IDEA 1:

Project title 1 (Descriptive title that captures your idea1)

Your response

Auto hate speech detector

What you want to do?

Your response. Longer response that provides a bit more description than what's in the title. ***NOTE****: Focus on the problem that you are trying to solve. Think in terms of driving research questions (RQs). You don't have to focus on methods at this stage. For e.g., your answer should not start with.. "Using sentiment analysis, I would do this…", "I wish to use unsupervised learning methodology for this task"*

I would like to build an auto hate speech detector that can identify hate speech in online communities. Different from rule-based models, which cannot update their hate speech lexicons over time, I want to build an automatic hate speech detector that can adapt over time. This adaptive behavior will be crucial since hate speech will also be adapting over time, so the machines should also learn the patterns of new hate speech. Delving deeper into technical details, I think this project will be built based on semi-supervised learning and use current hate speech lexicons as starting points.

Why should we care?

Your response. Provide a motivation of why this project is worth pursuing? That is, if you are successful, what difference will it make?

Hate speech detection is a critical issue in online communities as political polarization has become a worrying issue since the past few years. Social medias platforms such as Facebook and Twitter need to take extra efforts to deal with the increasing amount of hate speech. Therefore, an auto hate speech detector would be extremely useful for these companies. More importantly, this auto hate speech detector can adapt over time so that it can combat new hate speech promptly.

Keywords – To mark topic and domain of the idea.

Your response. Comma separated keywords

hate speech, text classification, natural language processing

IDEA 2:

Project title 2 (Descriptive title that captures your idea2)

Your response

Spread of information in online communities

What you want to do?

Your response. Longer response that provides a bit more description that what you have in the title

I would like to research how different kinds of information spread in online communities. For instance, if a new meme was posted on r/meme on reddit, how many people can it reach in three days? Is there a difference between the spreading speed of a news posted on r/news and a meme posted on r/meme? For a controlled comparison, we may compare how a sports news spread in r/news and r/sports. In summary, I would like to investigate the followings:

- Spreading speed of different kinds of information media (e.g., text vs. image)
- Spreading speed of different content (e.g., real vs. fake news)
- Spreading speed of information in different subcommunities
- Spreading patterns/routes of different kinds of information

Note that we need a good definition for "speed" before investigating these issues.

Why should we care?

Your response. Provide a motivation of why this project is worth pursuing? That is, if you are successful, what difference will it make?

In terms of marketing and public relations, it is important to know how different media spread in different communities to plan better online strategies. Another point of interest will be fake news. To combat fake news, we need to identify their spreading pattern, and use better media and strategy to spread the true information against them.

Keywords – To mark topic and domain of the idea.

Your response. Comma separated keywords

news and misinformation, online communities