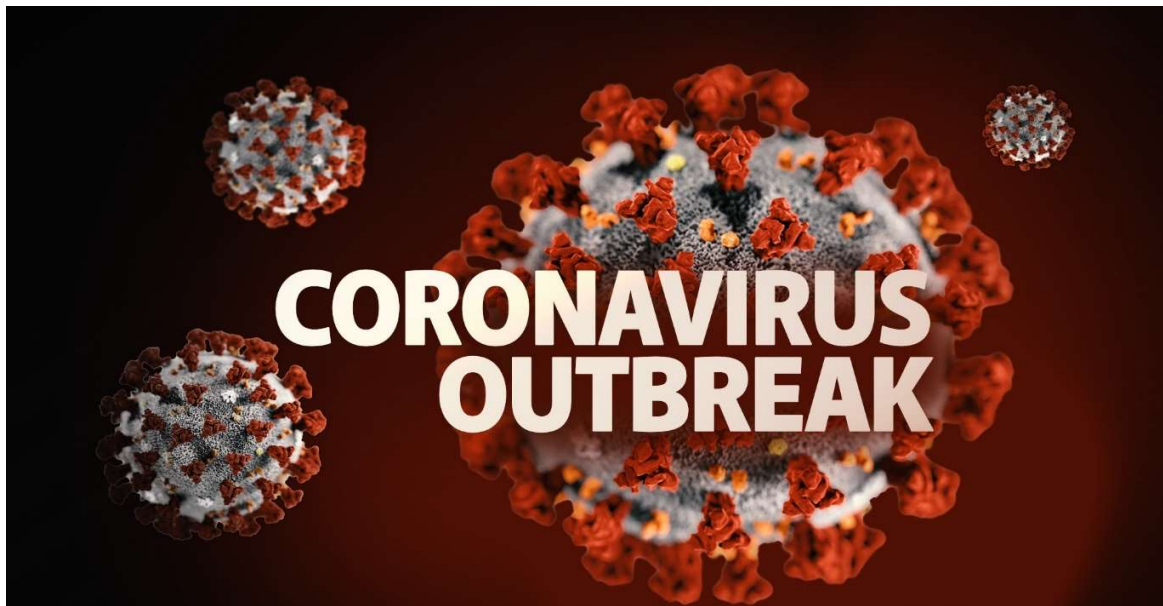




**PRESIDENCY UNIVERSITY**

Private University Estd. in Karnataka State by Act No. 41 of 2013

**BANGALORE**



## Covid Outbreak Analysis

MACHINE LEARNING-LINEAR REGRESSION

Project Submitted by,

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Section: 5CSE2

NASSCOM Assignment Project

## Project Details:

**Editor used:** google colab

**Project\_Link:**<https://colab.research.google.com/drive/1izZKvCRUWM4tR5YGmgOxiBZX5--guiS3?usp=sharing>

## About the Project:

**Concepts used to plot the graph:** Regression analysis, Linear-regression, Some of the Machine Learning Concepts, Correlation coefficients editor used: Google colab language used: Python, modules and libraries and Most Importantly Matplotlib is used.

## Project in detail:

### Steps that were followed:

1. Importing COVID19 dataset and preparing it for the analysis by dropping columns and aggregating rows.
2. Deciding on and calculating a good measure for our analysis.
3. Merging two datasets and finding correlations among our data.
4. Visualizing our analysis results using Seaborn.

A statistical analysis of the novel coronavirus (COVID-19) in India.

Coronavirus spread has conducted the society under the edge of loss in social lives. Additionally, it is crucial to investigate the transmission growth ahead and predict the future occurrences of the transmission. In concurrent, state-of-the-art mathematical models are chosen based on machine learning for a computational process to predict the spread of the virus, for instance:

1. Support Vector Regression<sup>5</sup> (SVR)
2. Polynomial Regression<sup>6</sup> (PR)
3. Deep Learning regression models

#### Dataset

The dataset retrieved from the official repository of Johns Hopkins University<sup>3</sup>. This data consists of daily case reports and daily time series summary tables. In the study, we have selected time-series summary tables in CSV format having three tables for confirmed, death, and recovered cases of COVID-19 with six properties. For example, province/state, country/region, last update, confirmed, death, and recovered cases.

Dataset used in Project Link:

<https://www.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>

[https://www.kaggle.com/sudalairajkumar/covid19-in-india?select=covid\\_19\\_india.csv](https://www.kaggle.com/sudalairajkumar/covid19-in-india?select=covid_19_india.csv)