

Let us introduce to you MEMaker - Make your museum visit memorable. For most people, especially young, a museum visit is not a very memorable event. After leaving an exhibition which was supposed to be inspiring we tend to remember only a few masterpieces which drew our attention the most. What if there was a way to enhance this experience?

With our app MEMaker every visitor will be able to choose the kind of experience they want to have. After you decide what you expect of the visit, a room with the exhibition will be set with your individual preferences in mind. Every work of art will be displayed on a high-resolution screen - that way we can provide the flexibility which is essential for the personalized experience. The whole process is based on a biofeedback method.

How does it work? Firstly, the viewer goes to the test area - here happens our calibration procedure. The viewer is asked to choose a preferred experience. It may be relaxing, learning, exciting, scary etc. After that, we ask the viewer to put on the ECG collecting bracelet and a special glove to examine the galvanic skin response (later maybe also a comfortable to wear EEG set). Next, we analyze the response to example pictures from the chosen category. Every picture has a set of features that we have in our database. Based on viewer results we select the set of pictures that will be shown on the main tour.

In our prototype code we used the K-Nearest Neighbours method to classify the state of the possible visitor from their ECG and GSR signals. Of course in the future we can make better classifiers based on other biosignals, and other algorithms (neural networks, spectral density, n-dimensional methods...). Also in the future classifiers will be get from experiments on the particular paintings from the museum.

Our goal is to add another senses to the exhibition. We can manipulate every sense for every painting to make the best possible stimulation. Thanks to the fact that all of the pieces of art are displayed on the screen, there will be no problem in viewing for disabled people, because you can, for example, adjust the height of the pictures for everyone.

Our app, MEMaker, is an app for art galleries or museums which want to make a special tour for every visitor with his personal needs. With new technologies, and signals from our bodies our team can make Spotify for paintings.