

Finding COVID-19 fake news with a computer chatbot

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The COVID-19 pandemic has been marked by ever-present fake news surrounding the behavior and effects of the coronavirus, the impact of social distancing, lockdowns, and quarantine, and the medical response



in terms of vaccinations and pharmaceuticals. Indeed, even some world leaders led the public astray with nonsensical revelations and suggestions regarding how we might address the problem of SARS-CoV-2.

Given that the pandemic is still very much an ongoing problem, research in the *International Journal of Artificial Intelligence and Soft Computing*, discusses a computer chatbot that uses ensemble learning technique to detect fake news. The chatbot, dubbed CovFakeBot, was developed by a team from the University of Delhi, India, and has been trained using well-established machine-learning models. It can accurately discriminate between genuine news and fake news regarding the COVID-19 pandemic on the microblogging platform Twitter.

Hunar Batra, Gunjan Kanwar Palawat, Kanika Gupta, Priadarshana, Supragya, Deepali Bajaj, and Urmil Bharti of the Department of Computer Science at the Shaheed Rajguru College of Applied Sciences for Women, explain that their chatbot utilizes the application programming interface (API) of a well-known messenger app, specifically the WhatsApp Business API, with another communications technology, Twilio, to create a conversational user interface. The team tested the chatbot with ten different machine learning and ensemble learning classifiers on a dataset from Twitter. A soft-voting model was demonstrated as the most accurate.

The team suggests that the CovFakeBot could become a very useful tool for social media users hoping to quickly check whether an update of concern is genuine news or fake news. They add that it would be a relatively simple matter to extend the system to other areas where fake news is an issue by training a new instance of the chatbot with a new dataset in the area of interest. In the long run, they hope that CovFakeBot and its cousins will be useful in limiting the spread of fake news on social media.



More information: N.A. Supragya et al, *CovFakeBot*: a machine learning based chatbot using ensemble learning technique for COVID-19 fake news detection, *International Journal of Artificial Intelligence and Soft Computing* (2022). DOI: 10.1504/IJAISC.2022.10051225

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