

Mood player creates the right atmosphere

March 3 2009

(PhysOrg.com) -- Melancholic songs, dance rhythms or romantic background music? The mood player can recognize musical characteristics and sort songs according to moods. It also blends in suitable images to the rhythm of the music.

MP3 players and digital cameras fill home computers with a data flood of images and music. The sector association BITKOM estimated that the number of music downloads in 2008 would exceed 38 million in Germany. Until now, anyone wishing to maintain an overview of their favorite music and photos had to laboriously assign keywords to everything using cumbersome administration software.

A new approach is to sort the data according to moods. The mood player developed by the Fraunhofer Institute for Digital Media Technology IDMT in Ilmenau compiles musical slide shows to match how the user feels at the time. From euphoric, relaxed and melancholic to vigorous. The software, which is based on the GenreID music analysis tool, trains the PC to recognize different musical characteristics. Images that suit the mood are automatically added to the play list and shown at a speed that matches the tempo of the music.

For this purpose, the mood player classifies the media in real time and makes the acquired information available in a database. The mood of the images is analyzed on the basis of several distinguishing parameters, including brightness, contrast, edges, colors, textures, layout and shape. Warm colors, for instance, represent friendliness and strong emotions, whereas cold colors have a more calming, distanced and melancholic

effect. Factors such as saturation, brightness, structures and the combination and arrangement of different colors are decisive in the image analysis. The pieces of music too are sorted according to mood parameters, such as volume, tone, melody, rhythm, instruments and vocals - automatically, without the need for tedious cataloging.

Provided by Fraunhofer-Gesellschaft

Citation: Mood player creates the right atmosphere (2009, March 3) retrieved 19 April 2024 from <https://phys.org/news/2009-03-mood-player-atmosphere.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.