Figure 1:

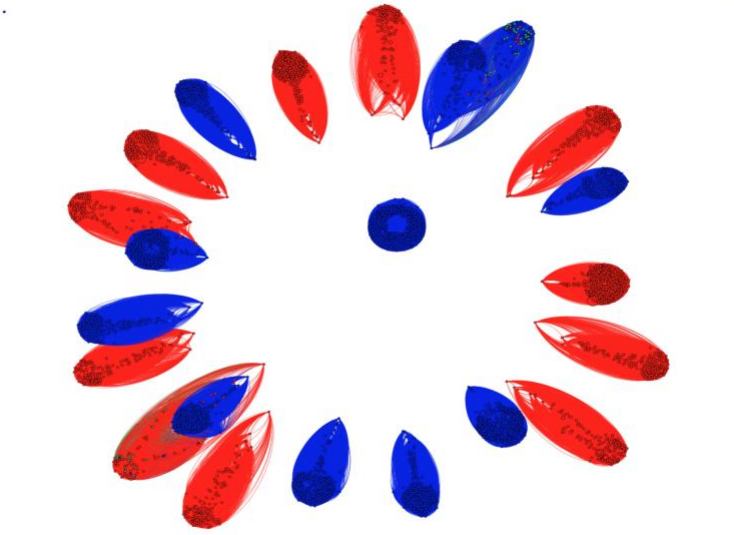
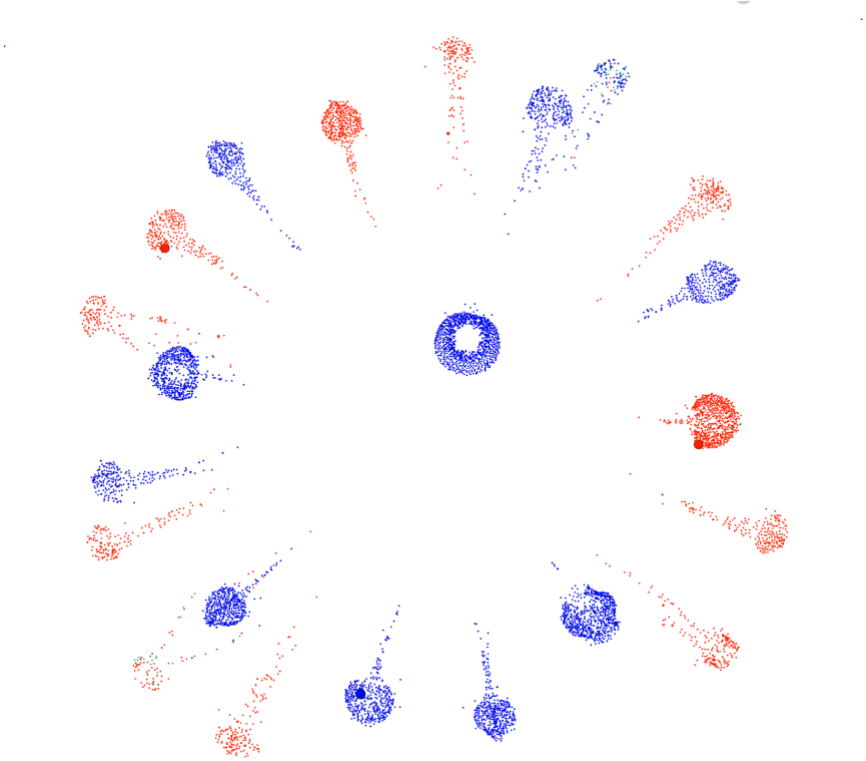


Figure 2:



It is quite clear that we find ourselves in a very divisive period in US politics. Twitter and other social media outlets have changed the way politics in this country works. It is in these transparent times that one's political opinion is more public than ever, causing much discourse in the online world. Donald Trump used social media to reach his supporters in 2016 in a way that no other politician has done. He used it as a direct line to his constituents' pockets. He is able to communicate to them directly instead of reaching the masses via a news outlet like most other politicians do. The number of consistent network and cable news viewers has declined since the emergence of online news sources.[1] Many people stay informed through social media and what is shared by their friends/follows. Social media not only serves as a news source for many, but also a forum for them to voice their opinion. In an attempt to better visualize this a network analysis was performed centered around how people from opposite ends of the political spectrum interact with each other on twitter. 21,494 tweets were collected that had the hashtag 'MuellerReport'. This hashtag was chosen because with the conclusion of Robert Mueller's Russia probe and the release of Attorney General William Barr's summary of Mueller's report, people rushed to social media to give their input on the subject. Like with any political issue, there is a level of bias in most of the tweets. The main purpose of the networks is to visualize this bias. It was clear that many supporters of the Trump administration were feeling vindicated. AG Barr's summary basically told the public there was no collusion between the Trump campaign and the Russian government.[2] Democrats widely urged the public to take Barr's summary with a grain of salt, as Barr was nominated for the role of Attorney General by the president. They raised caution as to whether his summary of the confidential report is to be trusted. Originally, the tweets were going to be sorted using the words used in the tweets themselves. This created an issue, as the common rhetoric among conservatives are too widely found in liberal tweets and vice versa.

To solve this, the algorithm utilized keywords associated with republicans (such as #trump2020 or #MAGA), and keywords associated with democrats(#resist or #bernie2020), and checked them against the bio of the user who made each tweet. Bios offer much more revealing information about the user rather than their tweets. Unfortunately, this meant the number of tweets that could be associated with a party was limited by the number of people with political keywords in their bio. Of the 21,494 total tweets, only 6,839 could be sorted into parties. There were 4,392 democrats and 2,447 Republicans. This set of 6,839 tweets were used to build the networks, with each tweet being a node. In the first network (Figure 1), the nodes are linked if they were tweeted on the same day and if they are of the same party. This resulted in 22 clusters aligned in a circular pattern. Organizing the network in this way made it clear which days had the most tweets for each party. For example, the largest grouping is the democratic tweets on March 26th. This cluster is located in the center of the network. The network shown without [2]the edges (Figure 2) emphasizes the size of each cluster. The two largest clusters are the blue one in

[1] "Trends and Facts on Network News | State of the News Media." Pew Research Center's Journalism Project. July 25, 2018. Accessed April 13, 2019. https://www.journalism.org/fact-sheet/network-news/.
[2] "March 24 2019 Letter to House and Senate Judiciary Committees." William Barr to House and Senate Judiciary Committees. March 24, 2019. Washington D.C.

the center, and the red one at 3 O'clock. These are both March 26th. This day seems to have the most tweets total. This could be because it was the first day tweets were collected, and Attorney General Barr's summary was released only days before.

Figure 3:

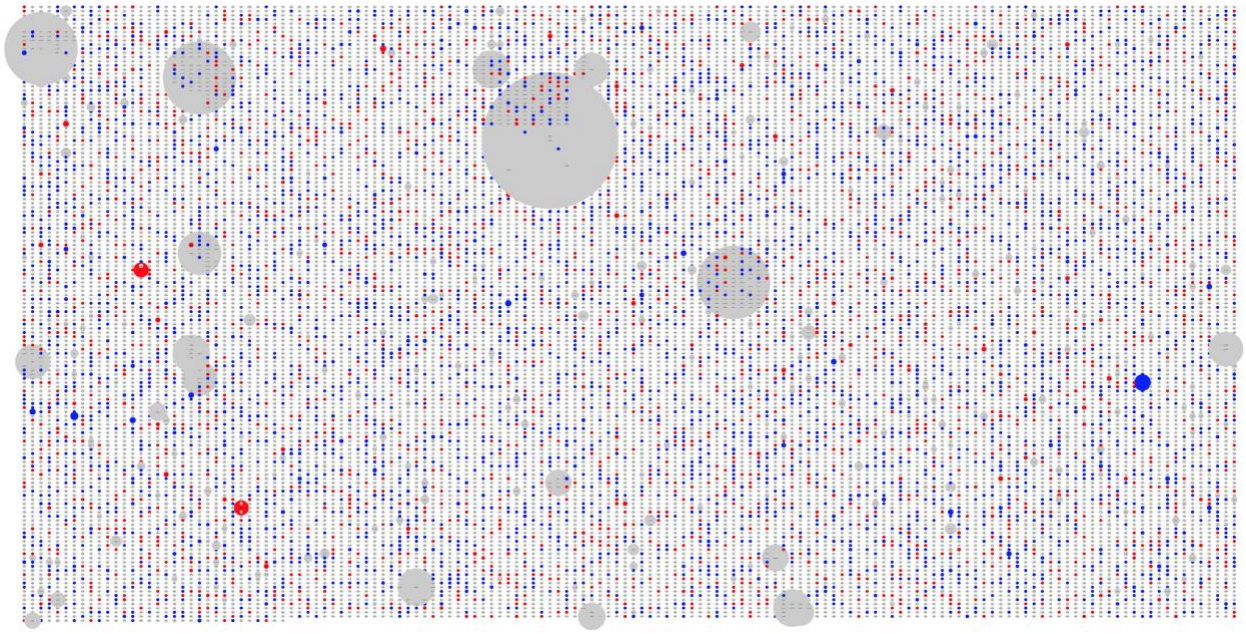
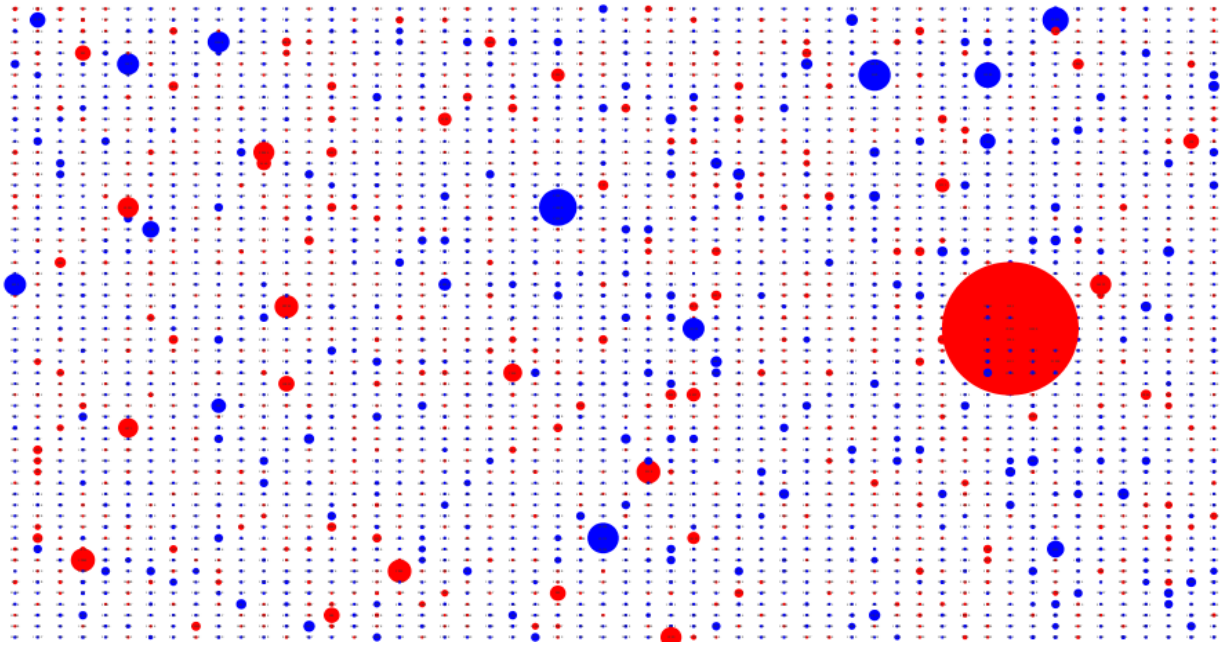


Figure 4:



The second network (Figure 3) has no links. Its purpose is to show the distribution of number of followers and the parties of those users. This is useful information because it helps determine the impact that that tweet had. The average number of followers in this dataset is 12,498, while the largest following is @jimmykimmel with over 11 Million followers (largest grey circle in Figure 3). The account with he second largest number of followers is @PerezHilton with about 6 million followers. Of just the tweets sorted into parties, the average number of followers drops to 9,369. This is because many of the high profile accounts like Jimmy Kimmel's do not have political keywords in their bio. The largest number of followers for the partisan dataset (depicted in Figure 4) is @DineshDSouza with just over 1 million followers. Dinesh D'Souza is a conservative political commentator whose tweet that was collected was promoting his upcoming appearance on Fox News in which he would discuss the Mueller report. The largest following for democrats is @TeaPainUSA, a liberal social media account with 400 thousand followers. The number of followers does not necessarily determine the number of people who saw that tweet. It's not the tweets from users that have the most followers that get seen the most, it's the tweets with the most retweets. Unfortunately, the API used to collect twitter data does not update the number of retweets after the data is collected. In most cases there are very few retweets because the data was collected moments after the tweet was posted. Having proper retweet data would be much more informative than just using followers to assess the impact of each tweet.

Figure 5:

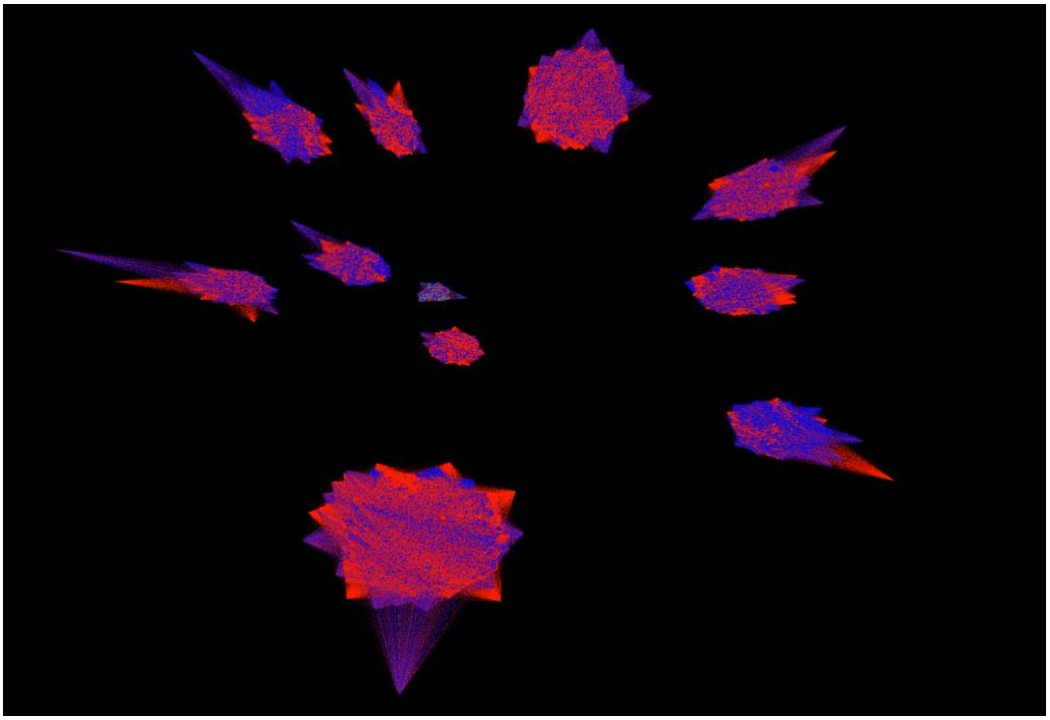
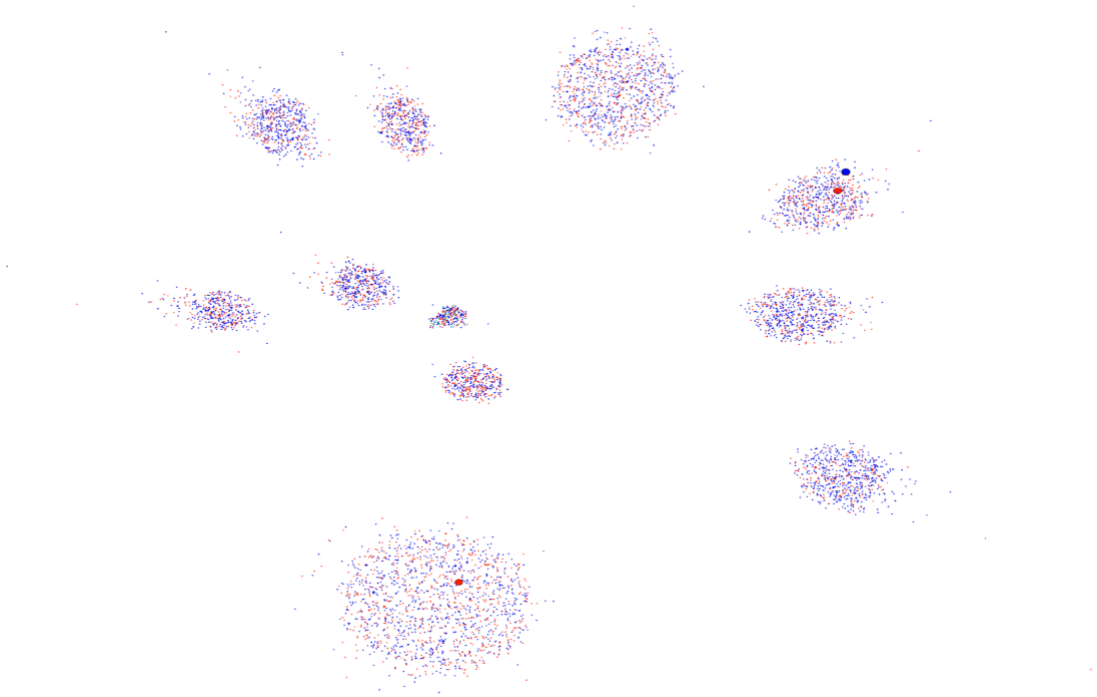


Figure 6:



The final network (Figures 5 and 6) is similar to the first one. The tweets are grouped only by the day which they were tweeted. This visualization shows which party tweeted more on each day. Figure 6 shows the network without the edges to make it easier to tell which party tweeted more. Over the 11 days, democrats made up the majority of tweets each day. The day with the highest percentage of liberal tweets was May 4th making up 77% of tweets that day. The highest percentage of republican tweets was 46% on March 31st. One thing to keep in mind when pondering this data is that the tweets that are associated with a party only make up a third of the entire dataset. Nearly all of the tweets with the hashtag 'MuellerReport' have some sort of political bias associated[3] with it, but just 32% of the tweets collected were included by the sorting algorithm.

For the most part, the high profile twitter accounts that were not sorted into parties are simply just reporting about the release of Barr's summary, not voicing an opinion. Many of them also are promoting upcoming events on tv or podcast that will have to do with the Mueller report. The majority of users who are actually voicing their opinion about the issue tend to have a smaller following. Smaller than Jimmy Kimmel and Perez Hilton that is. There are more than a few liberal and conservative twitter accounts with sizable followings. These are the tweets that usually get the most retweets. One twitter user will retweet another users message if it resonates with their beliefs, thus passing on the message to an even larger audience than just the following of the original poster. This is why proper retweet data would have been helpful in assessing the overall impact. However, with the data that was available, it was determined that the republicans had the two highest profile tweets from @DineshDSouza and @JudicialWatch. Democrats on the other hand, had the largest number of tweets total making up 64% of all sorted tweets. Considering how many people see some of these tweets, it is important to acknowledge the rhetoric used in them.

[3] "Network Evening News Viewership." Pew Research Center's Journalism Project. March 13, 2006. Accessed April 13, 2019. https://www.journalism.org/numbers/network-evening-news-viewership/.