

Mobile Video Analysis Software

Efficient aggregation of mobile eye tracking data

- Increase efficiency of analysis by factor 10-50*
- Works without markers for almost all use cases
- Unique SMI fixation detection for dynamic environments
- Quantify and visualize aggregated data for multiple participants



Benjamin Laukenmann, Agentur Siegmund:

“... We used SMI Eye Tracking Glasses for a qualitative survey on the usability of printed consumer bills in the eCommerce and energy sector. SMI Semantic Gaze Mapping technology was a very efficient tool to gain a better understanding of overall visual trends on the perception and the search pattern for key information on the bills and the advertising supplements ...”

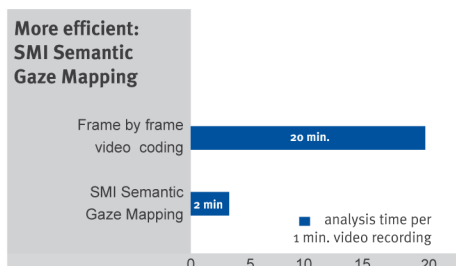
*Compared to frame by frame video coding

Efficiently aggregate mobile eye tracking data

Use SMI Semantic Gaze Mapping technology to efficiently aggregate mobile eye tracking data. Quantify and visualize behavior within multi-participant studies - with the SMI Mobile Video Analysis Software by SensoMotoric Instruments (SMI).

Increase efficiency by factor 10-50

SMI Semantic Gaze Mapping technology reduces the data analysis effort by factor 10 to 50 compared to traditional frame by frame video coding methods.



Works without markers for almost all use cases

The SMI Semantic Gaze Mapping technology allows using data recorded in natural environments without any distracting visual markers. This is important for use cases such as design perception, human to human interaction, driving, in-store shelf testing or sports.

Unique fixation detection for dynamic environments

The new SMI eye movement event detection algorithm has been designed from the ground up for highly dynamic mobile eye tracking applications. It ensures high data reliability specifically taking into account smooth pursuit and vestibulo-ocular reflex eye movements.

Quantify and visualize aggregated data for multiple participants

Data for multiple participants can easily be aggregated to any kind of target area (reference images), e.g. shelf, package, cockpit, mobile device, poster, using SMI's Semantic Gaze Mapping technology (patent pending).

Qualitative visualizations can be analyzed and exported like heat maps and focus maps, gaze replay, scan path and bee swarm.



Example of aggregate KPIs/heat map on a target area

In combination with the reliable fixation detection and self defined areas of interests (AOI) aggregated meaningful results are generated. Quantitative results are available with over 100 statistical parameters and as powerful visualizations such as SMI's unique KPI (Key Performance Indicator) and Gridded AOI module.

Specifications

SMI Mobile Video Analysis Software

- Software for the analysis of eye tracking videos recorded with SMI Eye Tracking Glasses and the SMI HED head-mounted mobile eye tracker.
- Includes SMI Semantic Gaze Mapping technology to efficiently aggregate data of multiple participants on target areas (reference images).

System requirements

- Windows XP, Windows Vista or Windows 7

SMI Semantic Gaze Mapping allows for fixation mapping on user-defined reference images representing your target area or objects. The technology can also be used to analyze data captured with stationary eye tracking systems (RED, Hi-Speed), e.g.:

- Website screen recordings
- Content from external video sources such as gaming consoles
- Recordings with an external scene camera, e.g. of control rooms