Review of: "Information Technology for Detecting Fakes and Propaganda Based on Machine Learning and Sentiment Analysis"

Paola Pasca¹

1 University Of Salento

Potential competing interests: No potential competing interests to declare.

After reviewing the work, here are some observations that may help the authors improve the work. Indeed, although on a superficial level it appears to be a comprehensive work, there are major theoretical and methodological shortcomings that do not make this work a significant contribution to the existing literature.

The recent literature review section contains seven paragraphs and only one bibliographic reference. Authors should include at least one (up-to-date and recent) bibliographic reference per paragraph, although ideally they should have references for each of the claims being made, both in this section and throughout the rest of the paper.

The methodologies are described in too general terms. At the very least, the authors need to elaborate on which particular methodology they used at the NLP and machine learning levels (have you compared the performance of different algorithms?). Furthermore, the lack of an accurate description of the dataset, the lack of any preliminary examination of the distribution of the data, the adoption of any pre-processing steps for textual data, and the lack of any statistical test to confirm the significance of the differences found make this work not generalizable, nor does it allow one to draw any conclusions about the phenomenon under study. In addition, pie charts are not appropriate for inter-group comparisons. I suggest using boxplots or violin plots, or points with lines to give an idea of the variability in the data. The authors should include all these elements to make the work more solid and useful to the scientific community.

Conclusions

Again, I observe a very superficial discourse and not a critical and comprehensive summary of the work the authors propose. Conclusions need to be aligned with the adjustments that will be made, highlighting the strengths where present and the limitations of the study.

Overall, I feel that this article needs major adjustments to be considered a valuable contribution to research progress.