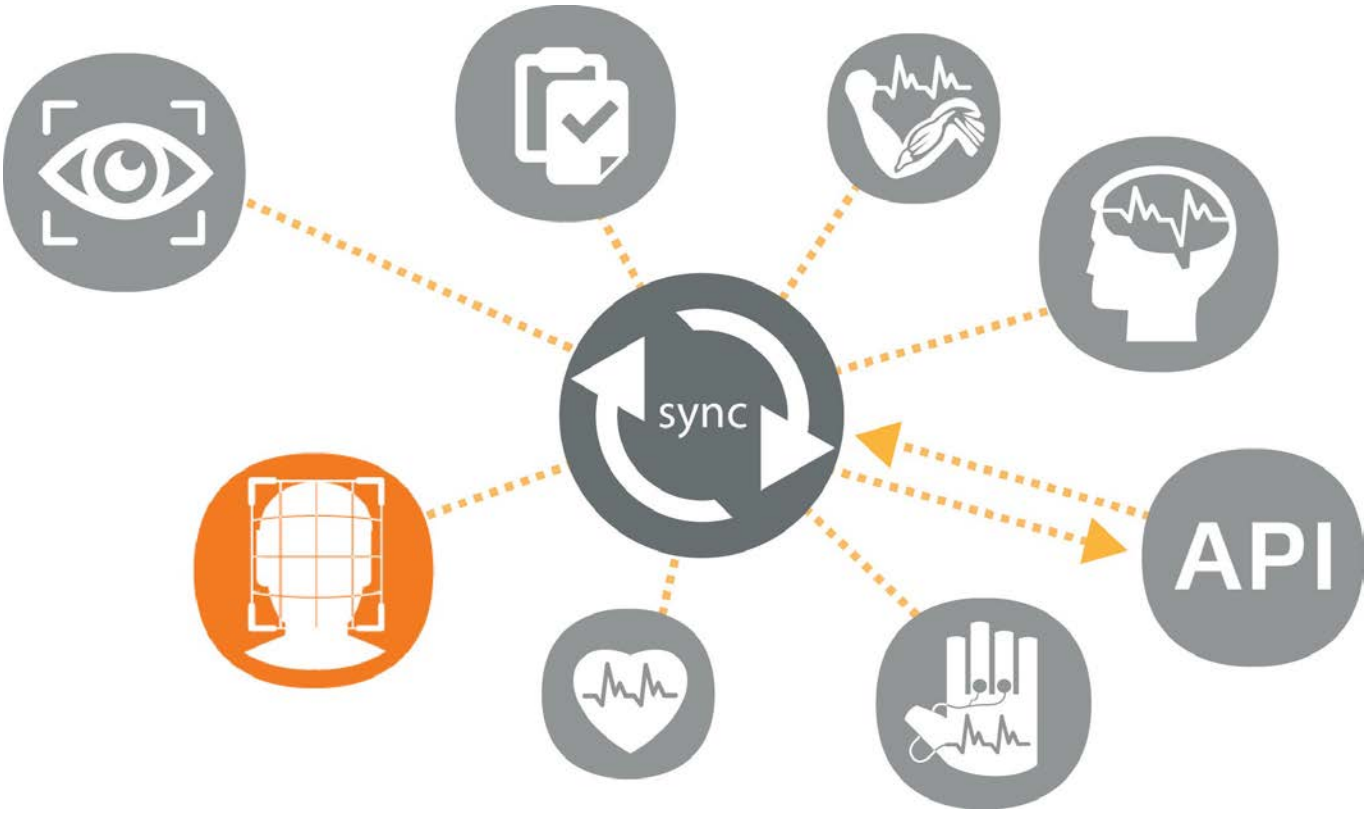


Emotient Module

Facial Expression Analysis

Pre-requisite: iMotions Core License

3 levels of facial expression analysis: Base, Research & Advanced

IMOTIONS®

BIOMETRIC RESEARCH PLATFORM

sales@imotions.com

Emotient Module
Facial Expression Analysis

The Emotient module allows you to automatically analyze facial expressions via a webcam. This can be done in 2 ways:

- Analyse facial expressions in studies executed from within the iMotions software including live observation of the emotions and AUs in sync with the stimuli.
- Import previously made videos (individual or batch) for post- processing of emotions and AUs.

The Emotient Module has the iMotions Core License as pre-requisite, which allows you to:

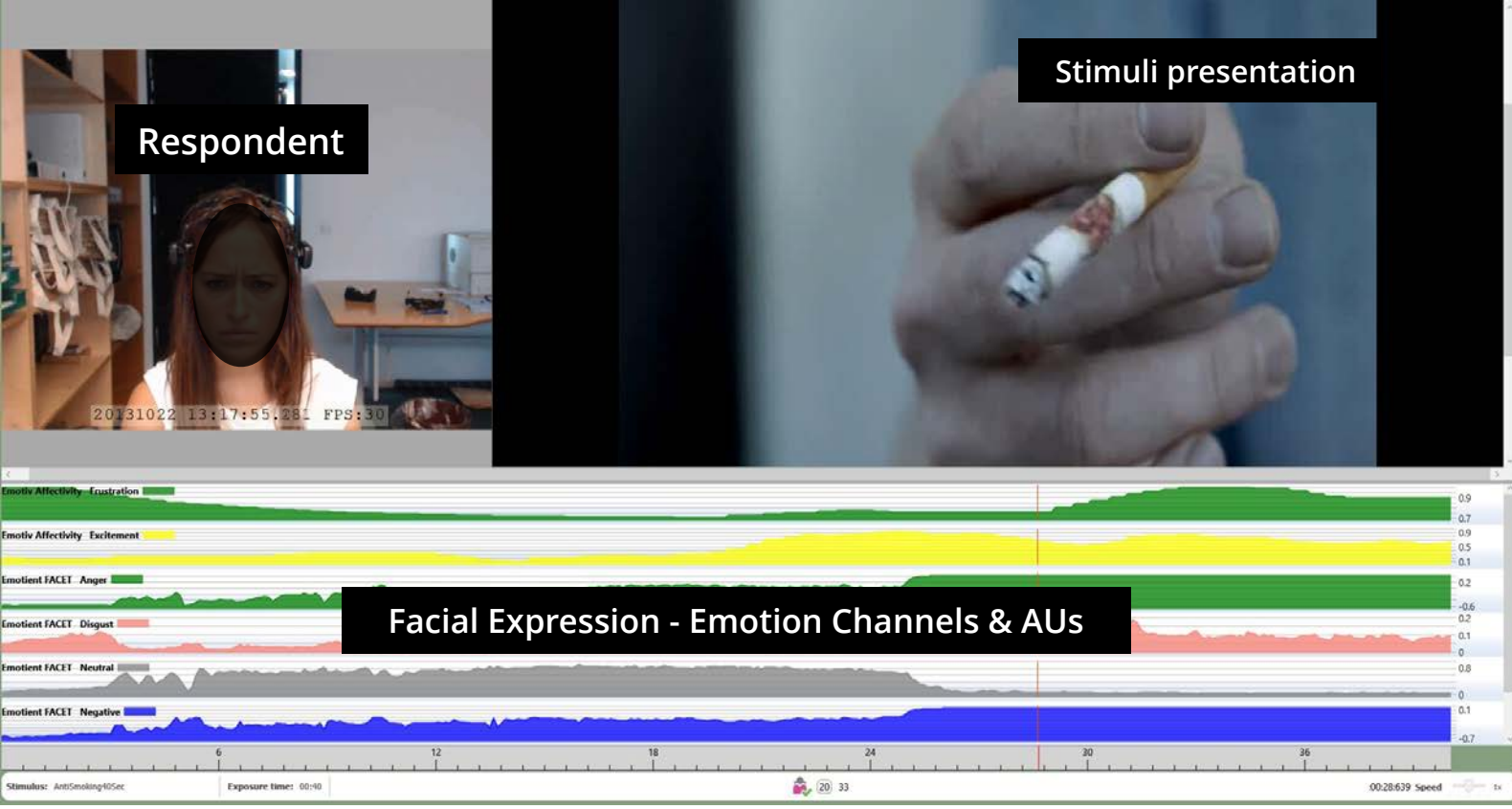
- Present stimuli such as images, videos, websites, games, software or real life objects
- Set up new studies and record data
- Control rotations, randomizations, and block designs
- Make live or post-processing markers to annotate and segment recordings
- Record the face of the respondent in sync with the stimuli
- Export raw data, metrics & visualizations per sensor
- Visualize results individually and/or aggregated
- Visualize real time sensor channels during data collection in sync with other sensors
- Forward data in real time and allow the import of external sensor / software data and loop it back into the platform via the API Module.
- Allows the modular integration and synchronization of any other sensor

Emotient Module Packages	BASE	RESEARCH	ADVANCED
Detects Valence: overall positive, neutral & negative responses.	X	X	X
Detects 7 Basic Emotions: Joy, Anger, Surprise, Fear, Sadness, Disgust, Contempt.	X	X	X
Detects Facial landmarks: Location of the inner and outer corners of the eyes, the tip of the nose, and mouth.	X	X	X
Detects Action Units as described in the Facial Action Coding System - FACS methodology. Action Units: 1, 2, 4, 5, 6, 7, 9, 10, 12, 14, 15, 17, 18, 20, 23, 24, 25, 26, 28.		X	X
Detects Head Pose: Provides estimates for the pitch, yaw, and roll in degrees.		X	X
Detects Gender & Glasses		X	X
Detects 2 advanced emotions: Frustration and Confusion			X

Some relevant iMotions Emotient Module users are:

HARVARD UNIVERSITY · Yale UNIVERSITY · USC University of Southern California · STANFORD UNIVERSITY · P&G · U.S. AIR FORCE

IMOTIONS



Raw Data Export per Emotion Channel

Q	R	S	T	U	V	W	X	Y
FaceRect Height	Joy Evidence	Joy Intensity	Anger Evidence	Anger Intensity	Surprise Evidence	Surprise Inte	Fear Evidenc	Fear Intensi
152	-2.874975	0.001219193	-0.4023853	0.1678265	-3.077752	0.0004761	-2.205187	0.0011925
153	-2.848672	0.00128727	-0.4155159	0.1631844	-2.99337	0.0005705	-2.249243	0.0010577
152	-2.680858	0.001820429	-0.4808494	0.1416113	-2.991656	0.0005726	-2.318069	0.0008768
153	-2.716959	0.001689677	-0.4807281	0.141649	-2.967527	0.000603	-2.308892	0.000899

Endorsed by Paul Ekman, Ph.D.,
One of the most influential in the facial behavior analysis to date.

20+ Years of experience pioneering machine learning & computer vision technology

200+ Published seminar papers on facial behavioral analysis

130+ Universities that have deployed the CERT - predecessor of FACET™

1000+ Researchers that have referred to the technology

Optionally also integrate Facial Expressions with:

EYE TRACKING | EEG | GSR | ECG/EMG | SURVEYS

IMOTIONS

Relevant links:

Articles and publications that have used the FACET technology as a tool for research.

1. Deriso D, Susskind J, Tanaka J, Winkielman P, HerringtonJ, Schultz R, and Bartlett M (2012). **Exploring the Facial Expression Perception-Production Link Using Real-time Automated Facial Expression Recognition.** In A Fitzgibbon, S Lazebnik, Y Sato, and C Schmid (Eds), European Conference on Computer Vision, Workshop on What's in a Face. Lecture Notes in Computer Science, Springer. Best Demo Award
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Relevant links:

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