## An Audience Steerable Automatic Music Director for Online Radio Broadcast

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## Abstract

A novel audience influenced online radio service is demonstrated. The core of this service is a mechanism for automatic generation of ordered playlists of songs. A subset of the network of artists and their associated material on MySpace (http://myspace.com) is used. From this subset, artist social links are used in combination with content-derived song-to-song dissimilarity to form a weighted complex network. This complex network has songs as nodes and social links weighted by content-derived dissimilarity as edges. Playlists are then generated by finding the shortest path through this complex network between given source and destination songs.

It is in the selection of the destination song that this system becomes user-steerable. While listening to the stream of the current playlist, users are given a pruned list of possible songs to serve as the destination for the next playlist. Listeners are then invited to select their preference, with the song that gathers the most votes being used to generate the next playlist. Through this interaction the current group of listeners becomes an ad-hoc collective, driving song selection to meet the group's taste.



