OpenSesame opens the door to open-source and user-friendly eye-tracking research

Create eye-tracking experiments without coding, using an experiment builder

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demo

the software described here is now being demonstrated!

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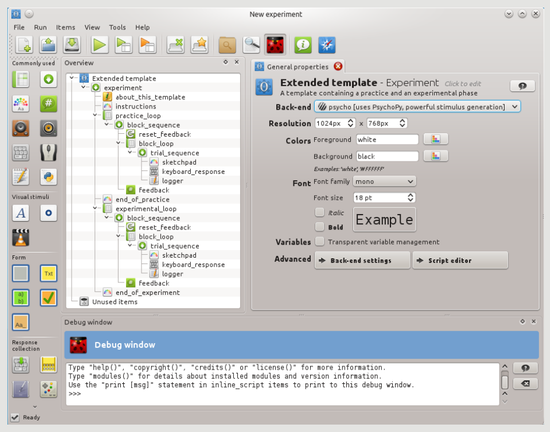
SR Research EyeLink

cnrs

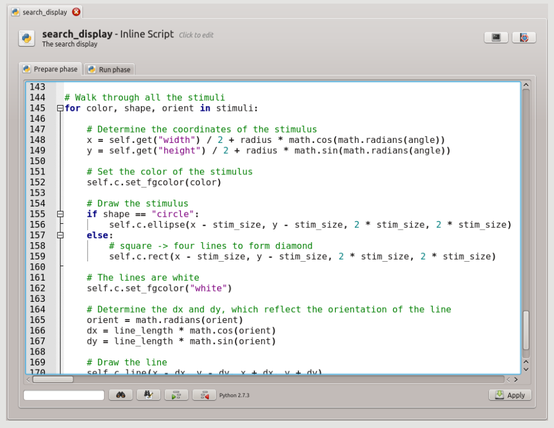
OpenSesame[1]

graphical user interface



drag 'n drop to create experiments

Python inline scripting



full Python environment inside

cross-platform

Linux

OS X

Windows

Android

powerful stimulus generators

expyriment

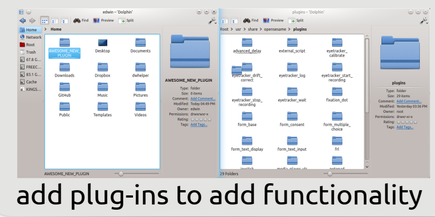
PyGame

PsychoPy[2]

open-source

GPL Free Software

modular

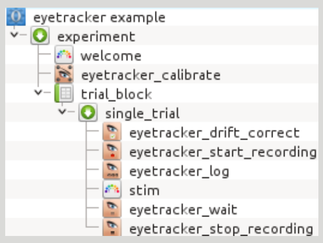


add plug-ins to add functionality

cross-platform eye tracking

wide range of eye trackers supported

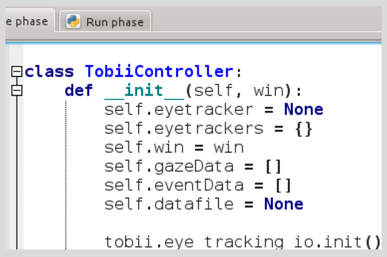
drag 'n drop
create complete experiments via the GUI for iViewX and EyeLink systems



SMI SensoMotoric Instruments

SR Research EyeLink

inline scripting
create experiments using inline scripting for every system for which Python bindings are available

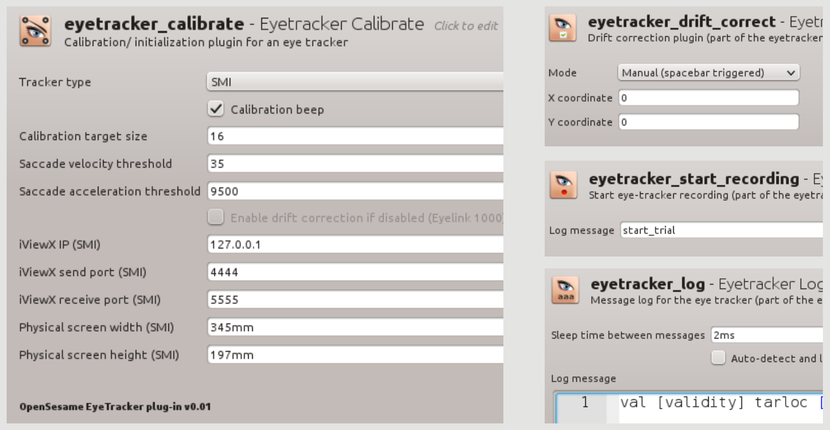


tobii interactive minds

ITU GazeGroup
Research on eye tracking and gaze interaction [3,4]

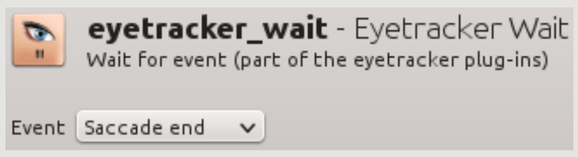
GazeParser [5]

user-friendly interface



gaze contingency

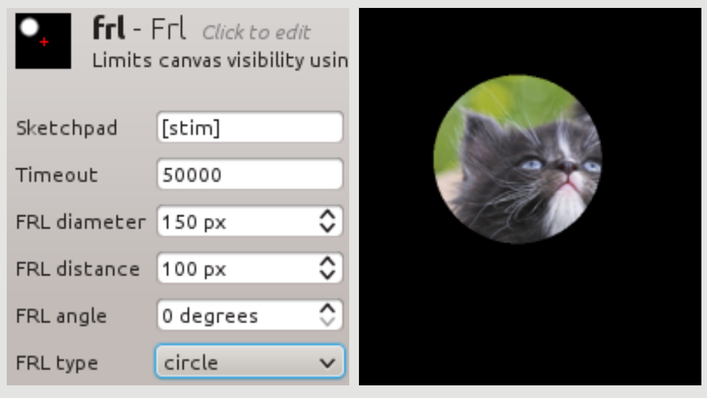
event detection



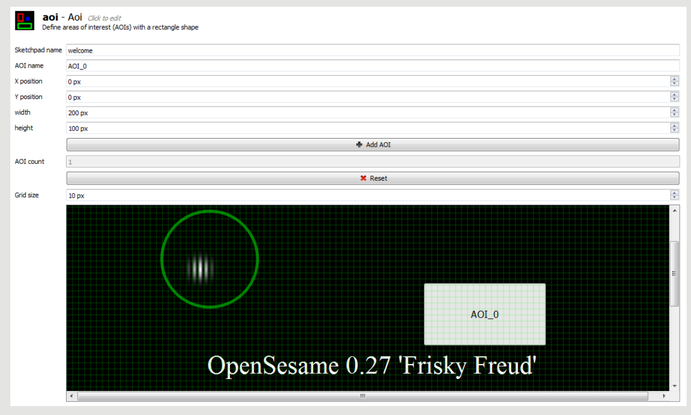
EyeLink
based on EyeLink algorithms

SMI
based on PyGaze online event detection algorithms[6]

forced retinal location



areas of interest



further information

demo
the plug-ins described on this poster are currently being demonstrated, just ask the friendly researcher (he should be somewhere nearby...)

website
osdoc.cogsci.nl/about

contact
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references

[1] Mathôt, S., Schreij, D., & Theeuwes, J. (2012). OpenSesame: An open-source, graphical experiment builder for the social sciences. Behavior Research Methods, 44(2), 314–324.

[2] Peirce, J. W. (2007). PsychoPy—Psychophysics software in Python. Journal of Neuroscience Methods, 162(1-2), 8–13.

[3] San Agustin, J., Skovsgaard, H., Hansen, J. P., & Hansen, D. W. (2009). Low-cost gaze interaction (p. 4453). ACM Press.

[4] San Agustin, J., Skovsgaard, H., Mollenbach, E., Barret, M., Tall, M., Hansen, D. W., & Hansen, J. P. (2010). Evaluation of a low-cost open-source gaze tracker (p. 77). ACM Press.

[5] Sogo, H. (2012). GazeParser: an open-source and multiplatform library for low-cost eye tracking and analysis. Behavior Research Methods.

[6] Dalmaijer, E.S., Mathôt, S., & Van der Stigchel, S. (submitted). PyGaze: an open-source, cross-platform toolbox for minimal-effort programming of eye-tracking experiments.