

Title: Supervised Machine Learning Approaches to Identify the False and True News from Social Media Data

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Abstract: The increasing number of online communities and social platforms like Twitter and Facebook has facilitated a level of information sharing never before seen in human history. Consumers are generating and sharing more data than ever before thanks to the proliferation of social media platforms, and some of it is deceptive and has no basis in reality. Automatically determining whether a text contains misleading data or misinformation is difficult. Before passing judgment on the accuracy of a piece, even a subject matter specialist needs to look into a number of different angles. Here, this research presents machine learning strategies for distinguishing between false and genuine news. In this study, we have collected data by web scraping and employed several different techniques to train a collection of machine learning algorithms and then compare how well they perform on our datasets. In this work five machine learning algorithms have been applied to find the best algorithms. After evaluating the model, the research found that the decision tree achieved the best 99.84% model accuracy from this study.

Keywords: Fake news detection Misinformation Social media analysis Machine learning Web scraping Text classification

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