"what's trending"

- ## Problem Statement

Twitter is a major source of information, widely used and very influential platform for any kind of political/social movement. The movements from Twitter are run with the help of Twitter trends. Unfortunately, nowadays majority of Twitter trends are not authentic which results in fake movements that seem to be supported by millions of people.

- ## Motivation

The researchers from the Swiss university chose the social media platform Twitter as their test field and observed over 19,000 unique fake trends promoted by over 108,000 accounts. These included fake and compromised accounts, which are accounts of people whose credentials have been stolen.

According to the study, this new type of astroturfing attack accounts for at least 20% of Twitter's global "Top 10" trends, most of the time generated by automated bots. One important point that the study touches upon is that Twitter's algorithm counts the use of the hashtag whether the tweet is later deleted, a loophole that these attacks abuse frequently.

The researchers found that 47% of local trends in Turkey and 20% of global trends are fake, created from scratch by bots.

- ## Features

1) Fake/Paid/Original Twitter Trend Recognition

The system will predict the health of the trends based on the account taking part in trend and some other factors by using AI/ML.

2) Statistical Analysis of Twitter Trends

The statistical analysis includes the trend timeline, growth rate, growth region, no. of tweets, activity graph etc.

3) Statistical Analysis of Twitter Account

The account analysis includes the joining date, number of followers, tweets, tweets average, tweets ratio (media/ text), activity graph, account growth rate etc.

4) Bot Account Recognition

The system will identify the account is being operated by human or by computer.

- ## Features under consideration (time needed to confirm these features)

1) Trend Lifetime Predictions

The lifetime of the active trend can be predicted with help of AI/ML and statistical analysis.

2) Sentiment Estimation

The public sentiment in trends with help of natural language processing.

3) Platform Estimation

The device or platform being used in what capacity to talk about the specific trending topic.

4) Conjoint Estimation

The estimation of two or more trending topics being used together and then treat them as one for analysis part.