Exploring and Predicting Covid-19 cases in India at Present.

Abstract

Several outbreak prediction models for COVID-19 are being used by officials around the world to make informed-decisions and enforce relevant control measures. Among the standard models for COVID-19 global pandemic prediction, simple epidemiological and statistical models have received more attention by authorities, and they are popular in the media. Due to a high level of uncertainty and lack of essential data, standard models have shown low accuracy for long-term prediction. Although the literature includes several attempts to address this issue, the essential generalization and robustness abilities of existing models need to be improved. This paper presents a comparative analysis of machine learning and soft computing models to predict the COVID-19 outbreak. Among a wide range of machine learning models investigated, two models showed promising results. Based on the results reported here, and due to the highly complex nature of the COVID-19 outbreak and variation in its behavior from nation-to-nation, this study suggests machine learning as an effective tool to model the outbreak.