



INTERNATIONAL

INVITED SESSION SUMMARY

Title of Session:

Intelligent Methods for Eye Movement Data Processing and Analysis

Name, Title and Affiliation of Chair:

Dr Katarzyna Harezlak, Silesian University of Technology, Poland
Dr Pawel Kasproski, Silesian University of Technology, Poland

Details of Session (including aim and scope):

Information hidden in the eye movement signal can be a valuable source of knowledge regarding people's wishes, intentions or skills. Due to the dynamic development of high quality cameras and algorithms processing eye movement data, growing interest in using it in various fields, such as medicine, sociology, cognitive studies or advertisements has been observed. Recently, a lot of attention has been paid to the application of eye movement for biometric identification. However, making the eye movement signal a valuable source of information requires the usage of some advanced methods for data analysis and processing. This session is meant to be a discussion panel for all researchers of these aspects.

The aim of the workshop is to summarize the current state of the art in eye movement data analysis and enable prospective researchers to present their new ideas concerning this subject.

The scope of the workshop includes but is not limited to:

- Collecting eye movement data
- Accuracy and precision of data
- Calibration of eye movement data signal
- Events detection (fixations and saccades)
- Gaze-based user interfaces
- Eye movement modelling
- Data mining of eye movement signal
- Eye movement based identification
- Improving man machine interactions for people with disabilities
- Eye movement applications in testing interface usability
- Eye movement in security systems
- Eye movement in solving problems
- Usage of eye movement signal in cognitive processes
- Methods improving quality of eye movement signal
- Recognition of people's intentions basing on their eye movement

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

Katarzyna Hareźlak, Pawel Kasproski, Institute of Informatics, Silesian University of Technology, Poland

Website URL of Call for Papers (if any):

<http://www.emdpa.pl>

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