

DSCI 510 Final Project – APPENDIX

Variable list and explanation

<u>Variable Name in py files</u>	<u>Variable definition</u>	<u>Variable source</u>
<u>mid</u>	Unique numbe of each post	Raw data without cleaning
<u>uid</u>	User ID	Raw data without cleaning
<u>Comments count/likes/reposts</u>	Number of comments/likes/reposts	Raw data without cleaning
<u>Text</u>	Post text content	Translated from original posts with Google translate api
<u>textlength</u>	Number of words in a text	Counted based on the text splitting result of Spacy
<u>Moral_score</u>	A measurement considering bot moral and immoral judgement words into accounr	Computed through constructing a semantic graph of all tokens in a post. Moral_score = centrality of the token in a graph * the moral label of that word in the moral judgement dictionary (1 for moral, -1 for immoral, 0 for other)
<u>Moral_wc</u>	Number of moral judgement word	Counted based on dictionary developed by SoCo Lab https://aclanthology.org/2020.ccl-1.50/
<u>Immoral_wc</u>	Number of immoral judgement word	Counted based on dictionary developed by SoCo Lab https://aclanthology.org/2020.ccl-1.50/
<u>Positive_prob</u>	Sentiment score measuring the probability of a text expressing positive emotions	Calculated by calling SnowNLP methods
<u>Average commenter follow</u>	Average number of following accounts of all commenters below a source post	= Sum(commenter following number)/comment count
<u>Average commenter follower</u>	Average number of followers of all commenters below a source post	= Sum(commenter follower number)/comment count
<u>Average moral word</u>	Average number of moral judgement words of all comments below a source post	= Sum(moral word count of each comment)/comment count
<u>Average immoral word</u>	Average number of immoral judgement words of all comments below a source post	=Sum(immoral word count of each comment)/comment count

<u>Commenter_gender_ratio</u>	Proportion of male commenters among all below a source post	= count(male commenter)/count(female commenter)
<u>Positive_negative_ratio</u>	Ratio of positive comments and negative ones below a source post	Define positive probability > 50% as a positive comment, and below 50% as negative comment. Divide positive comment number by the negative comment number.
<u>Average_text_length</u>	Average number of Chinese words below a source post	Counted based on Spacy word splitting.
<u>Average_moral_score</u>	Average moral score of all comments below a source post	Computed with same method with moral score in source post for each comment and get the mean value.
<u>Keyword_code</u>	The keywords used to get every source post, indicating the general topic of posts and comments	Categorical variable with 7 levels. a) Openai b) AI risk c) Post deletion d) Sexual assault e) Homeless dogs hurt f) Cat abusing g) Du Meizhu scandal