1. Record Nr. UNINA9910299960303321 Autore Grekow Jacek Titolo From Content-based Music Emotion Recognition to Emotion Maps of Musical Pieces / / by Jacek Grekow Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-70609-8 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (XIV, 138 p. 71 illus., 22 illus. in color.) Collana Studies in Computational Intelligence, , 1860-949X;; 747 Disciplina 780.285 Soggetti Computational intelligence Music Acoustical engineering **Emotions** Pattern recognition Acoustics Computational Intelligence **Engineering Acoustics** Emotion Pattern Recognition Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Introduction -- Representations of Emotions -- Human Annotation --MIDI Features -- Hierarchical Emotion Detection in MIDI Files. Sommario/riassunto The problems it addresses include emotion representation, annotation of music excerpts, feature extraction, and machine learning. The book chiefly focuses on content-based analysis of music files, a system that automatically analyzes the structures of a music file and annotates the file with the perceived emotions. Further, it explores emotion detection in MIDI and audio files. In the experiments presented here, the categorical and dimensional approaches were used, and the knowledge and expertise of music experts with a university music education were used for music file annotation. The automatic emotion detection

systems constructed and described in the book make it possible to index and subsequently search through music databases according to

emotion. In turn, the emotion maps of musical compositions provide valuable new insights into the distribution of emotions in music and can be used to compare that distribution in different compositions, or to conduct emotional comparisons of different interpretations of the same composition.