

Machine Learning Based Fake News Detection

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Abstract: *Consumption of news via social media, It is a two-edged sword. On one hand, consumers use social media to look for and consume news because of its low cost, ease of access, and rapid transmission of information. On the other side, it facilitates the widespread distribution of fake news, which is low-quality news that contains purposely misleading material. False news that is widely disseminated has the potential to have extremely negative consequences for both individuals and society. As a result, the identification of false news in social media has recently become a hot topic of research. False information about social media detection has unique characteristics and obstacles that render classic media detection algorithms ineffective or inapplicable. First, false news is purposefully designed to fool readers into believing false information, making it difficult to deconstruct and discover based on news content; as a result, we need to integrate auxiliary information, such as users' social commitments in social media, to aid in making a conclusion. Second, utilising this auxiliary data is difficult in and of itself, as users' social commitments to false news result in data that is huge, fragmentary, unstructured, and loud. We undertook this poll to continue to promote research on the subject of detecting false news in social media, which is both complex and relevant. We provide a complete analysis of detecting false news on social media in this survey, which includes fake news characterizations based on psychology and social theories, existing data mining techniques, evaluation criteria, and sample datasets. We also talk about adjacent study topics, open difficulties, and future research paths for social media fake news identification.*

Keywords: Fake News, User Profile, Trust Analysis, Machine Learning, Social Media

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