

# Adaptive Jukebox: Demo of a Context-Sensitive Playlist Generator

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Nowadays, a lot of users own large collections of MP3 files. Manually organising such collections into playlists is a tedious task. On the other hand random playlist generation may not always provide the user with an enjoyable experience. Automatic playlist generation is a field in computer science that addresses this issue, developing algorithms that create playlists to suit the user's preferences. The earliest research focused on the notion of music similarity and the satisfaction of user-defined constraints. Logan [1] suggests that playlist generators should also incorporate context, user modelling and user feedback. In literature, user models are quite simple while playlist generators that incorporate context usually only take into account one source of context [2] or use pre-defined contexts-of-use [3].

This demo presents the Adaptive Jukebox [4] - a zero-input playlist generator aimed at computer users. The system's user model can learn the user's preferences in various contexts. It uses a number of sources of context such as application context, mouse and keyboard activity, time of day and day of week, level of brightness, sky conditions, outside temperature and facial expressions, although in our demo we restrict ourselves to using the first three. We are currently in the process of evaluating our system, but initial results seem promising. For two out of three participants, our system performs better than both a random playlist generator and a playlist generator that does not take context into consideration.

## References

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