

Consumer Neuroscience and Neuromarketing

Research at the Cognitive HCI lab focuses on

Measuring consumer response/emotions on

- products
- products packaging
- product branding
- advertisements

Emotion recognition from EEG

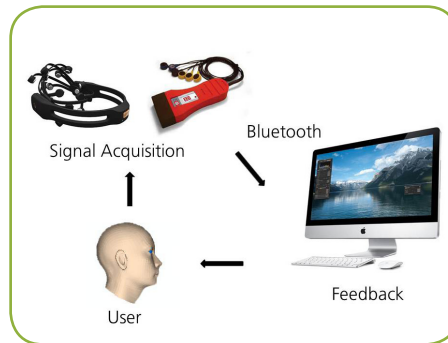
Assessing levels of various brain performance

- cognitive abilities
- self-control
- attention
- psycho-emotional tension

Emotion-enabled serious games

- learning
- brain performance enhancement (neurofeedback)

Research at the Cognitive HCI lab focuses on Human-Computer Interfaces which includes new forms of human-computer interaction based on biofeedback and haptic-based communication. A key study is the use of a real-time EEG-based interaction in Consumer Neuroscience and Neuromarketing.



With the use of modern EEG devices and the software tools developed in the Cognitive HCI lab, it is now possible to study mental processes associated with human behavior.

In the lab, studies on EEG-based emotion recognition algorithms allow recognition up to eight emotional states: 'satisfied', 'happy', 'surprised', 'protected', 'sad', 'unconcerned',



As EEG devices are now affordable, portable and user friendly, neuromarketing methods can be effective windows to real "inner" insights into consumer behavior and purchasing motivation.

Consumer neuroscience focuses on consumer's purchasing behaviour and how various factors affect individual preferences.

Neuromarketing applies neuroscience knowledge to improve traditional marketing methods. It also integrates EEG-based technologies into new marketing approaches.



'angry', and 'fear'. Additionally, different levels of valence are recognized from the extreme negative to the extreme positive.

These emotion recognition algorithms can be directly used in neuromarketing and to improve traditional marketing methods as well. The developed software can be used with any EEG device including Emotiv, Pet 2, etc.

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