

## Abstract

Today, due to the increasing spread of social media and the fact that people tend to read the news through traditional media such as newspapers and magazines has been minimized, social media plays a key role in delivering news to the audience. Dissemination of news in cyberspace Due to its low cost, rapid dissemination of news and easy access provided by this space, are the main reasons for turning to this issue. In this research, using content features that can be extracted from the text and the title of the news, along with several new features such as examining the semantic similarity between the title and the text of the news in several ways, using subject modeling and then similarity between the two deal with fake news. We also train the machine using neural network techniques to make the least mistakes in finding fake news. The language used for fake news in this study is English and this choice was made due to the lack of a reliable data set in Persian. After performing various tests, the final accuracy has reached about 90%, which is an improvement over previous work, and it can be said that the newly extracted features have had a good effect on identifying fake news.

Keywords: Fake news detection, News content features, social media, Neural networks

