

Advances in the conceptual model for filtering fake news

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The spread of misinformation as fake news via social media is a serious problem especially when it colors the opinions and actions of people unimpeded by critical thinking. Fake news in the area of politics, health

and medicine, and other realms may well have affected the progress of human history in many ways where we have seen inappropriate outcomes that may not have occurred had people been properly informed rather than accepting fake news as truth.

The problem is that [fake news](#) often feeds a person's biases and existing opinions and the rapid response of social media allows it to spread quickly to detrimental effect. It is estimated that almost two-thirds of news updates on social media is fake news.

Research in the *International Journal of Knowledge and Learning* has looked to model the spread of fake news on social media and develop tools to identify fake news so that it might be flagged as false.

The team used a dataset of 3,000 news items of which 2,725 were used to train their algorithms and the remainder were used to test those algorithms. Five types of classification algorithms were tested: support vector machine (SVM), naïve Bayes, [logistic regression](#), random forest, and neural networks.

The team has shown that logistic regression is the most accurate at flagging the test news updates from the dataset. This approach corroborated the two-thirds proportion of fake news versus fake news. The success of the approach could be used to assist fact-checking systems by flagging updates that are likely to be fake news for further analysis.

Riktesh Srivastava of the City University College of Ajman in UAE, Jitendra Singh Rathore of Banasthali University in Rajasthan, Sachin Kumar Srivastava of the IILM Academy of Higher Learning in Lucknow, and Khushboo Agnihotri of Amity University in Uttar Pradesh, India, hope their research will contribute to efforts to reduce the spread of fake news across [social media](#).

More information: Khushboo Agnihotri et al, The impact on society of false news spreading on social media with the help of predictive modelling, *International Journal of Knowledge and Learning* (2022).
[DOI: 10.1504/IJKL.2022.10045737](https://doi.org/10.1504/IJKL.2022.10045737)

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