

# Multimodal Sentiment Analysis On Songs Using Ensemble Classifiers

Esteban Gomez  
Electrical and Computer Engineering  
gomezs2@illinois.edu  
Spring 2015  
Advisor: Minh N. Do

## ABSTRACT

We consider the problem of performing sentiment analysis on songs by combining audio and lyrics in a large and varied dataset, using the Million Song Dataset for audio features and the MusicXMatch dataset for lyric information.

The algorithms presented on this paper utilize ensemble classifiers as a method of fusing data vectors from different feature spaces. We find that multimodal classification outperforms using only audio or only lyrics. This paper argues that utilizing signals from different spaces can account for inter-class inconsistencies and leverages class-specific performance. The experimental results show that multimodal classification not only improves overall classification, but is also more consistent across different classes.