

Youtube/Twitter Trending Analysis

Kim, Rojas, Truong, Winkler

Overview

- Motivation
- Dataset
- System Architecture
- Color Analysis
- Sentimental Analysis
- Top 3 Categories Per Country
- Twitter & Youtube Streaming Analysis

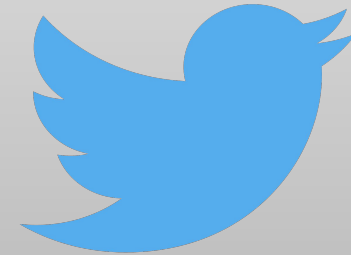
Motivation

- Interesting data set
- Youtube is a big platform with a large international reach
- Why do people make youtube videos?
 - Popularity
 - Educate people
 - Send a message
 - “pewdiepie” made \$12 million USD in the year of 2017[1]
- Brand marketing

Dataset and system Architecture

Dataset

- Historic Youtube trending Data
 - 8 months of trending per day
- Twitter/Youtube Stream
 - top 50 Trending Videos on youtube
 - twitter streaming



System Architecture

- Lambda architecture
 - Batch Analysis
 - Speed layer
- Data saved for later analysis
 - average lifecycle of a trending video
 - peak hours
 - Trending spot vs Twitter Attention

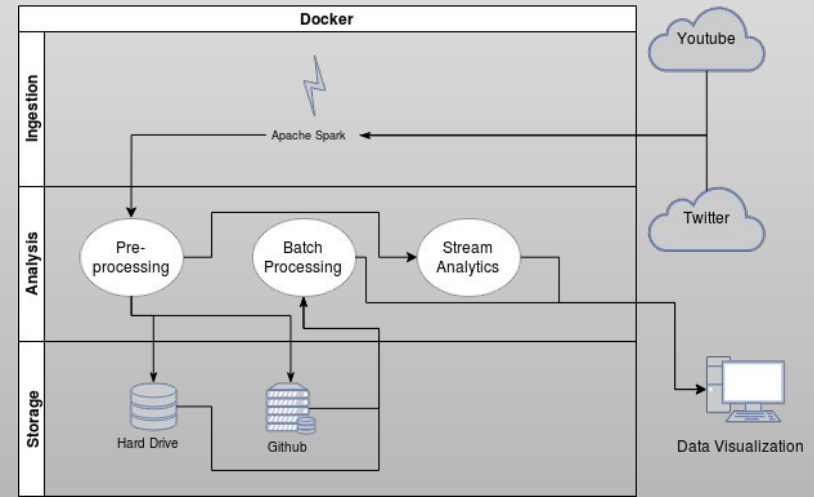


Figure 1: Example Thumbnail

Analysis



Thumbnail Analysis

- Data cleaning
- Image cleaning
- Object Detection
- Color Analysis
- MapReduce



Figure 1: Example Thumbnail



Figure 2: Example Thumbnail

Thumbnail Analysis

- Use strong colors in thumbnails
- Results:
 - Spotlight Effect

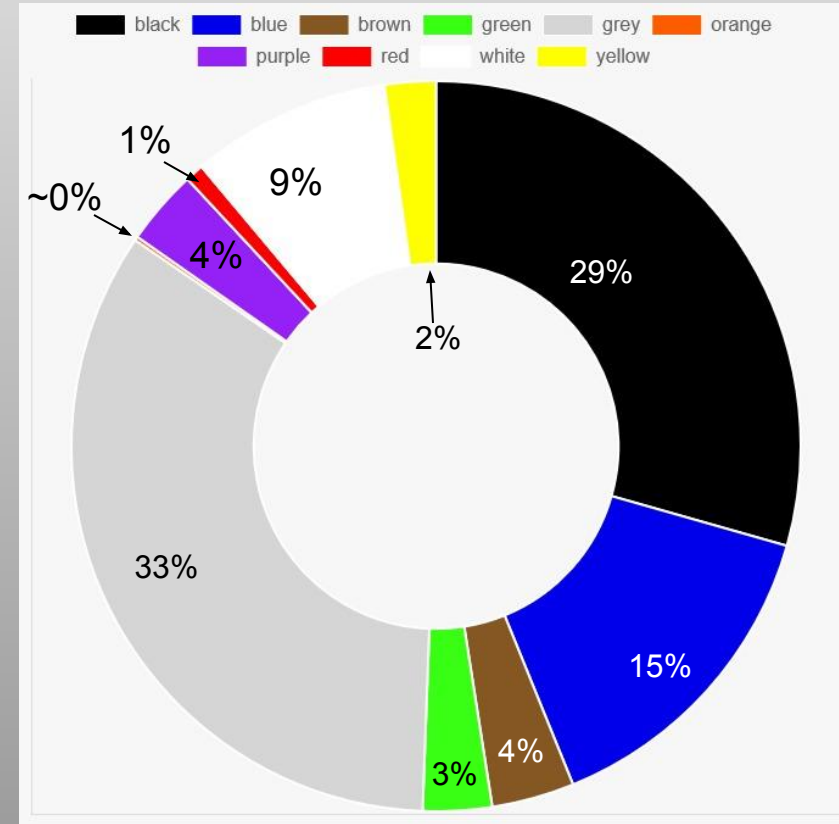


Figure 3: Color Analysis
Results

Sentiment Analysis

- Sentiment was done for Canada Youtube Videos
- MapReduce
- Titles were neutral while Descriptions were positive

Figure 4.2.4 Description analysis sums



Sentiment Analysis

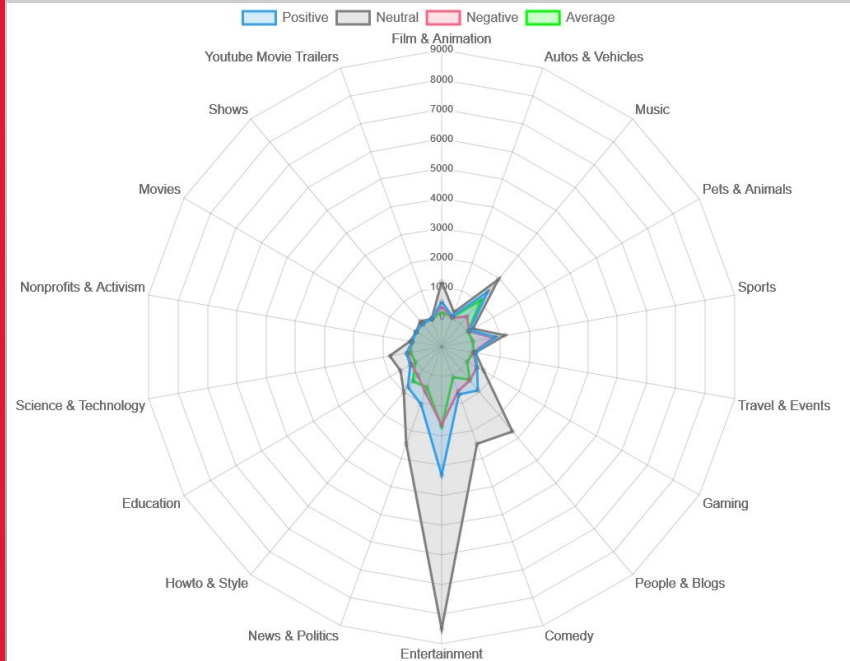


figure 4.2.2 Title analysis sums

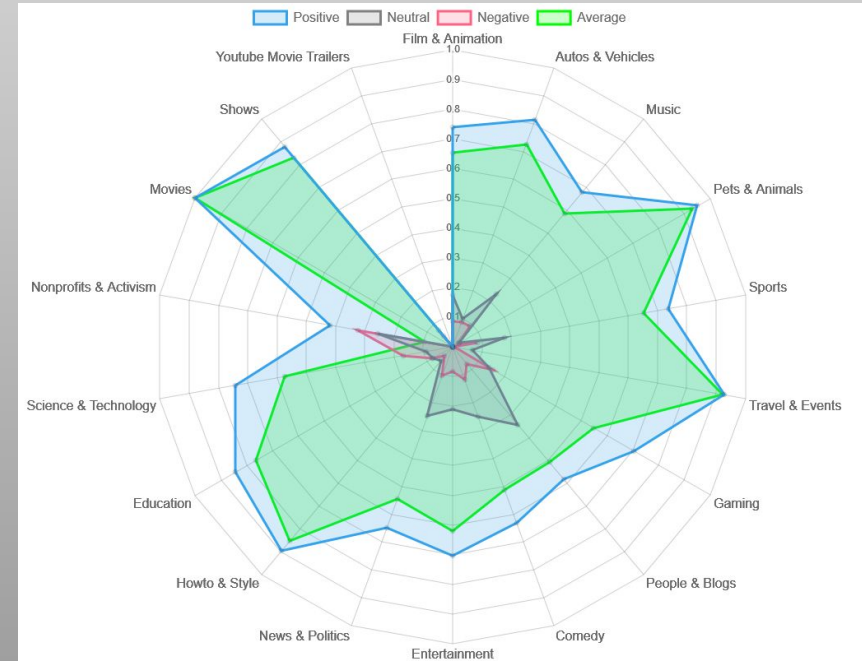
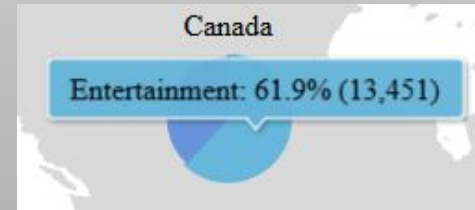


figure 4.2.3 Description analysis percentage

Top 3 Categories Per Country

- Sum for every category and got the top 3
- Entertainment was very dominant



Can be seen by
interacting with map on
figure 4.3.1

Twitter Youtube Stream Analysis

- Live from twitter and Youtube
- Outside the top 10
- Unexpected
- Live demo

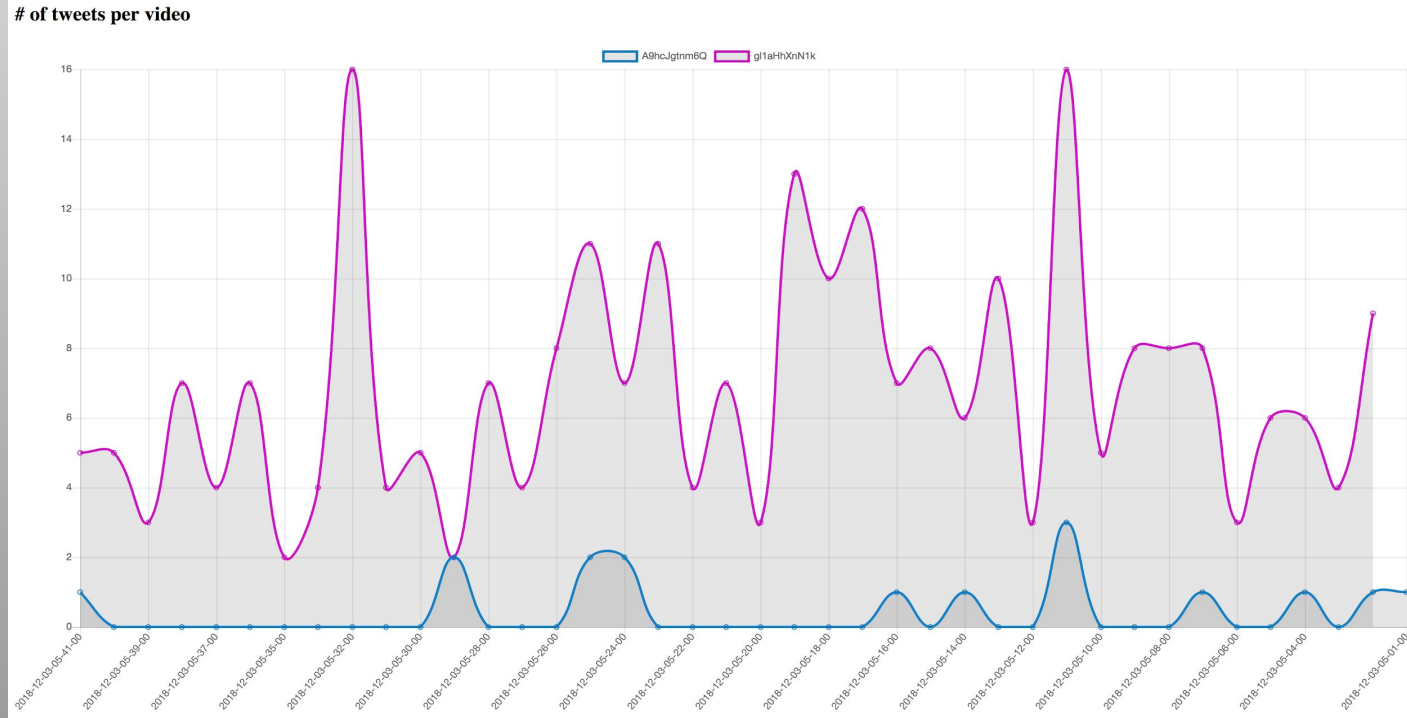


Figure 5

Conclusion

Trending video tips:

- Neutral background colors
- Hardly any negative title videos
- Limited correlation between the two platforms
- Music videos had the most cross platform traffic

Questions/answers

