Abstract

The world is facing its biggest challenge since 1920 due to spread of COVID-19 virus. Identified in China in December 2019, the virus has spread more than 200 countries in the world. Scientists have named the virus as Novel Corona Virus (belongs to SARS group virus). The virus has caused severe disruption to our world. Educational institutions, financial Services, government services and many other sectors are badly affected by this virus. More importantly, the virus has caused a massive amount of human deaths around the world and still its infecting people every day. Scientist around the world are trying to find a solution to stop the COVID-19. Their solutions include identifying possible effective vaccine, computer-aided modelling to see the pattern of spread etc. Using Machine Learning techniques, it is possible to forecast the spread, death, and recovery due to COVID-19. In this article, we have shown a machine learning model named as Prophet Time Series Analysis to forecast the spread, death, and recovery in different countries. We train the model using the available historical data on COVID-19 from John Hopkins University's COVID-19 site. Then we forecast spread, death, and recovery for seven days using a well-known forecasting model called Prophet. This interval can be increased to see the effect of COVID-19. We chose 145 days of historical data to train the model then we predict effect for seven days (15 June 2020 to 22 June 2020). To verify out result, we compare the predicted value with actual value of spread, death and recovery. The model provides accuracy over 92% in all the cases. Our model can be used to identify the effect of COVID-19 in any countries in the world. The system is developed using Python language and visualization is also possible interactively. By using our system, it will be possible to observe the effect of spread, death and recovery for any countries for any period of time.