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Attention-Based Deep Learning Models for Detection of Fake News in Social Networks

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Abstract

Automatic fake news detection is a challenging problem in deception detection. While evaluating the performance of deep learning-based models, if all the models are giving higher accuracy on a test dataset, it will make it harder to validate the performance of the deep learning models under consideration. So, one will need a complex problem to validate the performance of a deep learning model. LIAR is one such complex labeled benchmark dataset which is publicly available for doing research on fake news detection to model statistical and machine learning approaches to combating fake news. In this work, a novel fake news detection system is implemented using deep neural network models such as CNN, LSTM, BiLSTM, and the performance of their attention mechanism is evaluated by analyzing their performance in terms of accuracy, precision, recall, and F1-score with training, validation, and test datasets of LIAR. © 2021 IGI Global. All rights reserved.

Author keywords

Attention Mechanism; Deep Learning; Fake News Detection; Natural Language Processing; Optimization

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