EEG Kiss

This page serves as information source for the EEG_Kiss project.

This project is initiated by Karen Lancel & Hermen Maat and will be executed in coorperation with Fourtress, Baltan Laboratories and Holst Centre.

Background

In the EEG_Kiss project we explore how a kiss can be translated to data. We will try to make a part of the kiss or the shared experience of the kiss measurable. Each kisser will wear an EEG headset with wich brainwaves can be measured. The data that is measured by the EEG headset must be translated into visuals, sound or vibrations so that an audience is able to "experience" the kiss. The raw EEG waves of the individual kissers must also be visible to the audience. The audience can then use the visualisations, sound, vibrations and EEG waves to form their own interpretation about what the kiss was like. Then the audience will be asked to share their own interpretation to be part of an art work.

The artists Karen and Hermen started with a setup where they would have two kissers (themselves) wearing an EEG headset from Imec and showing the EEG waves on a big screen. They would then ask the audience to share their own interpretations of what they saw and to see if they could detect a "shared feeling or synchronisation" in the EEG waves.

In future setups the artists want to be able to somehow detect some kind of synchronisation between the EEG waves (or filtered EEG waves) and be able to explain to an audience what the waves might mean and why synchronisation could be occuring. The goal here is not to use exact science but to share interpretations and reflect on the data. The actuator feedback should all be performed on a live (realtime) basis with minimal latency. Futhermore, the EEG waves and synchronisation data should be shareable over the internet so that people from different locations are able to experience the kiss. One additional whish is that a kiss can be saved in the form of a picture or "portret" that represents the combined data of the kiss so that the artists can say: "this is what your kiss looked like".

The part that Fourtress is responsible for is creating a framework to be able to analyse the EEG data. The reason is that it must support multiple types of inputs and outputs so that it is reusable or extendable for other applications. Input data could come from: different EEG headset that produce different data formats, saved EEG data files, EEG data streams, EEG data from online sources, etc. The output should be a generic data stream that can be used to create al kinds of music or visuals. Once the framework is done, a graphical designer could create visualisations based on the frameworks output. Fourtress wil only make simple demonstrative visualisations or music at most since it's not the area of expertise of Fourtress.

The team

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Position: Software engineer

Location: Fourtress Eindhoven

Usefull links

http://sourceforge.net/projects/page/

MeVisLab

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