r/MiningReddit

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Initial Questions

- What words were used most in r/politics?
- How did r/politics users comment in other subreddits?
- Who were the most influential users in the r/politics?
- What does the comment distribution through the month of January look like?
- What are user sentiment on specific political topics?

Tools

- JSON
  - Initial format of the data
  - Easy for machine to read
  - Can be parsed into another format like CSV
- Python
  - Code is easy to read and understand
  - Large library
- WEKA
  - Text mining of Single User and r/politics
  - Quick results once the format is learned
- CSV
  - This format has more order
  - Graphing and plotting is easier with this format

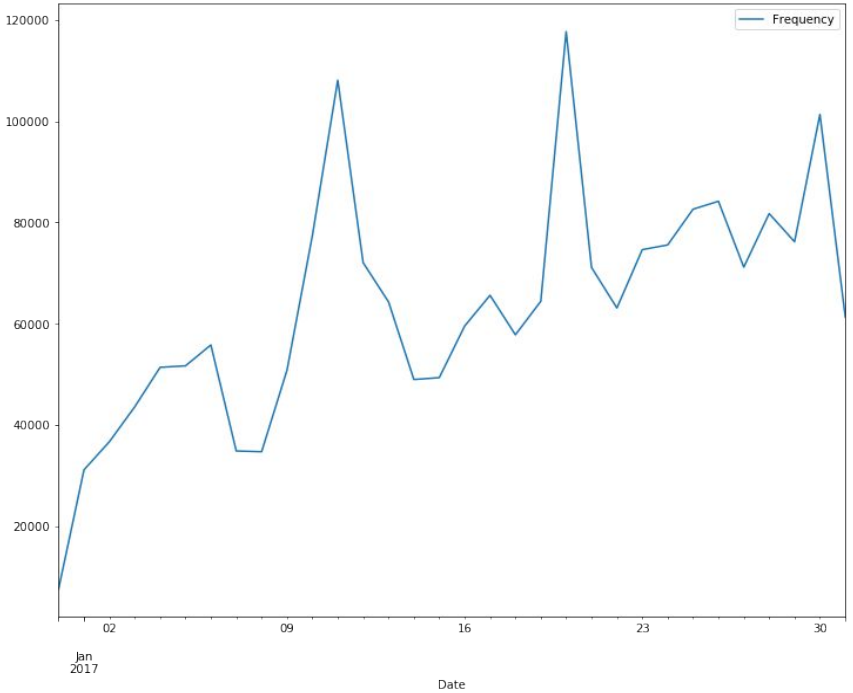
Data Preprocessing

- Sampling
  - Our dataset was a massive 42GB
  - Sampling allowed us to test our source code on a manageable size
- Data Cleaning
  - Dates has to be cleaned
  - Non-ascii characters
  - Unix timestamps conversion
- Data Reduction
  - Reduced our large JSON file to multiple smaller JSON files

Results

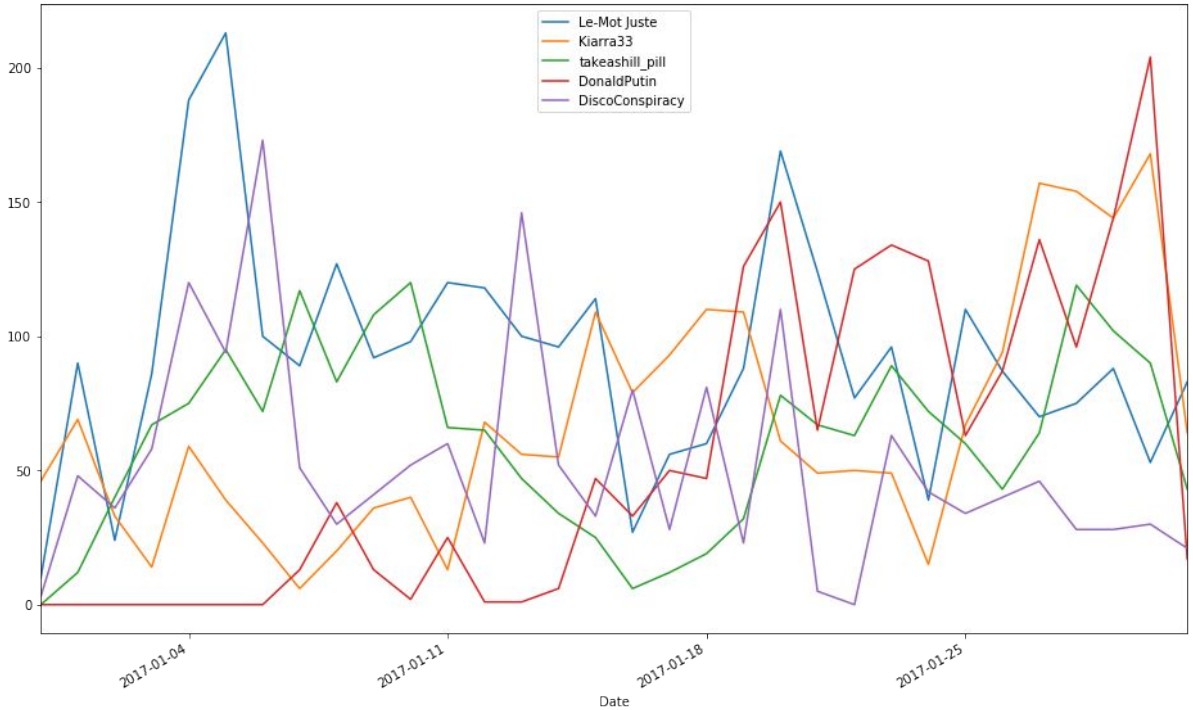
- Timeseries of the all the comments on Politics subreddit
  - January 11-12
    - President Obama's Farewell Address
  - January 20
    - Inaguration

r/ Politics Comments Timeseries

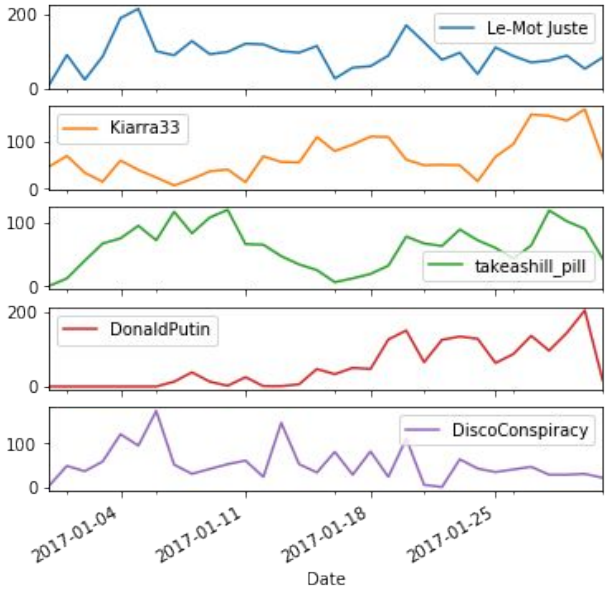


Behaviour of Top Influencers in r/ Politics

Timeseries of comments per user(s)



Time Series of comments per user



Findings and Applications

- Top influencers post times are unique compared to whole dataset
- Certain patterns were noticed for individual influencers
  - “Assange, Russia, News”, Correlation
  - “Russia, Russian, Election, Free”
    - Worried that the election was influenced by Russia
- Top influencers usually only have one highly score comment
  - Constantly changing influencers
- We can look at the subreddits influencers use and make assumptions
  - Kiarra33 as a Bernie supporter