Record Nr. UNINA9910254982203321 Autore Knees Peter Titolo Music Similarity and Retrieval: An Introduction to Audio- and Webbased Strategies / / by Peter Knees, Markus Schedl Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa , 2016 **ISBN** 3-662-49722-0 Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (XX, 299 p. 82 illus., 47 illus. in color.) Collana The Information Retrieval Series, , 1871-7500 ; ; 36 025.04 Disciplina Soggetti Information storage and retrieval Application software Signal processing Image processing Speech processing systems Big data Information Storage and Retrieval Computer Appl. in Arts and Humanities Signal, Image and Speech Processing Big Data/Analytics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto 1 Introduction to Music Similarity and Retrieval -- 2 Basic Methods of Audio Signal Processing -- 3 Audio Feature Extraction for Similarity Measurement -- 4 Semantic Labeling of Music -- 5 Contextual Music Meta-data: Comparison and Sources -- 6 Contextual Music Similarity, Indexing, and Retrieval -- 7 Listener-centered Data Sources and Aspects: Traces of Music Interaction -- 8 Collaborative Music Similarity and Recommendation -- 9 Applications -- 10 Grand Challenges and Outlook -- Appendix. Sommario/riassunto This book provides a summary of the manifold audio- and web-based approaches to music information retrieval (MIR) research. In contrast to other books dealing solely with music signal processing, it addresses additional cultural and listener-centric aspects and thus provides a more holistic view. Consequently, the text includes methods operating

on features extracted directly from the audio signal, as well as methods operating on features extracted from contextual information, either the cultural context of music as represented on the web or the user and usage context of music. Following the prevalent document-centered paradigm of information retrieval, the book addresses models of music similarity that extract computational features to describe an entity that represents music on any level (e.g., song, album, or artist), and methods to calculate the similarity between them. While this perspective and the representations discussed cannot describe all musical dimensions, they enable us to effectively find music of similar qualities by providing abstract summarizations of musical artifacts from different modalities. The text at hand provides a comprehensive and accessible introduction to the topics of music search, retrieval, and recommendation from an academic perspective. It will not only allow those new to the field to quickly access MIR from an information retrieval point of view but also raise awareness for the developments of the music domain within the greater IR community. In this regard, Part I deals with content-based MIR, in particular the extraction of features from the music signal and similarity calculation for content-based retrieval. Part II subsequently addresses MIR methods that make use of the digitally accessible cultural context of music. Part III addresses methods of collaborative filtering and user-aware and multi-modal retrieval, while Part IV explores current and future applications of music retrieval and recommendation.>.