

## Fake News Detection Using Topic Authenticity

## Description

## Researchers

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Researchers propose an approach for the detection of fake news in online social media (OSM). The approach is based on the authenticity of online discussions published by fake news promoters and legitimate accounts. Authenticity is quantified using a machine learning (ML) classifier that distinguishes between fake news promoters and legitimate accounts. They also propose novel link prediction features that were shown to be useful for classification. These include processes used to divide the dataset into categories representing topics or online discussions and measuring the authenticity of online discussions is provided. Using new data collection methods for OSM, they retrieved accounts and their posts in order to train traditional ML classifier, and developed guidelines for manually labeling accounts. The proposed approach is demonstrated using a Twitter pro-ISIS fanboy dataset provided by Kaggle. The results show that this method can successfully distinguish between the false "authenticity" from fake news promoters, and legitimate accounts. Thus, the suggested approach is effective for discriminating between topics that were strongly promoted by fake news promoters and those that attracted authentic public interest.