**Multimodal Sentiment Analysis On Songs Using Ensemble Classifiers**

Esteban Gomez

Electrical and Computer Engineering

gomezsa2@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.