OGAMA OpenGazeAndMouseAnalyzer

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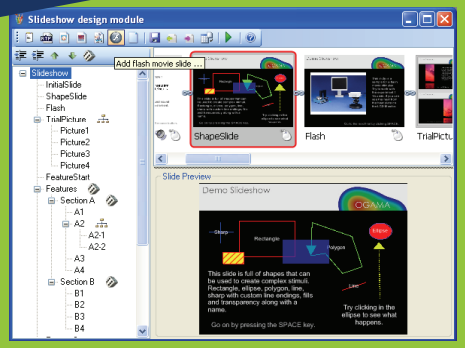
Freie Universität Berlin

Design

Slideshow

optimized for slide show study designs



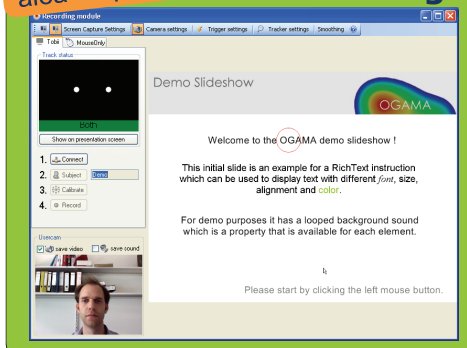
- integrate flash
- audio stimuli
- RTF-instructions
- multiple shapes
- custom shuffling
- slide links
- define tests
- send trigger

This **software** allows recording, importing and analyzing of eye- and mouse-tracking data in parallel. OGAMA is **open source** waiting to be adapted to suit your requirements. Its main features include database-driven pre-processing and filtering of gaze and mouse data, the creation of attention maps, areas of interest definition and replay. OGAMA is designed for analyzing gaze and mouse data recorded in experimental setups with screen based **slide show stimuli**. The spreadsheet data output can directly be used with statistical software packages.

Record

Recording

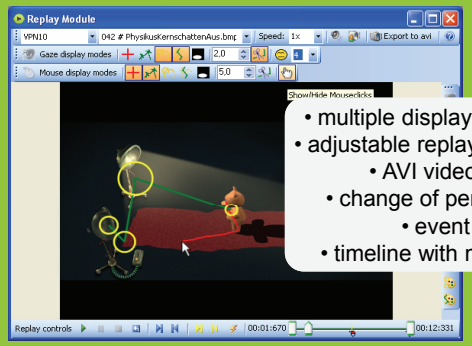
native tobii[3] & alea[5] support



- live viewer
- mouse path recording
- LPT trigger
- set custom marker
- user camera
- dual monitor capable
- event recording

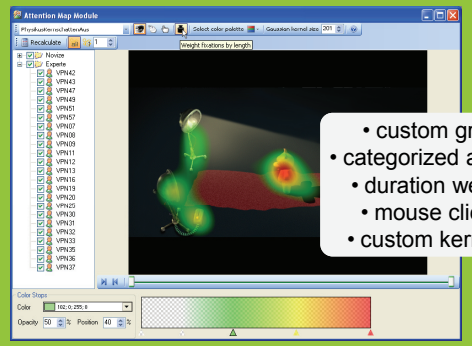
Analyze

Replay



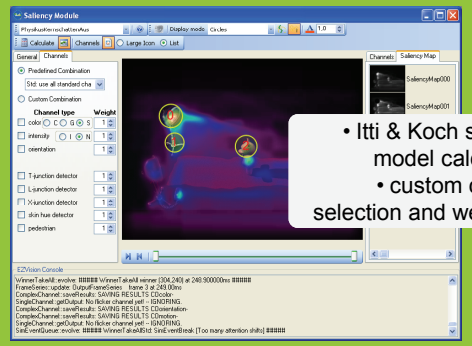
- multiple display modes
- adjustable replay speed
- AVI video export
- change of pen styles
- event display
- timeline with markers

Attention Map



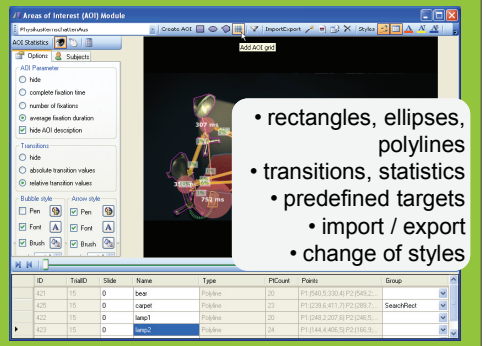
- custom gradients
- categorized analysis
- duration weighting
- mouse clickmaps
- custom kernel size

Salience Map



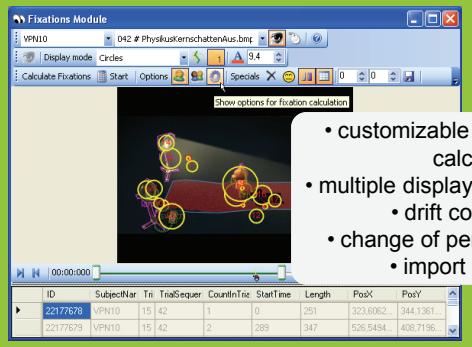
- Itti & Koch salience model calculation
- custom channel selection and weighting

Areas of Interest



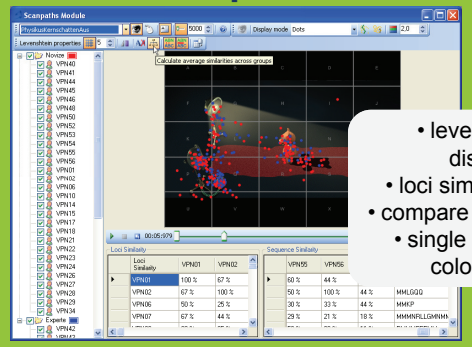
- rectangles, ellipses, polylines
- transitions, statistics
- predefined targets
- import / export
- change of styles

Fixations



- customizable fixation calculation[1]
- multiple display modes
- drift correction
- change of pen styles
- import / export

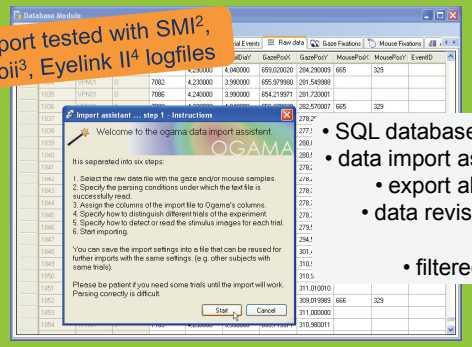
Scanpaths



- levenshtein distances
- loci similarities
- compare groups
- single subject colorization

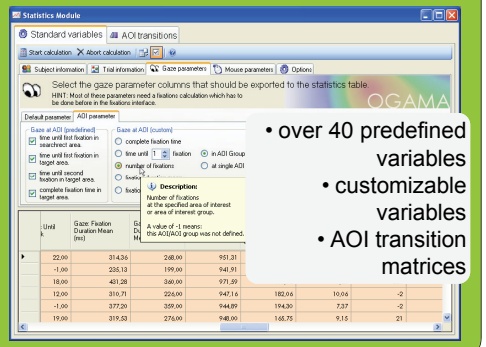
Database

import tested with SMI[2], Tobii[3], Eyelink II[4] logfiles



- SQL database driven
- data import assistant
- export all tables
- data revision and control
- filtered views

Statistic



- over 40 predefined variables
- customizable variables
- AOI transition matrices

1) based on LC Technologies fixation detection source code (www.eyegaze.com)
2) SMI (Sensomotoric Instruments, www.smi.de)
3) Tobii (Tobii Technology, www.tobii.com)
4) Eyelink II (SR Research, www.sr-research.com)
5) Alea (alea technologies, www.alea-technologies.com)

Voßkühler, A; Nordmeier, V.; Kuchinke, L.; Jacobs, A.M.: OGAMA – OpenGazeAndMouseAnalyzer. Open source software designed to analyze eye and mouse movements in slideshow study designs. In: Behavior Research Methods, 40/4 (2008), S. 1150-1162.

Share your experience with us and give it a try.
http://didaktik.physik.fu-berlin.de/ogama