



17th EUROPEAN CONFERENCE ON EYE MOVEMENTS

11-16 August 2013, Lund, Sweden

In Association with:



**Eye Movement
Researchers
Association**



ECEM 2013 will include a **student competition** sponsored by SensoMotoric Instruments ([SMI](#)) to develop software for eye tracking and eye movements research. Applications may be for entertainment, communication, faster or better human computer interaction, analysis and visualisation of eye movements, event detection or any novel application that uses eye movement data as an input. The **prize** for this competition is an [SMI RED-m eye tracker](#), a remote binocular eye tracker with a sampling rate of 120Hz. SMI will support the first 50 competitors to register before the end of February 2013 with a loan of a RED-m system, completely free of charge, to develop their software, from March until the competition closes.



You can register for the competition here:
<<http://ecem2013.eye-movements.org/>>

Dates

- Launch of the competition February 2013
- Deadline for the submissions: May 31st
- Notification on results: July 1st 2013

Rules of the competition:

1. Any student (undergraduate or graduate – submit supervisor confirmation) may enter the competition.
2. Participants may be individuals or a group, but all must be undergraduate or graduate students.
3. Multiple submissions from the same participant(s) are allowed.
4. The application must take advantage of eye movement data on some level.
5. The submission can be almost anything, for example, new software to visualise or analyse eye movements, a new faster gaze communication method, a novel gaze-controlled way to control the environment or support mobility, a totally new concept (demonstrated with a proof-of-concept application)... use your imagination!
6. Submissions cannot consist of a new eye tracker built by the participant – the competition focuses on new applications of eye tracking.
7. **Participants are allowed to freely choose their implementation tools and eye tracking devices.** The submission will be evaluated on the system it was developed on, pending availability. SMI have offered loans of systems up to ECEM 2013 for those who may not have a system available. However, the four finalists who will exhibit at ECEM 2013 will be expected to make their software portable to a suitable SMI system for the purposes of demonstration. SMI will support finalists in porting their software for these purposes.
8. Only complete submissions will be reviewed. Please see "Submissions" for more information.
9. The recommended language of the submission is English. Other languages used in the interface of the application are allowed but the report must be in English.
10. The resulting software will become part of the EMRA shared tools in the case of analysis or visualisation of eye data (<http://www.eye-movements.org/>), or part of the COGAIN software in the case of gaze control or communication. All software must be ready for open source distribution, including full reference to the authors and documentation.

Submission format

The submission should include:

- Title of the application
- An installation packet, with all required parts. Note that the submission cannot be only a description of an idea, algorithm, or concept - there must be some clear way to test it with an eye tracking device, therefore, an executable application that demonstrates the idea is required.
- Installation / setup instructions
- A brief documentation explaining the idea of the application, brief notes on its implementation and an explanation how it works. Report of an initial user/usability test is highly desirable (recommended length of documentation is 5 pages).
- Contact information: name(s), (team name), organisation, email address, mail address, phone/fax.
- Supplementary materials such as videos or still images are allowed but not required.

Please send the complete submission by email to: competition@ecem2013.eyemovements.org

Review criteria

A jury formed by academic and industrial members of EMRA and COGAIN will review the submissions. Judging will be based on the following criteria:

- Originality, innovation and usefulness
- How well the application takes advantage of eye movement data
- How well user requirements are taken into account
- Quality of the submission, including the software and the documentation
- Portability of the software across eye tracking systems

This will result in four finalists. The finalists will be judged by jury and by delegates attending ECEM 2013.

Prize

The four finalists will present their software at ECEM 2013, Lund, Sweden, and the winner will receive the SMI RED-m eyetracking system.

Implementation tools and eye trackers

The software may be developed on any eye tracker (SMI systems are available for loan), but the members of the jury must be able to test the application with an available eye-tracking device. Therefore, it would be useful if the student(s) could email the organisers well before the deadline so that the committee can organise the review.

Contact

Please send any queries to competition@ecem2013.eye-movements.org