

# Review of: "Automatic Content Analysis Systems: Detecting Disinformation in Social Networks"

Patricia Sánchez-Holgado<sup>1</sup>

<sup>1</sup> Universidad de Salamanca

**Potential competing interests:** No potential competing interests to declare.

The title situates the topic; it is descriptive about the work and its objectives.

The summary is correct and consistent with the content of the article.

The topic is relevant today and may be of interest for research on the detection of fake news.

Regarding the structure of the article, it is clear and follows the outline of introduction, method, results, and discussion, which is coherent with the research work and understandable for the reader.

It shows coherence in the description of each section and correct argumentative capacity. The writing style is appropriate and follows a logical sequence.

A review of the literature is carried out with recent and updated references; the state of the art is relevant, and the theoretical framework is correct.

The objective of this work is to explore the use of computational linguistics and machine learning methods to detect misinformation.

On the other hand, research questions are not seen in the text, which could help guide the reading of the work and the objectives it sets.

As for the methodology, it uses computational linguistics, a multimethod process.

One of the issues that is not clear in the work is how the selection of the corpus of fake news that serves as training and testing of the machine learning model is carried out, since it is relevant to obtaining results from the model.

It remains to be explained in detail how the corpus (10000 / 10000) was obtained. Some questions not explained are: was a complete list of words used for content extraction? Was a manual labeling process carried out to identify the contents as fake news or not? And in this case, how was this process carried out? Has all content identification been automatic? Or have human coders been used in any step? And if so, how many? With what characteristics? Were they trained? Has any intercoder reliability test been carried out? What were the inclusion or exclusion criteria? Was there some kind of codebook to guide the qualitative analysis of all human participants? ...are some of the issues that can be incorporated into the description of the methodology.

In the results, a descriptive work has been carried out of what has been obtained by applying computational methods. The

F-score results are good.

It is consistent with the analyses, and the tables help understand the figures mentioned.

The conclusions are a direct result of what has been obtained from the data, which is valued positively.

Certain limitations of the work could also be commented on, as well as future lines of research, which are not appreciated in the final discussion.

References and citations are correct.