Symposium

Eye tracking as a scientific key to the future of usability research
at the
14th European Conference on Eye Movements (ECEM)
19-23 August 2007 in Potsdam, Germany

Abstract

Recent achievements in eye tracking technology allow for measurement in more natural environments and during less artificial tasks. With these advances, eye movement analysis becomes more and more attractive for usability research. There is a long history of eye movement studies aiming to understand visual perception, which have produced a large body of empirical evidence. Combining this knowledge with recent improvements in technology will provide the means to investigate interfaces between humans and technical systems. Challenges in the future will be the design of cognitive technical systems based on attention sensitive interfaces. Presentations of the symposium provide examples of innovative eye-tracking methods and applications and will also show suggestions of the integration of this technology with other methods and modalities.

Programme

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On eye tracking and usability research: Introduction to the symposium

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Covert detection of colorblindness using eye movements in support of enhanced human computer interaction

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Learning when to grasp

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New usability metrics for the evaluation of eye typing systems

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Eye tracking analysis in reading on-line newspaper

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Saccade control in children with Dyslexia, Dyscalculia, and ADHD: Development, deficits, training, and transfer to reading

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How users adapt to new web applications: Evidence from eye-tracking studies

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"Stop adding nonsense!" Google's advertisement strategy on the eye-tracking test-bench

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Gaze communication: The case of object selection

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Effect of gaze path playback on retrospective think-aloud in usability tests

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From gaze mouse to attentive interfaces: Three selected problems

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Final discussion and future work