DT2470 Music Informatics Final Project

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1 Introduction

Earlier this year, Apple Music introduced their new "AutoMix" feature, which automatically creates smooth transition mixes between songs in a playlist. [1]. No public information is available regarding the technical details of this feature, except that it uses Apple Intelligence to apply time stretching and beat matching techniques.

A few months later, Spotify launched their own audio mixing function, allowing users to manually create DJ-style transitions between tracks in their playlists from one tempo and key pairing into another [2].

This project attempts to achieve similar functionality by extracting features from audio tracks and using MIR techniques to create smooth transitions between songs.

2 Feature Extraction

3 Modeling Methods

[3]

4 Evaluation

5 Conclusion

References

[1] Apple. WWDC 2025 — June 9. Video; Timestamp: [00:30:47]. URL: https://www.youtube.com/watch?v=0_DjDdfqtUE&t=1847s.

[2] Spotify. Mix Your Favorite Playlists Seamlessly by Adding Your Own Transitions. Spotify Newsroom press release, https://newsroom.spotify.com/, 2025. Published August 19, 2025. Accessed on 2025-10-21.

[3] Len Vande Veire and Tijl De Bie. From raw audio to a seamless mix: creating an automated dj system for drum and bass. *EURASIP Journal on Audio, Speech, and Music Processing*, 2018(1):13, 2018. URL: https://asmp-eurasipjournals.springeropen.com/articles/10.1186/s13636-018-0134-8, doi:10.1186/s13636-018-0134-8.