Major Project Proposal

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Finding Political Leanings of News and Media Organisations

Motivation

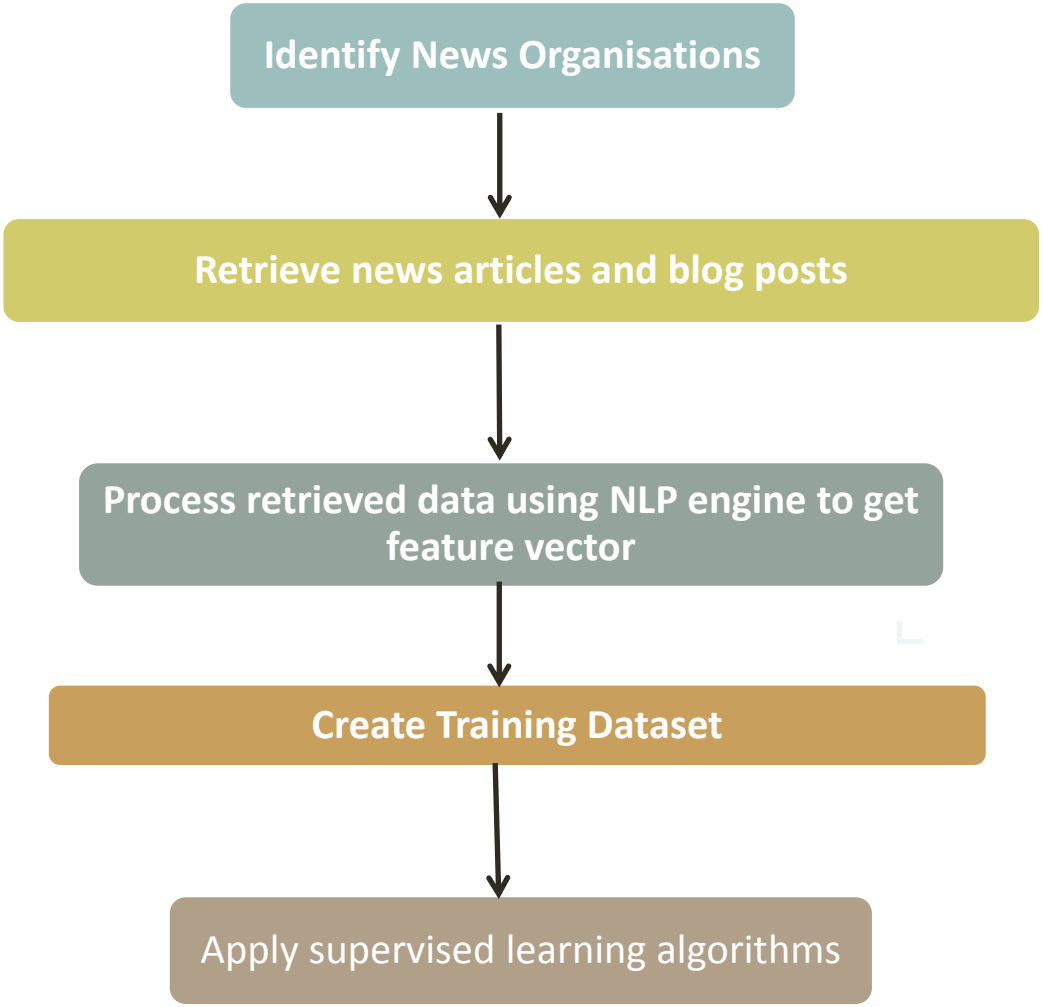
- In this era of digital and electronic media the content being generated by various news and media organizations has wide reaching effects and hence shape public opinion.
- Hence there is motivation for Political parties to use these means to promote their own propaganda.
- So the news content being generated everyday by different sources is often biased to favour one or the other political parties.

- We attempt to find the political leanings of various news websites, popular blogs
- We plan to do this for organizations within India
- Some challenges
  - Diverse groups of political parties existing in a multi party democracy like India
  - Multiple ethnicities of people having different political views
  - So the news and media organizations have to take well calculated stands on major political issues and appeal to their respective target audiences.

How we plan to do this

- Machine Learning Approach
- Graph Approach

Machine Learning Approach



Identify News Organizations

- These could be any organizations like
  - CNN IBN
  - Aaj Tak
  - NDTV
  - Times Now
  - Times Of India
  - The Hindu

Retrieve Posts

- We can pull the data from the respective sources using
  - Twitter handles
  - Website articles
  - Meme’s / Cartoons appearing in the newspapers


NO PROBLEM. I AM USED TO IT!
UPA2
CBI
TAINTED MINISTERS
SCAMS
CORRUPTION


And I had just unpacked !!....
I AM EX CM
Resign


SEE. OUR TIES ARE INTACT
CORRUPTION
MANJUL

NLP Engine

- We process the articles that we pulled by passing them through an NLP engine like Alchemy API or TextRazor API.
- This gives us the semantic and syntactic structure of the article
- Using the above obtained structure we generate feature Vectors

Manually Annotate Articles

- We then manually annotate some articles to have a given bias
- Ex:
  - Rahul Gandhi having born into the powerful Gandhi family has always led a luxurious lifestyle. He was caught sleeping in the parliament showing his seriousness towards the proceedings of the house
  - The above article has a strong anti congress bias

Apply Learning Algorithms

- Use the training data obtained by manually annotating articles to learn the bias for newer articles.

Graph Approach

- We model the data as a social graph . With the nodes in the graph being
  - News Organisations
  - Writers
  - News Readers/TV Anchors
  - Political Entities
  - Articles
  - Ideologies

News Organisations

- The Hindu
- CNN IBN
- Times of India
- India Today
- Outlook
- The Economic Times
- The Indian Express

Writers

- Swapan Dasgupta
- Ramchandra Guha
- Yogendra Yadav
- Chandan Mitra

News Readers/TV Anchors

- Palki Sharma
- Arnab Goswami
- Barkha Dutt
- Rajdeep Sardesai
- Prannoy Roy

Political Entities

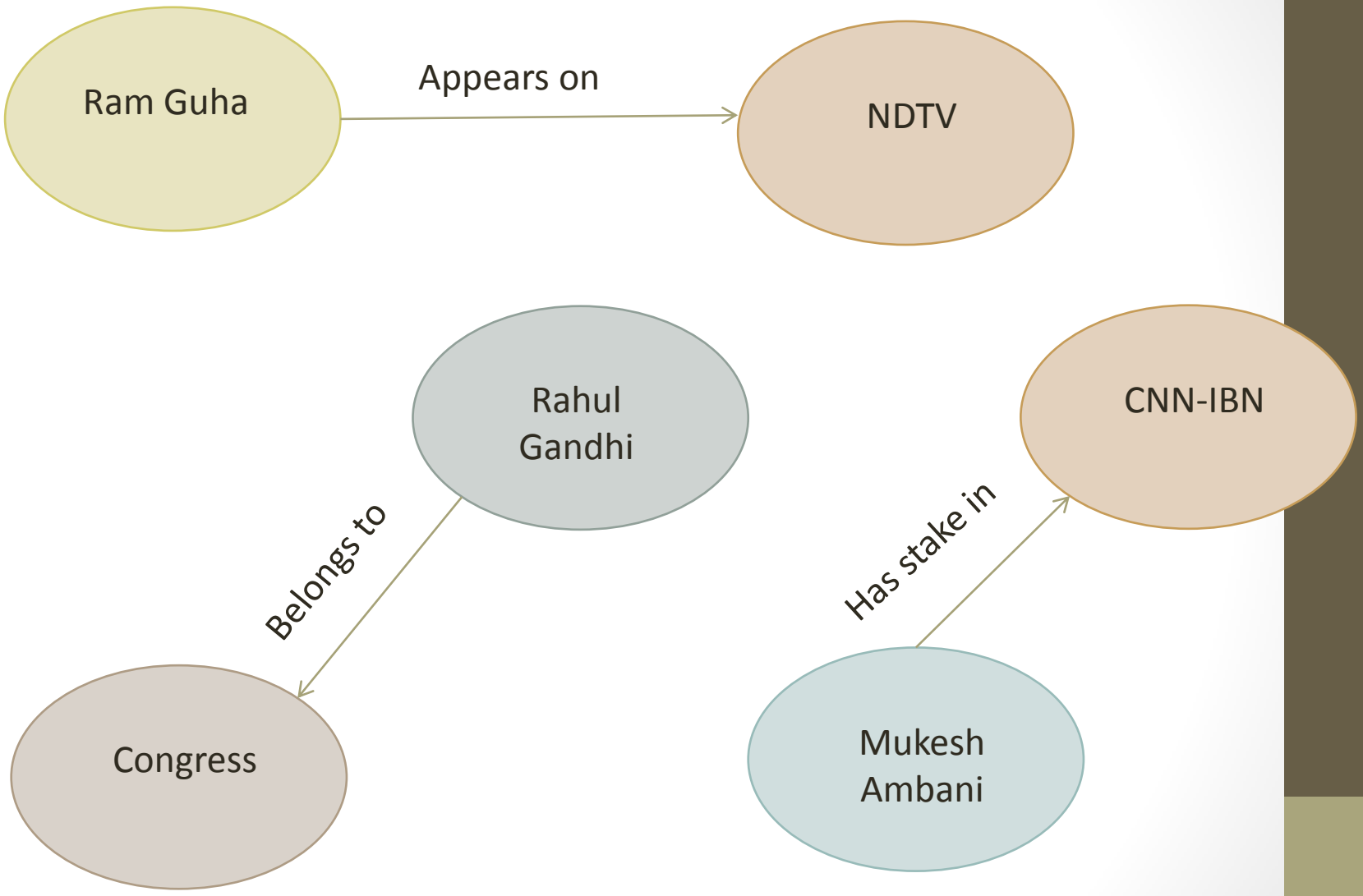
- Political Parties
  - INC
  - BJP
  - AAP
  - CPI(M)
  - JD(U)
- Politicians
  - Narendra Modi
  - Karunanidhi
  - Sonia Gandhi
- Political Funders
  - Adani
  - Ambani

Ideologies

- Left
- Marxist
- Right Wing
- Center Left
- Center Right

Edges Between the Nodes

- The different edges between the nodes can be as below
  - Writer ***- WRITES FOR->*** News Organization
  - Writer ***-INCLINED TO->*** Political Party
  - Political Party ***–HAS->*** Ideology
  - Politician ***–BELONGS TO->*** Political Party
  - ...
- The weight between the edges can be decided based on different parameters like the no. of articles written by writer for the news organisation etc.
- Using all the above edges and graph structure we try to predict the below link
  - News Organization ***–BIASED TO->*** Political Party


Ram Guha
Appears on
NDTV
Rahul Gandhi
Belongs to
Congress
CNN-IBN
Has stake in
Mukesh Ambani

Thank You