Executive Summary:

The 2016 GOP race has garnered the public’s attention especially the debates. Fox News’ debate in Detroit is the highest viewed debate of the year at 16.9 million viewers. This is no surprise with the interest Donald Trump has gathered from the general public. Trump’s brash manner and lack of civility has ran counter to traditional political campaigns.

Our project tries to see if there is a correlation between how negative Trump is being compared to his rivals and public sentiment towards him. The workflow process was as follows:

1. We used transcripts from the Washington Post of three previous Republican Debates (Houston, Detroit, and Miami). With the help of Beautiful Soup (an HTML parser) we scraped these sites to build dictionaries of all words said by specific candidates during each debate.
2. The dictionaries were placed in a relational database to find keywords and then sent through Alchemy Sentiment API to get a confidence and sentiment score.
3. Due to Twitter locking down their publicly available data we were only able to analyze the last 10 days of data from Tweepy.
4. After both data sets were collected we assigned a weighting factor and then combined using SQL. From the sets we performed data visualization using pandas (MATPLOTLIB) and Tableau to showcase the trends and our findings.

To our surprise we found that Trump’s debate performances were not as negative as his running mates. Additionally, our expectation for positive public sentiment on Twitter was wrong as well. What we did find was that Trump dominated the digital space in sheer volume of tweets and re-tweets.

TOOLS USED:

Technologies/Tools used: Python, Beautiful Soup, Sentiment, TwitterAPI, Tweepy, MySQL, and Pandas/Tableau