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Political Fake News Detection from Different News Source on Title Social Media using Machine Learning Techniques Mahfujur Rahman, Mehedi Hasan, Md Masum Billah, Rukaiya Author(s) Jahan Sajuti Name Contact Email(s) mahfuj@aiub.edu **Published** Journal Name AIUB Journal of Science and Engineering (AJSE) Type of Publication Journal Volume 21 **Issue Publisher** AIUB Journal of Science and Engineering (AJSE) **Publication** Date November 23, 2022 **ISSN** 1608 – 3679 (print) 2520 – 4890 (Online) DOI https://doi.org/10.53799/ajse.v21i1.383 **URL** https://doi.org/10.53799/ajse.v21i1.383 Other Related Page No: 70-77 Info.



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Abstract

People are more dependable on online news systems than ever in this modern time and day. The more people depend on online news, magazines, and journals, the more likely it will have more significant consequences of fake news or rumors. In the era of social networking, it has become a significant problem that negatively influences society. The fact is that the internet has become more accessible than ever, and its uses have increased exponentially. From 2005 to 2020, overall web users have increased from 1.1 billion to 3.96 billion [16]. As most individuals' primary sources are microblogging networks, fake news spreads faster than ever. Thus it has become very complicated to detect fake news over the internet. For that purpose, we have used four traditional machine learning (ML) algorithms and long short-term memory (LSTM) methods. The four traditional methods are as follows logistic regression (LR), decision tree (DT) classification, k-nearest neighbors (KNN) classification, and naive bayes (NB) classification. To conduct this experiment, we first implemented four traditional machine learning methods. Then we trained our dataset with LSTM and Bi-LSTM (bidirectional long-short term memory) to get the best-optimized result. This paper experimented with four traditional methods and two deep learning models to find the best models for detecting fake news. In our research, we can see that, from four traditional methods, logistic regression performs best and generate 96% accuracy, and the Bi-LSTM model can generate 99% accuracy, which outbreaks all previous scores.