Data Mining The Oscars on Twitter

Yun Zhou, Weiyan Shi, Mingyung Kim, Jiang Zhu, Alanna Iverson & Dylan Daniels

Presentation for STAT222 at UC Berkeley, Spring 2016



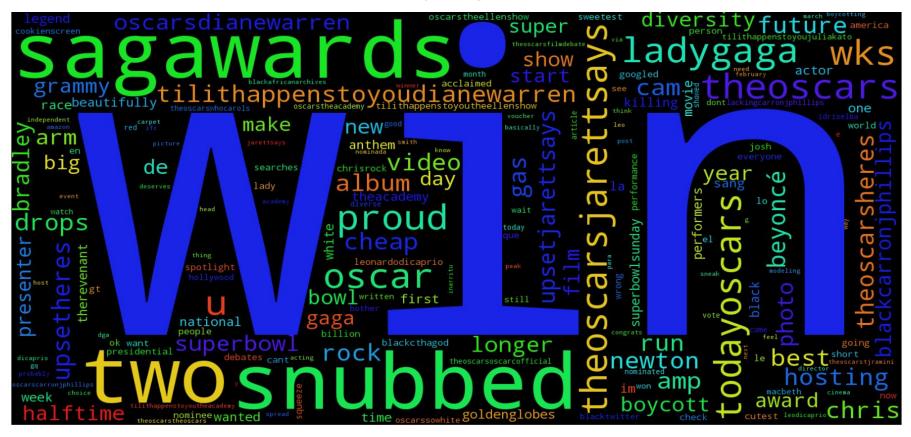




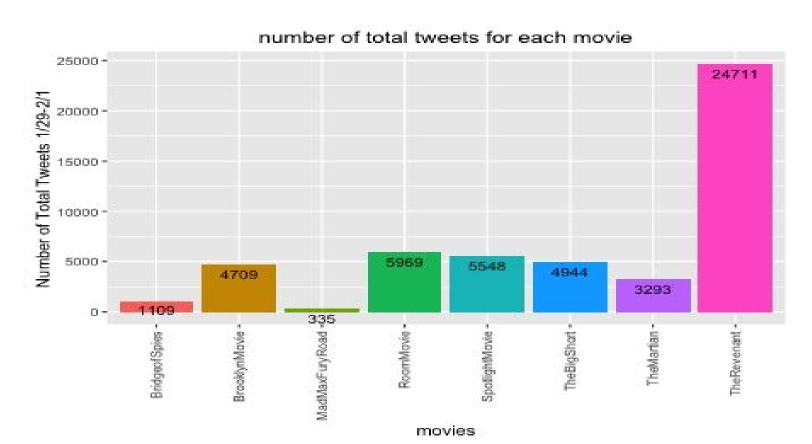




What are people saying about the Oscars?

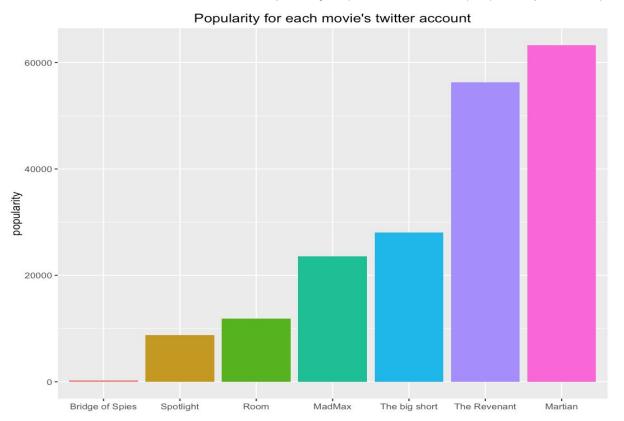


Most-Mentioned Movies on Twitter



Statistics about each movie's official twitter account

Popularity = (Followers Count) * (Likes per tweet)



01/28/2016 - 02/03/2016

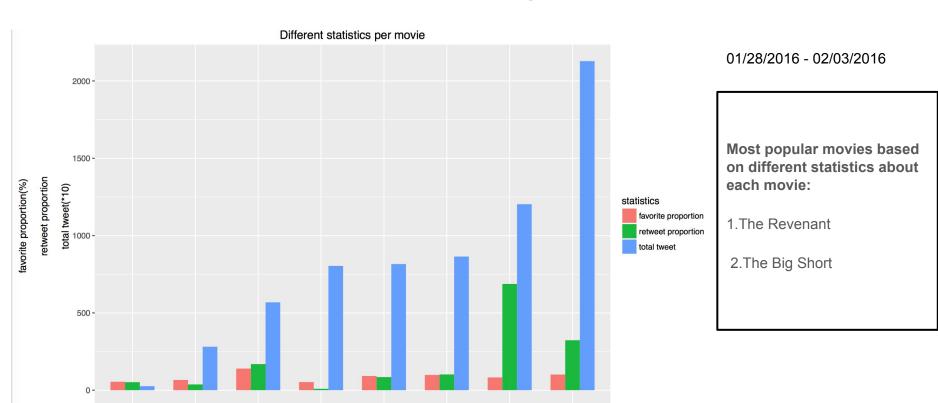
Most popular movies based on their twitter accounts:

1.The Martian

2.The Revenant

Brooklyn doesn't have a twitter account, so the data is missing.

Different statistics per movie



Bridge of Spies

The Martian

Mad Max

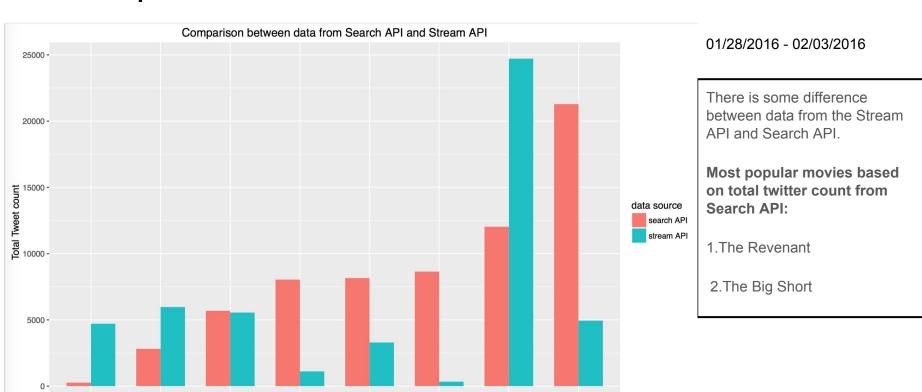
The Revenant The Big Short

Brooklyn

Room

Spotlight

Comparison between Stream API and Search API



Mad Max

The Big Short

The Revenant

The Martian

Bridge of Spies

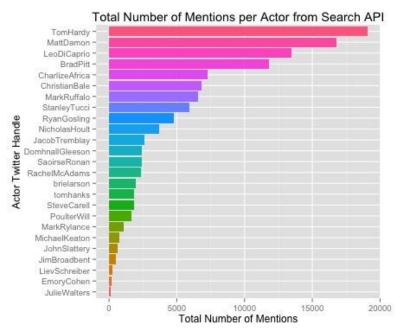
movie

Brooklyn

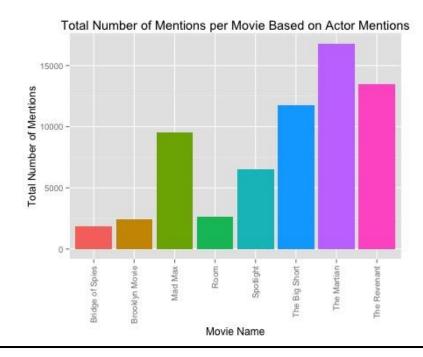
Room

Spotlight

Total Actor Mentions Grouped by Actor and Movie





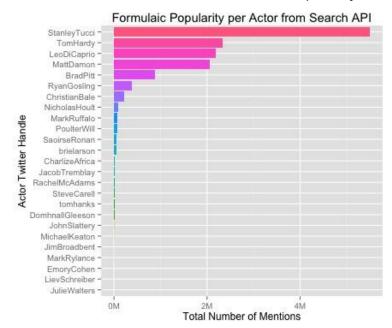


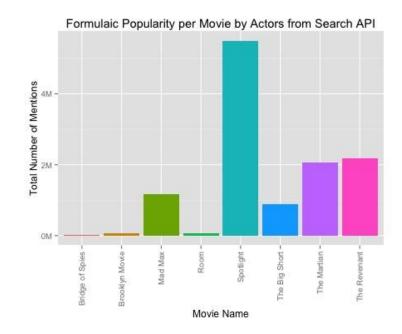
Most popular movies based on the actors in them:

1.The Martian (Matt Damon) 2.The Revenant (Leo DiCaprio)

Total Popularity of Grouped by Actors and Movie

Total Popularity = Total Mentions + Retweets/4 + Favorites/16





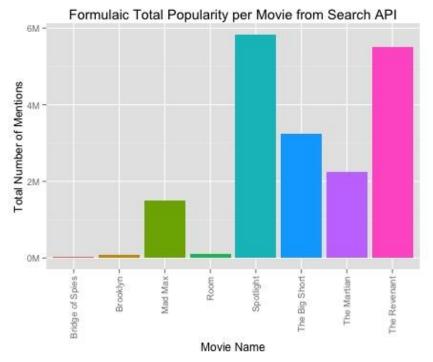
Most popular actors: 1.Stanley Tucci 2. Tom Hardy

3.Leo DiCaprio

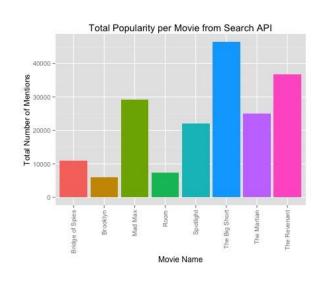
Most popular movies based on the actors in them:

1.Spotlight (Stanley Tucci) 2.The Revenant (Leo DiCaprio)

Total Movie Popularity vs. Mentions per Movie









Sentiment Analysis: Tweet sentiment and the Oscars

Tweet Sentiment



@ElenyaMusic

Saw Spotlight last night and it was fantastic. It's such an important story performed by an incredible cast. #spotlight #movie #cinema



So just watched The Spotlight. Not bad but not totally sure if it's worth for the best picture. #SpotlightMovie #Spotlight #Oscars



Spotlight movie was sooo boring..

Positive

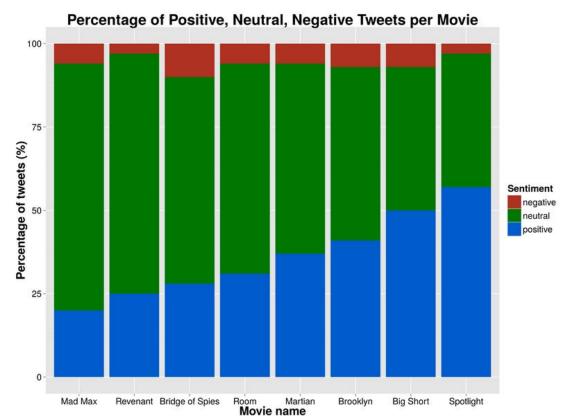
Neutral







Sentiment Analysis: Positive/neutral/negative tweets



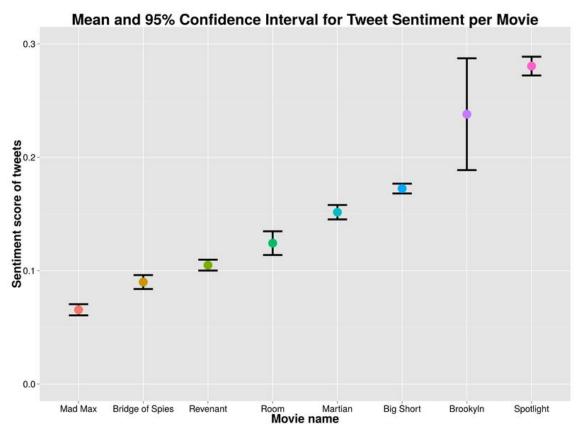
The movies with the highest percentage of positive tweets:

1. Spotlight

- 2. The Big Short
- 3. The Brooklyn

Footnote: We measured the sentiment of tweets with the python package, TextBlob. Sentiment scores are on a scale of -1 to 1.

Sentiment Analysis: Distribution of tweet sentiment



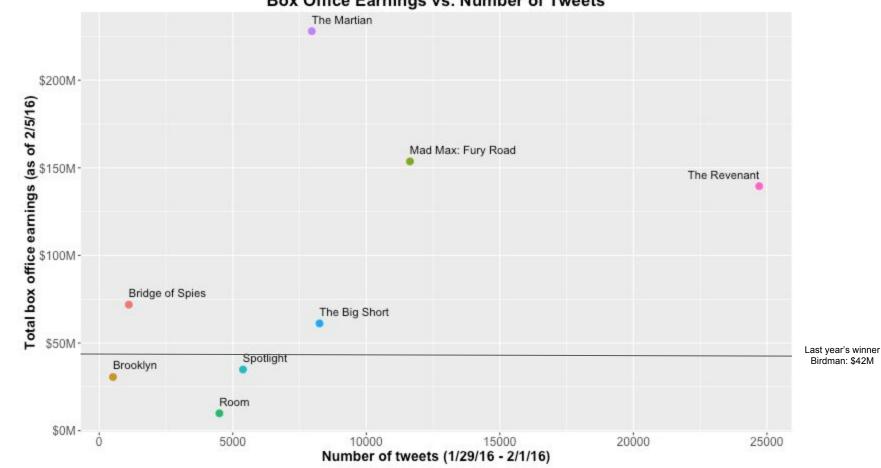
The movies with the highest means and 95% Cl's for tweet sentiment scores:

1. The Spotlight

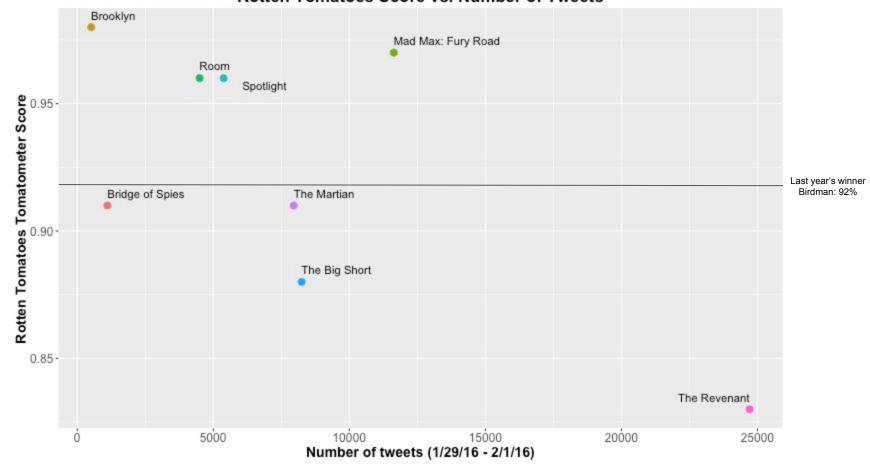
- 2. The Brooklyn
- 3. The Big Short

Footnote: We measured the sentiment of tweets with the python package, TextBlob. Sentiment scores are on a scale of -1 to 1.

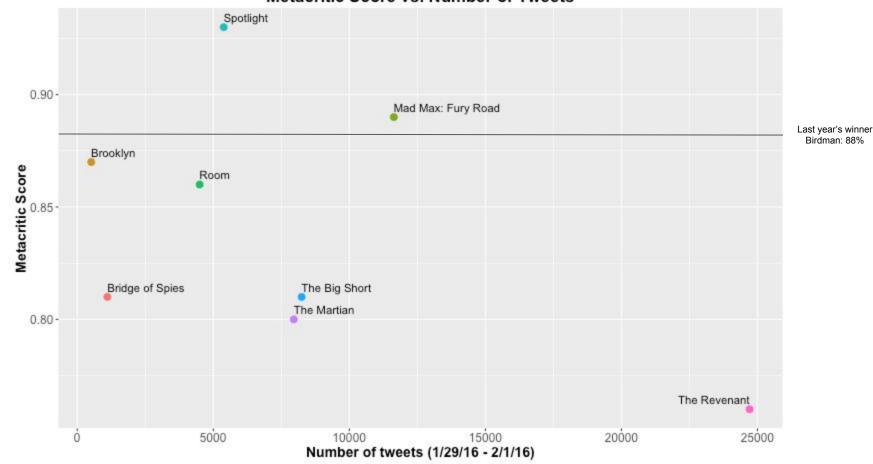
Box Office Earnings vs. Number of Tweets



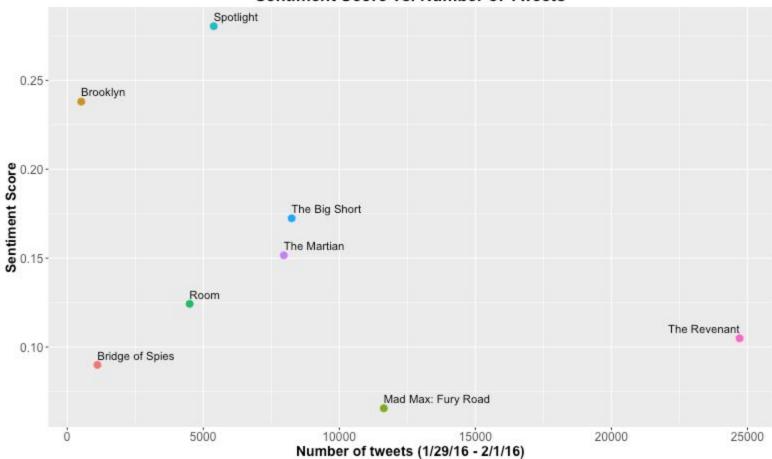
Rotten Tomatoes Score vs. Number of Tweets



Metacritic Score vs. Number of Tweets



Sentiment Score vs. Number of Tweets



Footnote: Sentiment scores are on a scale of -1 to 1. The plot only shows a portion of the full y-axis.

Topic Modeling: Larent Dirichelet Allocation (LDA)



rememb tookdog legend premier film ford david

TomHardy



MarkRuffalo



now crioscar kate winslet

LeoDicaprio



ChristianBale

E ryan Efellow canadian award end notebook hate Muladams

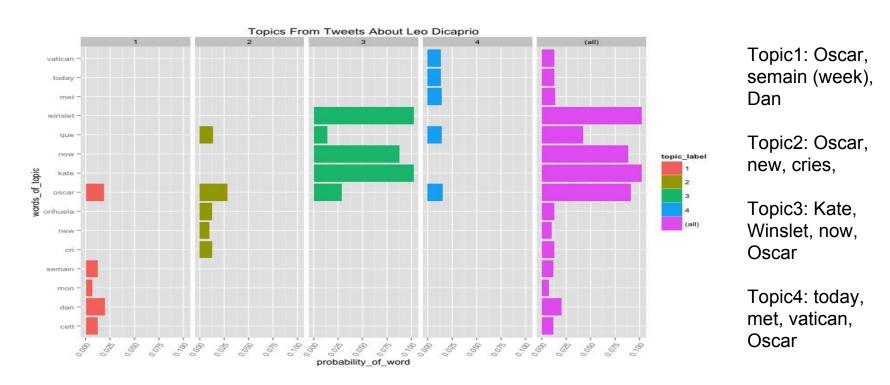


TomHanks

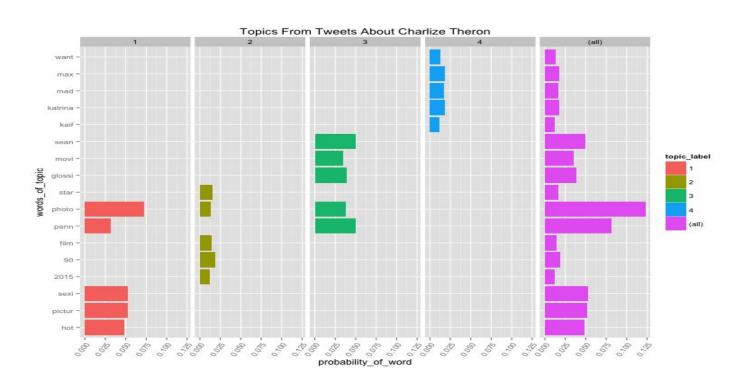
sexipictur star penn photo sean movi hot celebr Charlize Theron

help revolut treation of credit like streep hig stanley Tucci

Topics About Leo Dicaprio



Topics About Charlize Theron



Topic1: photo, picture, hot, sexy

Topic2: star, photo, film, 90, 2015

Topic3: sean, movie, glossy, photo, penn

Topic4: want, mad, max, katrina

Conclusion

Dataset	"Prediction"
Popularity of tweets from/about actors (Alanna)	Spotlight
Sentiment analysis (Mingyung)	Spotlight
Popularity of movies on twitter (Jiang)	Revenant
Critical reception (Dylan)	Spotlight or Brooklyn
Popularity of movies' account on twitter (Weiyan)	Revenant
Topic Modelling (Yun)	Revenant