

# Musical Tweets

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## Topic Overview

Everyone loves music! But what are people saying about it on Twitter?

Let's dive into it...

# Table of contents

The background is a dark blue gradient. In the top right, a pair of hands plays a yellow saxophone with orange and red wavy lines representing sound waves. In the bottom left, a pair of hands plays a blue keyboard instrument. Scattered around the central area are several autumn leaves in yellow, green, blue, and orange.

**01**

**Data**

**02**

**Pipeline**

**03**

**Model**

**04**

**Results**



**01**

**Data**

## Tweet Data

50,000

Tweets

keyword: 'music'

2021-11-02 to 2021-11-09

3700

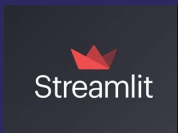
Tokenized words





**02**

**Pipeline**



# Pipeline

## Data Cleaning

- Non-English Tweets
- Duplicates
- Empty Tweets

## Topic Modeling

- NMF
- CorEx
- LDA

## Gather Tweets

- Snsrape

## Text Preprocessing

- ❤️ 😂
- #hastags
- @mentions
- Punctuation
- Lemmatization
- Stop words

## Streamlit

- Word/Topic Analyzation
- Deploy on Heroku



**03**

**Model**



# Choosing a Topic Model



## NMF

- Good word-topic results
- Poor doc-topic alignment



## CorEx

- Clearest Topic Results
- Anchoring was helpful



## LDA

- pyLDAvis helpful
- Slowest



**04**

**Results**

# Best Topics from CorEx Model



## Radio

Total Correlation:  
0.78



## Music Streaming

Total Correlation:  
0.94



## Official Video

Total Correlation:  
1.23



## New Music

Total Correlation:  
1.11



## Music Taste

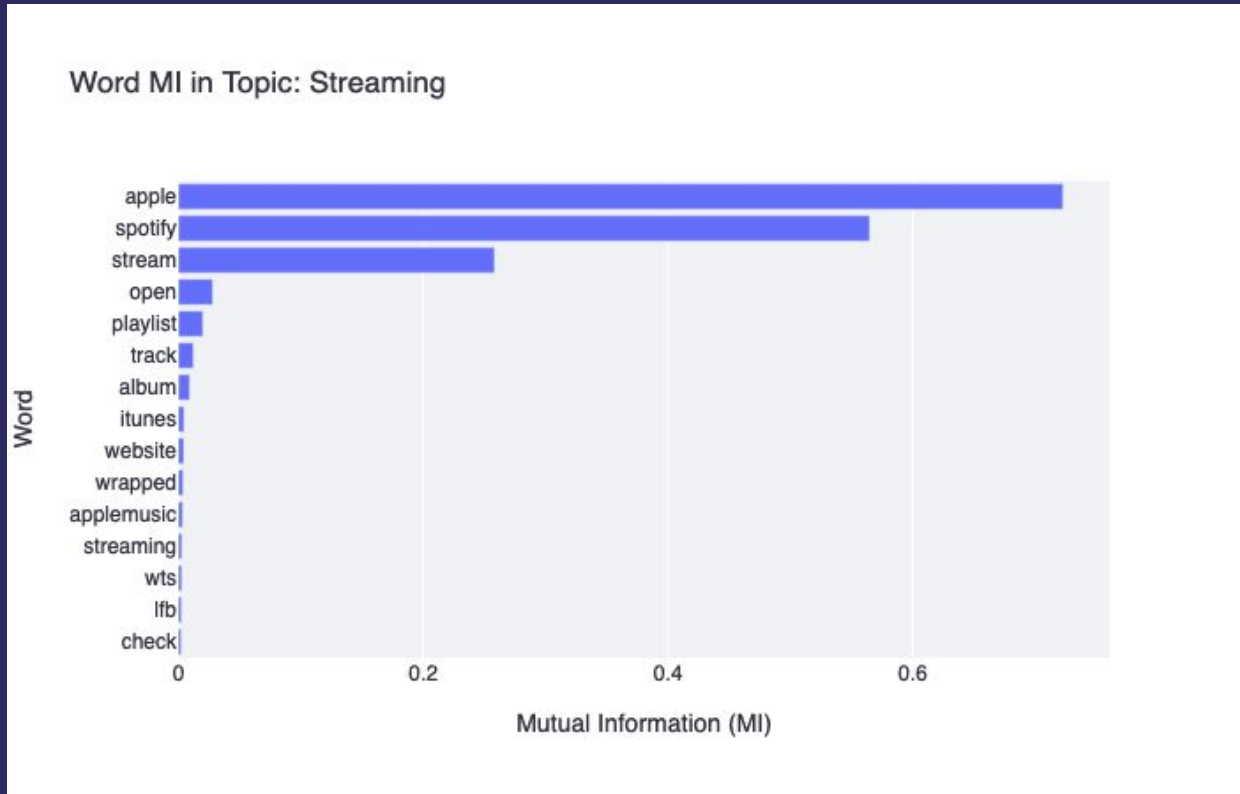
Total Correlation:  
0.84



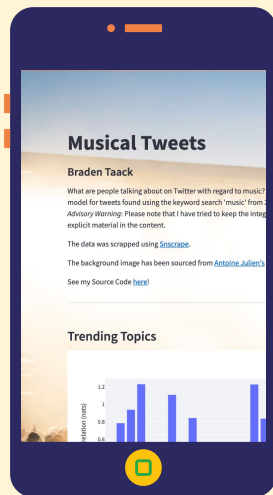
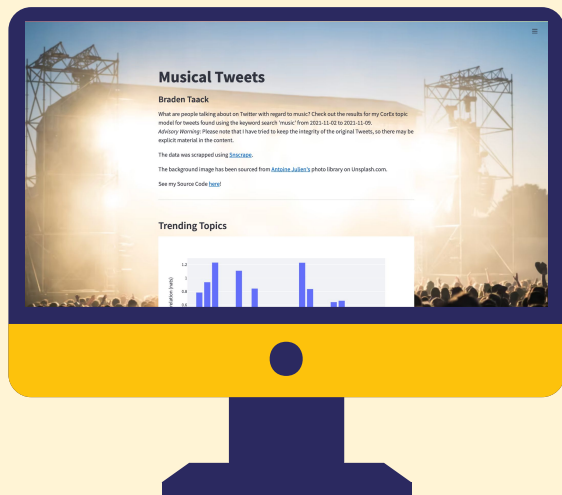
## Twitter

Total Correlation:  
1.23

# Example Topic: Streaming



# Streamlit Web App



**Deployed on Heroku!**

<https://metis-musical-tweets-project.herokuapp.com/>

# Conclusions



- Lots of different topics within music on Twitter
- CorEx worked best for given model options
- Streamlit app for easy topic analysis



# Thanks!

Do you have any questions?

<https://metis-musical-tweets-project.herokuapp.com/>

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