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| Title | *The FBProphet forecasting model to evaluate the spread of COVID-19 pandemic: A machine learning approach* | | |
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| Abstract |  |
| The pandemic due to the COVID-19 virus causes financial disruption almost in all the countries in the world. It breaks the supply chain management system, especially in the food, energy and industrial sectors. This COVID-19 pandemic hits the world over different periods of time in a year and continues from the year 2020. It is important to predict the severity of the infection rate and death rate to prepare and take necessary actions for the future. But it is still difficult to forecast the outbreaks for the long term with higher accuracy. Here, a machine learning (ML) algorithm, FBProphet, is employed to forecast COVID-19 outbreaks in Bangladesh as a time series forecasting. This model predicts the daily and cumulative infection and death rates with a high and low error rate. Due to the seasonality feature of the FBProphet model, it can predict the different waves of outbreaks with higher accuracy. Furthermore, cross-validation of the predicted results has been performed to ensure the accuracy of the results. The effort and the outcomes of this computational study will help the decision makers of this country to take necessary actions for the future which can save lives and prevent economic disruption. | |