

IDEA 1:**Project title 1 (Descriptive title that captures your idea1)**

Detection of Fake News on Social Media Websites (Twitter, Facebook, Reddit)

What you want to do?

Develop a tool/model that can accurately detect fake news content posted online and further analyze it to determine characteristics of fake news (how often it is shared, characteristics of users who are more likely to spread it etc.). I have an inclination for detecting political fake news. The research question I am trying to answer is - how can we accurately detect fake news from real content posted on social media platforms?

Why should we care?

Since the 2016 US Elections there has been a huge debate on how fake news and polarized content spreading on Facebook led to influencing the results of the presidential election. Over 3 million Russian troll tweets were identified by Twitter in trying to polarize opinions during the elections. Studies have been conflicted about the extent of the impact of fake news spreading during this event, but there is no doubt that if left unchecked, there is potential for fake news to impact millions of people. Thus, it is important to be able to figure out ways to effectively detect fake news and stop its spread early in the network.

Keywords – To mark topic and domain of the idea.

Fake news detection, social media fake news, machine learning

IDEA 2:

Project title 2 (Descriptive title that captures your idea2)

Detection of Hateful/Offensive content on Social Media

What you want to do?

Develop a tool that can detect hateful/offensive content on social media, identify patterns in hateful content, categorize hateful content (racist, sexist etc), and identify where group/community hatred is being spread. (for example, identifying groups on Facebook whose members are focused on spreading racist hate). While it may not be possible to answer all these questions through a single analysis, I would focus on a couple of aspects from above depending on the data and resources available.

Why should we care?

Hateful thoughts and ideas should not have a place to spread/grow in society. Moreover, one of the main reasons for identifying hateful content on social media is –

- 1. It can incite people towards violence*
- 2. Targets of hateful content can develop mental/psychological issues*

It is especially dangerous since any kind of content has the potential to spread fast on social media. Detecting hateful content can be especially useful in predicting violence or other illegal activities and social media websites + law enforcement can use this information to predict/prevent crimes.

Keywords – To mark topic and domain of the idea.

Hateful content detection, identifying hate categories, machine learning, text analysis, Social media mining