CS9.435 Computational Social Science
End-Semester Exam

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Q1 [9 marks]
Read the paper Lewis, Kevin, Marco Gonzalez, and Jason Kaufman. 2012. "Social Selection and
Peer Influence in an Online Social Network." Proceedings of the National Academy of Sciences of
the USA 109 (1):68–72. Read only until end of Discussion section page 3 / 5.

a) The social sciences investigate the overall behavior of organizations, communities, and societies, as well as their interactions and changes across time. This work exhibits a feature of computational social science in that it examines the reasons for similarity and homogeneity among friends rather than random individuals. It comprehends social ties and strives to ascertain preferences that transcend a length of time. The computing section focuses on building distinct social networks and then using this data to develop a comparison between the patterns among friend picks, shared liking, and influence.Overall, the article examines the dynamics of friendship through time, which validates the CSS portion of the paper.

b) I've done the following work in three areas as example :

Music:- The existence of an asterisk on the right hand side signifies the presence of a strong coefficient in the case of lite/classical rock, showing that students have a strong inclination to pick their peers based on similar likes. In terms of effect, students who enjoy classical/jazz are more likely to identify with and support their peer's tastes.

Movies:- Dark satire and bawdy comedy/gore fans are more likely to be pals for a long time.No such conclusion can be reached in the event of influence.

Books:- There is no such conclusion to be reached in the situation of both selection and influence.

c) The following are some strategies for improving the paper:

- According to a research done several years ago, student tastes have changed dramatically. As a result, I believe that the categories of preferences should be changed from books, movies, and music to sports, gaming, fashion, computers, books, movies, and music. This would aid in the depiction of clusters and networks, allowing for the analysis of various patterns that emerge between them.
- It is crucial to analyze the selection and impact of friends based on soft features such as shared emotions, common characters, common values, and common aspirations that they debate and share on social platforms, taking into mind that choosing of friends does not simply depend on hobby or leisure interests such as books, music, and movies.

Q2 [8 marks]

Look at slide 15, 16 in CS9.435-Lecture-24-CSS-Social-Elections-April-2022-Joyojeet Pal.pptx
shared with you

a) On slide 15, the observation that can be made about Akhilesh Yadav is that he looks to want to build a connection with them in order to gain their Favour, as he is shown posing with them. Politicians, like other society characters, want higher exposure in order to market themselves, requiring the development of this political culture. This might be considered a marketing strategy.

In the morning, Narendra Modi may be seen plogging, which is an observation that can be made. This illustrates that, as India's Prime Minister, he is not just exercising and encouraging health and fitness, but also promoting cleanliness.

Piyush Goyal may be described as seeming to be at an event, which is essential for him to portray himself as a socially engaged politician.

On slide 16, Narendra Modi is depicted practicing yoga, which enhances health and fitness. Political culture is important in allowing people to engage with him on this level as a public person and active politician. He may be seen photographing ducks in the next snap. He appears to be artistic, and he spends a lot of time photographing. This culture is necessary if he is to be depicted as a calm, nature-loving individual. In the photo after that, he can be seen reading the newspaper while surrounded by ducks.He enjoys reading the news and learning about the world, as can be seen.This is required in order to show him as competent and well-informed. He is shown working on a laptop in the following shot, creating the idea that he is a morning professional, meaning that he gets up early and works efficiently. The purpose of this presentation is to depict him as a hardworking person who also likes reading.

Q3

We discussed IRB extensively in class.
a)

Institutional Review Board

Application for Analysis of UP politician's twitter
activity during UP elections

International Institute of information Technology
Hyderabad

About Project

In this project we are analyzing the twitter activity of different political leaders and how this activity is affecting the result of the election. Different Patry and party members take help of different social media platform like twitter, Facebook etc. to increase the number of votes they will get in the election. We collected two dataset (Tweets of Different politicians of different party) from twitter for analysis , one is before election dataset and another one id after election dataset. Using these dataset, we analyzed how "**Different parties trying to bring more attention to party and make people more engaged in the twitter**" and "**Election results revolve around Top leaders of different political parties**"

Project and Human Involvement

- Humans are not directly involved in this project.

- But indirectly because we collected tweets of the different politicians.

- We collected data according to the policies of the twitter.

- Conducted a survey to know most famous politicians.

- This project does not violet any ethical norms.

Project and IRB role

- We collected data : the tweets of the politicians of the different parties for analysis.

- We are doing the analysis locally and on our personal machines.

- There is no public platform where our data can be accessed.

Project and IRB role

- **Selected BJP politicians randomly from the list of the politicians.**

- **Selected both Popular and less popular politicians to reduce the bias.**

- **Elections are in some sense decided by top political leaders. Since most people know only a subset of the politician (or the big names of the party) and they vote according to that only.**

Project and IRB role

Validation:

- All the finding and the analysis of the hypothesis will be made available for the public.

- Results will be examined manually and by machine learning professionals.

- The researchers will issue a disclaimer about fair means, which will be published.

Thankyou

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- M.Tech CSE 1st Year

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