The two prominently used machine learning models are SEIR [ 3 ] and Regression model [ 4 ] for the disease infec-tion forecasting around the world.

The SEIR model has mainly four components, viz., Susceptible ( *S* ), Exposed ( *E* ), Infected ( *I* ), and Recovered ( *R* ), as shown in Figure 1 . *S* is the fraction of susceptible individuals (those able to contract the disease), *E* is the fraction of exposed individuals (those who have been infected but are not yet in-fectious), *I* is the fraction of infective individuals (those capable of transmitting the disease), and *R* is the fraction of recovered individuals (those who have become immune). The most important part of this model is to calculate the R 0 value. The value of R 0 tells about the contagious-ness of disease. It is the fundamental goal of epidemiologists studying a new case. In simple terms R 0 determines an average of what number of people can be affected by a single infected person over a course of time. If the value of R 0 < 1, this signifies the spread is expected to stop. If the value of R 0 = 1, this signifies the spread is stable or endemic. If the value of R 0 > , 1 this signifies the spread is increasing in the absence of intervention. Regression models are statistical sets of processes that are used to estimate or predict the target or dependent variable on the basis of dependent variables.

The regression model has many variants, such as linear regression, ridge regression, stepwise regression, polynomial regression, and so on. This study has used linear regression and polynomial regression [ 5 ] for prediction of COVID-19 cases. Equation ( 1 ) shows the relationship between a dependent and independent variable in polynomial regression. In Equation ( 1 ), *x* is the independent variable and *θ*0 is the bias; also, the intercept and *θ*1 , *θ*2 , . . . . . . , *θn* are the weight or partial coefficients assigned to the predictors and *n* is the degree of polynomial.