Title: Can We Track Pro-Ukrainian Sentiment Through Tweets?

1

Problem Statement

What problem are you trying to solve? What larger issues do the problem address?

The goal is to determine if we can track public support for Ukraine through tweets. Public support is essential to success for Ukraine in the war against Russia.

2

Outcomes/Predictions

What prediction(s) did you make? Identify applicable predictor (X) and/or target (y) variables

The date (before or after the invasion) is likely to impact sentiment. The search phrase used to find the tweet ('Stand with Ukraine' or 'Russian Troops' is likely to correlate with sentiment.) 3

Data Acquisition

Where are you sourcing your data from? What is the dimension? Any missing values?

Variable	Value
Data Source	kaggle
Rows #	56000
Columns #	7
Numerical Cols #	4
Categorical Cols #	3
Missing Values Present #	0
Outliers?#	NA

4

Data Preparation

What data preparation do you plan to do before modeling?

Tweets were classified as either Pro-Ukraine or Other using TextBlob. This was the target variable. There were 7 predictor variables, transformed doing OneHotEncoder and StandardScaler.

5

Modeling

Which models would you be trying out?

TextBlob for sentiment analysis. Logistic Regression, KNN and decision tree models to classify texts. 6

Model Evaluation

How would you evaluate your model's performance? Results?

Split the data into training and test sets. Compare accuracy on the test set predictions. Results are compared with a baseline model.