing,...)
- Intelligent assistants
- Human resources tools

- Assistive technologies
- EEG-based communication tools

=====PUBLICATIONS=====

The proceedings will be published by **Springer**, in the Lecture Notes on Computer Science series (LNCS).

=====AWARDS=====

A **best paper award** will be granted to one of the works presented at the conference. Works presented at the Doctoral Consortium will be considered for the **DC award**.

=====IMPORTANT DATES =====

Submission Deadline (all papers):	September 30, 2017
Submission Deadline (DC and demo proposals):	October 31, 2017
Decision Notification:	October 30, 2017
Submission of final papers:	November 30, 2017

=====TYPES OF CONTRIBUTIONS=====

LONG AND SHORT PAPERS

Contributions can be long (10-12 pages) or short papers (4-6 pages). The program committee will decide, based on reviews, whether to consider the submitted papers for oral presentation or for poster presentation. PhD students participating in the DC can also submit their work as a long/short paper, if properly extended.

All papers must report original, innovative, and forward-looking research that has neither been published nor submitted for publication elsewhere. All submission files must be anonymized in order to allow a double blind review process. Authors' info and acknowledgments will be inserted later, in the camera ready versions of accepted papers.

DOCTORAL CONSORTIUM

The Doctoral Consortium (DC) is a special session of the conference where a limited number of PhD students in the early phases of their research can receive advice in a constructive and informal atmosphere. Students present and discuss their research with other PhD students and a panel of established researchers. Students interested in participating in the Doctoral Consortium proposers should submit a 2-page abstract (plus references) in Springer LNCS format but without the typical sections of a paper submission; it is important to describe the research questions, the project position with respect to the state of the art, the research plans and methodology, as well as the ideas and results achieved so far. Accepted abstracts will be included in the adjunct conference proceedings.

All submissions need to follow the Springer formatting guidelines.

- Latex templates can be found here:

<ftp://ftp.springernature.com/cs-proceeding/llnacs/llnacs2e.zip>

- MS Word templates can be found here:

<ftp://ftp.springernature.com/cs-proceeding/llnacs/word/splnproc1703.zip>

- MS Word 2003 templates can be found here:

<http://resource-cms.springer.com/springer-cms/rest/v1/content/7117506/data/v1/Microsoft+Word+2003+Proceedings+Templates>

- Guidelines for publication ethics can be found here:

<https://www.springer.com/gp/authors-editors/journalauthor/journal-author-helpdesk/before-you-start/before-you-start/1330#c14214>.

=====SUBMISSION METHOD=====

Long and short papers are to be submitted through EasyChair via the following URL:
<https://easychair.org/conferences/?conf=symbiotic2017>

DC and demo proposals are to be submitted by sending them to:
Symbiotic2017@gmail.com

=====REGISTRATION=====

Registration: Through the conference website. Registration of one of the authors by November 15, 2017 is required in order for the paper to be included in the proceedings. All information on registration (including conference fees) is described on the conference website.

=====CONTACT=====

For questions about the conference, please contact: Jaap Ham -- j.r.c.ham@tue.nl or symbiotic2017@gmail.com

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