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# Fake News Detection System Using AI & ML

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**Abstract:** *The rise of digital media has significantly increased the spread of misinformation, particularly through social media platforms. Failed news invented a story that readers should be misleading to enable individuals and society to serve serious risks by influencing public opinion, undermining trust in legitimate news sources, and affecting decision-making processes. The purpose of this project is to solve the growing problem of spreading fake messages by using artificial intelligence (AI) to accurately identify and filter misleading information. Prepare news articles for analysis for data schedule steps such as text cleaning and feature extraction. A variety of algorithms are tested, including neural networks such as Support Vector Machines (SVMs) and BERT, identifying misleading content based on language and style information. By training the model on marked data records, you learn to distinguish between facts and invented messages very accurately. Although the model works well in a controlled environment, further improvements have been proposed to improve the robustness of various sources and forms. This solution highlights the possibility that AI will reduce misinformation and provides the basis for future progress for auto-detected false messages. The project also examines ethical considerations regarding the use of AI in content moderation, such as the potential distortion of the model and its impact on free expression. By improving the model using more diverse data records and continuous learning mechanisms, future iterations can achieve even greater accuracy and adaptability. Ultimately, this AI-controlled approach to the recognition of false messages contributes a valuable tool to promote reliable information and a more comprehensive effort to promote informed public discourse in the digital age.*

**Keywords:** Fake News Detection ,Artificial Intelligence (AI) ,Natural Language Processing (NLP), Machine Learning (ML), Support Vector Machine (SVM), Bidirectional Encoder Representations from Transformers (BERT), Text Classification ,Neural Networks ,Misinformation, Content Moderation, Data Preprocessing, Sentiment Analysis, News Verification ,Deep Learning Models, Information Integrity


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