

# Music recommendation system based on semantic relevance

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The growing spread of the Internet, Web technology, networks and social media, and the rapid growth of data and music data, and the expansion of online stores and services, greatly increases the difficulty of choosing the most effective musical pieces. In other words, users are faced with a large amount of data and music data, many of which do not have any logical organization; therefore, in such a situation, it is necessary to search for data and information that is closest to the wishes of the users and to a challenge. And has begun researchers to use advisory systems to filter and sort items and information based on the interests of users in the field of music. Most music recommendation systems are based on a user rating, while this kind of mechanism suffers the problem of the diversity of the rating. This factor, as well as problems such as cold start and sparsity of the data, led to the result of these Unreliable. Hence, social tag have been used as a powerful tool for designing a musical recommendation system to address some of the issues raised and to increase the accuracy of the results obtained these systems and find the best music of interest to users. In this thesis, due to the fact that in the area of the system of the recommendation of music, less attention is paid to the semantic relations of the tags; to offer suggestions, the semantic relations of the tags, including emotional tags and the time of the tags, are used. It is assumed that emotional tags assigned by users to the music can provide additional useful information about the users' preferences, opinions and feelings, and the timing of the tagging can help us, keep up to date the interest of our users. The proposed system, based on the performed experiments, has better efficiency and accuracy than other methods.

**Keywords :** Recommendation system Music recommendation system Semantic relevance tags Ontology

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