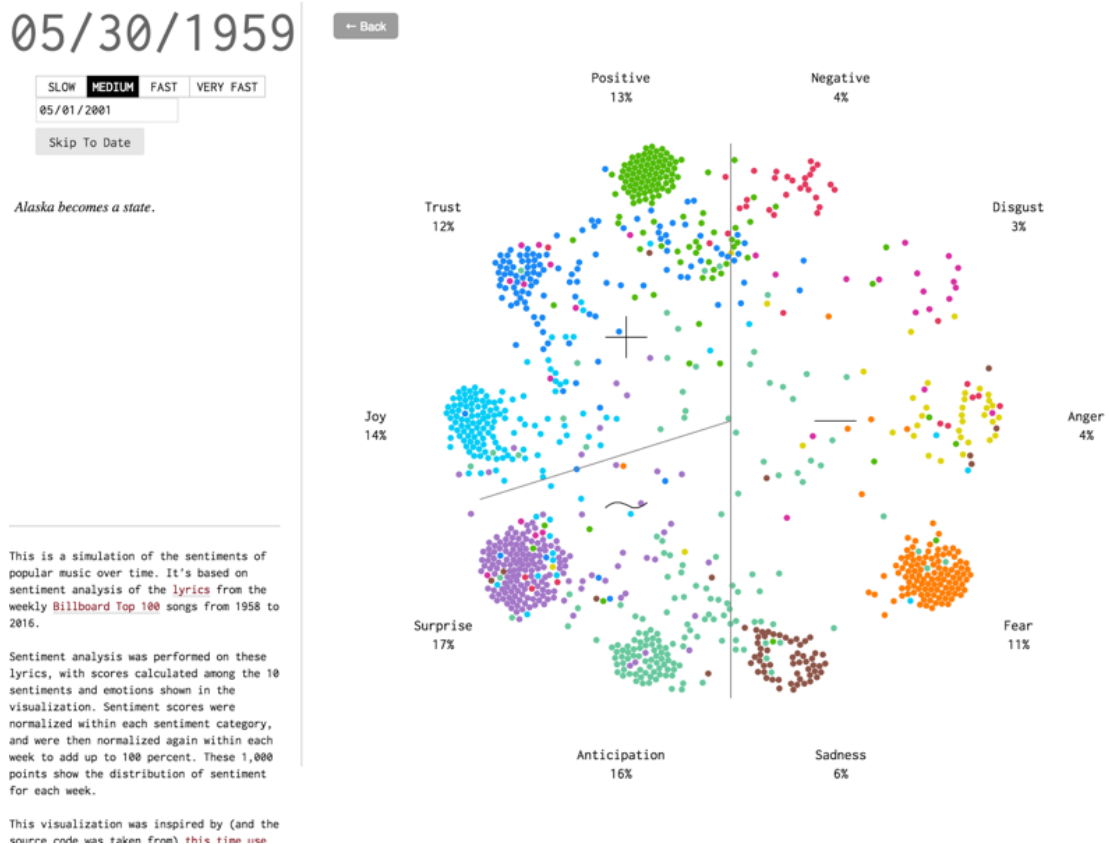


# Music as History Abstract

Sharon Lo

Completed as a final project for cs1951a (Data Science), “Music as History,” explores the trends in popular music sentiment over time. While most sentiment analysis tools partition data into a polarity from 0.0 to 1.0 or under one of three categories of positive, neutral, or negative, we wanted to build a sentiment analysis determination algorithm that would cover more dimensions of sentiment/emotion. Using song lyric data from the weekly Billboard Top 100 listings from 1958 until 2016, our tool categorizes songs into different moods, calculating the weekly average sentiment of the lyrics on ten different scales: anger, anticipation, disgust, fear, joy, surprise, trust, positive, and negative to provide a deeper understanding of the complexities of mental state across different time periods. In addition, in order to gain context on what the moods were about, topic modeling was done by year. Initial findings suggest that, starting in the late-1990’s, music sentiment is more negative than positive, with higher levels of fear and anger, and lower levels of joy as well. It was also found that, on average, popular music sentiment tends to be more positive in the winter and spring months, and more negative in the summer and autumn months. In addition to our analyses, we created a webapp that includes a visualization of the distribution of sentiments by week, as well as an interactive element where users can input how they are feeling, and we recommend to them the week of music that most closely matches their mood. This was a group project where I worked with Sarah Grace, Jared Schober, and Sam Johnson.



← Back

# How are you feeling today?

let us map your mood to a musical time period



I'm ready to feel the music!

← Back

# Your best match is 01/11/97



Topics of the Year

