

## The Impact of Recurring Events in Fake News Detection

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**Abstract :** Detection of Fake news and missing information is gaining popularity, especially after the advancement in social media and online news platforms. Social media platforms are the main and speediest source of fake news propagation, whereas online news websites contribute to fake news dissipation. In this study, we propose a framework to detect fake news using the temporal features of text and consider user feedback to identify whether the news is fake or not. In recent studies, the temporal features in text documents gain valuable consideration from Natural Language Processing and user feedback and only try to classify the textual data as fake or true. This research article indicates the impact of recurring and non-recurring events on fake and true news. We use two models BERT and Bi-LSTM to investigate, and it is concluded from BERT we get better results and 70% of true news are recurring and rest of 30% are non-recurring.

**Keywords :** natural language processing, fake news detection, machine learning, Bi-LSTM

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