Abstract

A large amount of research in recommender systems focuses on algorithmic accuracy and optimization of ranking metrics. However, recent work has unveiled the importance of other aspects of the recommendation process, including explanation, transparency, control and user experience in general. Building on these aspects, this paper introduces *MoodPlay*, an interactive music-artists recommender system which integrates content and mood-based filtering in a novel interface. We show how MoodPlay allows the user to explore a music collection by musical mood dimensions, building upon GEMS, a music-specific model of affect, rather than the traditional *Circumplex* model. We describe system architecture, algorithms, interface and interactions followed by use-case and offline evaluations of the system, providing evidence of the benefits of our model based on similarities between the typical moods found in an artist's music, for contextual music recommendation. Finally, we present results of a user study (N = 279) in which four versions of the interface are evaluated with varying degrees of visualization and interaction. Results show that our proposed visualization of items and mood information improves user acceptance and understanding of both the underlying data and the recommendations. Furthermore, our analysis reveals the role of mood in music recommendation, considering both artists' mood and users' self-reported mood in the user study. Our results and discussion highlight the impact of visual and interactive features in music recommendation, as well as associated humancognitive limitations. This research also aims to inform the design of future interactive recommendation systems.