Musical Composition by Computer with Inspiration from Files of Different Media Types

Authors: Cassandra Pratt Romero, Andres Gomez de Silva Garza

Abstract : This paper describes a computational system designed to imitate human inspiration during musical composition. The system is called MIS (Musical Inspiration Simulator). The MIS system is inspired by media to which human beings are exposed daily (visual, textual, or auditory) to create new musical compositions based on the emotions detected in said media. After building the system we carried out a series of evaluations with volunteer users who used MIS to compose music based on images, texts, and audio files. The volunteers were asked to judge the harmoniousness and innovation in the system's compositions. An analysis of the results points to the difficulty of computational analysis of the characteristics of the media to which we are exposed daily, as human emotions have a subjective character. This observation will direct future improvements in the system.

Keywords: human inspiration, musical composition, musical composition by computer, theory of sensation and human perception

Conference Title: ICMTC 2018: International Conference on Music Theory and Composition

Conference Location : Osaka, Japan Conference Dates : September 13-14, 2018