ISACS 2015

8th International Symposium on Attention in Cognitive Systems

In conjunction with IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2015)

Hamburg, Germany
October 2, 2015

Call for Papers - Dates

Full Paper Submission: *September 4, 2015*
Acceptance Notification: *September 10, 2015*
Final Paper Submission: *September 18, 2015*
Workshop Day: *October 2, 2015*

isacs2015.joanneum.at

The Symposium

The capacity to attend to the relevant has been part of Artificial Intelligence (AI) systems since the early days of the discipline. Currently, with respect to the design and computational modelling of artificial cognitive systems, selective attention has again become a focus of research, and one sees it important for the organization of behaviours, for control and interfacing between sensory and cognitive information processing, and for the understanding of individual and social cognition in humanoid artefacts. One may consider selective attention as part of the core of artificial cognitive systems. Within the context of the engineering domain, the development of enabling technologies such as autonomous robotic systems, miniaturized mobile - even wearable - sensors, and ambient intelligence systems involves the real-time analysis of enormous quantities of data. These data have to be processed in an intelligent way to provide "on time delivery" of the required relevant information. Knowledge has to be applied about what needs to be attended to, and when, and what to do in a meaningful sequence, in correspondence with visual feedback.

Suggested symposium topics include, but are not limited to:

- Attention in robotic systems
- Attention in human-robot interaction
- Computational architectures for attention
- Modelling of visual and auditory attention
- Biologically inspired attention
- Aspects of attention in cognitive psychology, neuroscience, and philosophy
- Attention and control of machine vision processes
- Performance measures for attention enabled artificial systems
- Applications of computational models of attention

Objectives

The goal of this symposium is to provide an international forum to examine computational methods of attention in cognitive systems from an **interdisciplinary viewpoint**, with the focus on computer vision in relation to robotics, psychology, and neuroscience.

Organisers

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Program Committee

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Jochen Triesch *Frankfurt IAS, Germany*
Hezy Yeshurun *University of Tel Aviv, Israel*

Authors

4 pages IEEE style blind paper submission is handled via easychair. Presentation slides will be published on the ISACS website after the symposium. Authors will also have the option of including their paper in the electronic symposium proceedings in arxiv.org (with DOI) until December 2015.

Invited Talks

Christian Balkenius *Lund University, Sweden*
Ali Borji *University of Wisconsin, WI, USA*
Ralf Engbert *University of Potsdam, Germany*
Fiora Pirri *University of Rome, La Sapienza, Italy*
Jochen Triesch *Frankfurt IAS, Germany*
Michael Zillich *Vienna Univ. of Technology, Austria*