Title:
MusicBox: Navigating the space of your music

Author:
Anita Lillie

Affiliation:
MIT Media Laboratory

Abstract:

Navigating increasingly large personal music libraries is commonplace. Yet most music browsers do not enable their users to explore their collections in a guided and manipulable fashion, often requiring them to have a specific target in mind. MusicBox is a new music browser that provides this interactive control by mapping a music collection into a two-dimensional space, applying principal components analysis (PCA) to a combination of contextual and content-based features of each of the musical tracks. The resulting map shows similar songs close together and dissimilar songs farther apart. MusicBox is fully interactive and highly flexible: users can add and remove features from the included feature list, with PCA recomputed on the fly to remap the data. MusicBox is also extensible; we invite other MIR researchers to contribute features to its PCA engine. MusicBox has been shown to help users find music in their libraries, discover new music, and challenge their assumptions about relationships between types of music.