

Preface

This book presents the most important issues with automated systems for music emotion recognition. These problems include emotion representation, annotation of music excerpts, feature extraction, and machine learning. The book concentrates on presenting content-based analysis of music files, which automatically analyzes the structures of a music file and annotates this file with the perceived emotions. Emotion detection in MIDI and audio files is presented.

In the experiments, the categorical and dimensional approaches were used, while for music file annotation, the knowledge and expertise of music experts with a university music education. The built automatic emotion detection systems enable the indexing and subsequent searching of music databases according to emotion. The obtained emotion maps of musical compositions provide new knowledge about the distribution of emotions in music and can be used to compare the distribution of emotions in different compositions as well as for emotional comparison of different interpretations of one composition.

Białystok, Poland
May 2017

Jacek Grekow

From Content-based Music Emotion Recognition to
Emotion Maps of Musical Pieces

Grekow, J.

2018, XIV, 138 p. 71 illus., 22 illus. in color., Hardcover

ISBN: 978-3-319-70608-5