

# TWITTER TREND ANALYSIS



Analyze the CAA protests using AI and NLP

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# Analyse the CAA protests using AI and NLP

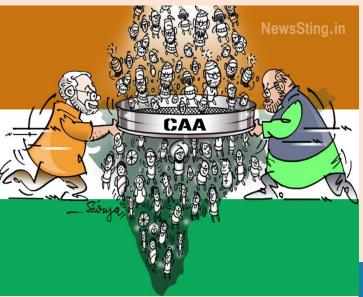
#### **PROBLEM STATEMENT**

Submit your Python code to analyze twitter trends. Your code will cover:

- a) Generate a word cloud based on the tweets
- b) Show the relative popularity of the hashtags
- c) Show which political figure had the maximum share of voice. An indicative list of personalities you can run this analysis for: Narendra Modi, Amit Shah, Mamata Banerjee, Prashant Kishore, Uddhav Thackeray, Yogi Adityanath. You can also track entities like JNU, AMU, Jamia Milia, IIT Chennai, Jadavpur University, TISS Mumbai.
- 2) Submit a detailed report explaining the steps you followed and clearly showing your outputs including all the graphs and charts.

#### **ABSTRACT**

Twitter is a huge social media platform. There are millions of tweets every day, ranging from politicians to celebrities. More than that, tweets allow us to gain insights into the online public behavior. As such, analyzing Twitter has become a crucial source of information for brands and agencies. Here we are going to analyze the CAA Protest using AI and NLP.





























## **METHODOLOGY**

# 1 a) Generate a word cloud based on the tweets

#### **Step 1: Import required Libraries**

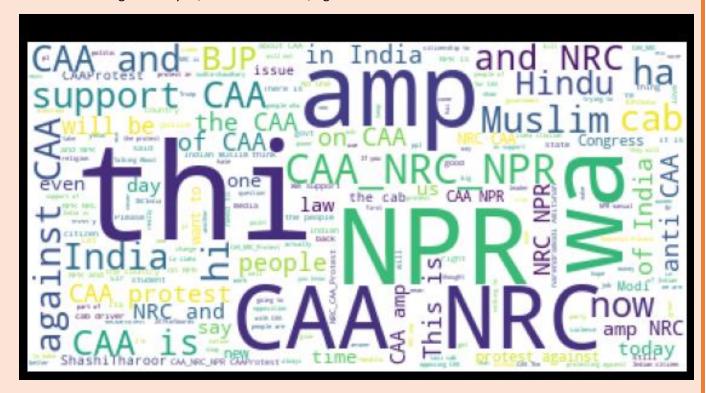
Libraries such as pandas, matplotlib, requests and re(regular Expressions are imported).

#### **Step 2: Importing the tweets**

Link for tweets: 'https://spotleai.sgp1.digitaloceanspaces.com/course/data/tweets\_nrc.txt'

## **Step 3: Constructing Word Cloud**

Using Matplotlib and Word cloud' Libraries we generate the word cloud. This can be modified according to different background styles, number of words, figure size etc.



We can see most common tweets like CAA, NPR, NRC, Hindu Muslim, against support etc.

# 1 b) Show the relative popularity of the hashtags

#### Step 4: Creating a hashtag list from tweets of politicians

Fetches all the hashtags from the file.

#### Step 5: Display the count in descending (popular to unpopular)















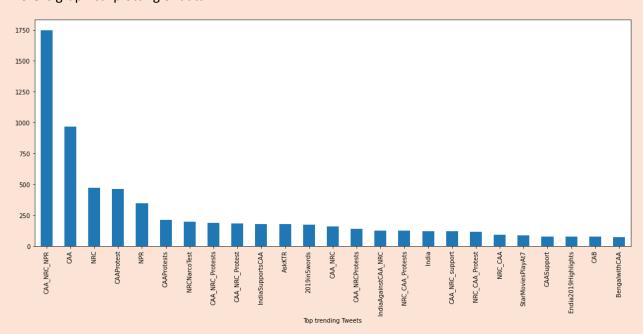




# Here is the list of top 25 tweets:

CAA NRC NPR 1	746
	968
	471
	460
NPR	344
CAAProtests	210
NRCNarcoTest	196
CAA NRC Protests	186
CAA_NRC_Protest	180
IndiaSupportsCAA	178
AskKTR	177
2019in5words	172
CAA_NRC	160
CAA_NRCProtests	138
IndiaAgainstCAA_NRC	126
NRC_CAA_Protests	124
India	120
CAA_NRC_support	120
NRC_CAA_Protest	114
NRC_CAA	92
StarMoviesPlayAt7	84
CAASupport	78
Endia2019Highlights	78
CAB	76
BengalwithCAA	73

Here is graphical plotting of data











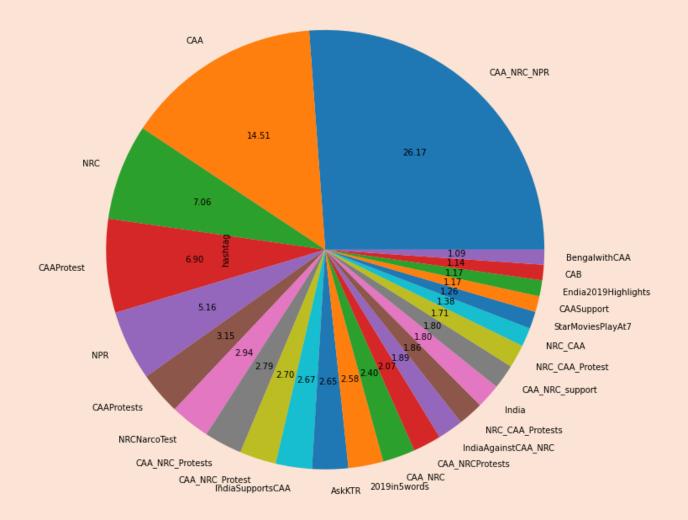












Here we can see the most trend topic is NRC< CAA and NPR and its related terminologies. The most widely used tweet is #CAA\_NRC\_NPR

# 1 c) Show which political figure had the maximum share of voice

## Step 8: Optimize the Tweets as per NLP

Here I used spacy to extract NLP out of tweets

# Step 9: function to find Political figure had the maximum share of voice

Here I created a function checkword to check if a string is subpart of another















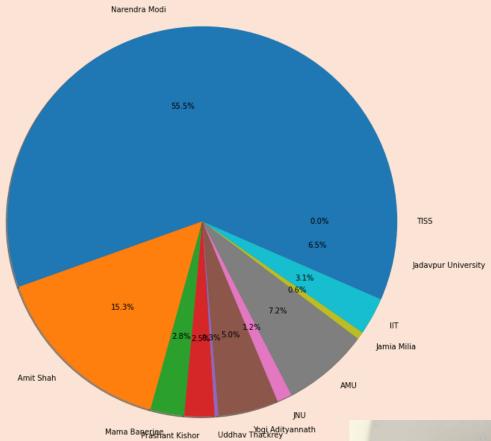




Output is as follows:

{'Modi': 178, 'Amitshah': 49, 'Mamata': 9, 'Prashant': 8, 'uddhav': 1, 'yogiadityanath': 16, 'JNU': 4, 'AMU': 23, 'Jamia Milia': 2, 'IIT': 10, 'Jadavpur': 21, 'TISS': 0}

Step 10: Plotting a Pie Chart of Political figure had the maximum share of voice



#### **OBSERVATION**

Hence, we can see Narendra Modi Shares the maximum

Voice by 55.5% followed by Amit Shah at 15.5%, whereas

TISS shared a lowest rating with 0%





